FINANCIAL INCLUSION STRATEGIES AND FINANCIAL PERFORMANCE OF DEPOSIT TAKING SACCO'S IN NAIROBI CITY COUNTY

BY

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DECLARATION

This dissertation is my original work and has not been presented for a degree or other award in any other University. No part of this research dissertation should be reproduced without authority of the author or/and of St. Paul's University.

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SUPRERVISORS' DECLARATION

We confirm that the work reported in this dissertation was carried out by the student under our supervision. This research dissertation has been submitted with our approval as University supervisors.

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DEDICATION

This dissertation is dedicated to my husband Kabage and our children Salma, Reign and Reily for their support and encouragement throughout the dissertation writing period. To my parents, Stephen and Esther Moki, Thank you so much for

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ACRONYMS AND ABBREVIATIONS

AFI	Alliance for Financial Inclusion
ATM	Automated Teller Machine
CA	Capital Adequacy
CAR	Capital Adequacy Ratio
CAMEL	Capital adequacy, Asset quality, Management and Liquidity
CBK	Central Bank of Kenya
SASRA	SACCO Societies Regulatory Authority
NGO	Non-Governmental Organizations
ROA	Return on Assets
SACCO	Savings and Credit Cooperative Societies
DTS	Deposit Taking SACCO's

OPERATIONAL DEFINITION OF TERMS

A cooperative: An autonomous association of persons united voluntarily to meet their common economic and social needs (International Co-Operative Alliance). Cooperative societies are both economic units for mobilization of resources and social organizations serving members' social needs (Sasra, 2018).

A cooperative financial institution: An institution owned and controlled by its members. It is operated for the purpose of promoting thrift, providing credit at reasonable rates and providing other financial services to its members (Ali, 2015).

Financial Inclusion: Means that an organization ensures that individuals and businesses have access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit and insurance – provided in a responsible and justifiable way (Chepkemoi, 2017).

Financial Inclusion Strategies: Roadmaps of actions, agreed and defined at the national or subnational level, which stakeholders follow to achieve financial inclusion objectives (Haidar, 2013).

Financial Innovation Strategy: According to Jofre (2011) it involves the design, the development, and the implementation of innovative financial instruments and processes, and the formulation of creative solutions to problems in finance.

Financial Literacy: Kashangaki (2014), defines it as the way people understand and use knowledge of basic financial concepts to plan and manage financial decision as in insuring, investing, saving and budgeting.

Financially Literate - A financially literate person according to Lawack (2012), is someone that knows what are the most suitable financing decisions on the business performance at the various growth stages of the business; knows where to obtain the most suitable products and services; and interacts with confidence with the suppliers of these products and services with the ability to understand and analyze financial information and act accordingly.

Microfinance Institution – Haiyambo (2016), defines it as a business entity that provides financial services to low income populations. Nearly all offer loans to their members, and many offer insurance, deposit and other services. A great scale of organizations is regarded as microfinance institutes

Mobile Banking - It refers to the use of a smartphone or other cellular device to perform online banking tasks remotely, such as monitoring account balances, transferring funds between accounts, bill payment and locating an ATM (Kenon, 2018).

ABSTRACT

Deposit taking SACCO's continue to play a significant role in the lives of the poor in Kenya by responding to their needs, concerns and voices by providing easy access of financial services. Financial inclusion is seen as a solution to include on a large-scale previously excluded poorer groups without access to capital into the financial system. The objective of the study was to determine how financial inclusion strategies affect the performance of savings and credit co-operative in Nairobi County, Kenya. The study was guided by the following research objectives: To determine the effect of financial innovation strategies on performance of savings and credit co-operative in Nairobi County, Kenya; To evaluate the effects of financial literacy strategies on performance of savings and credit co-operative in Nairobi County, Kenya; To assess the effect of regulatory reforms on performance of savings and credit co-operative in Nairobi County, Kenya. The study was guided by open systems theory, financial intermediation theory and the Life cycle of saving theory. This study adopted both descriptive research design and causal research design. The study population comprised of the 40 registered deposit taking SACCO's in Nairobi County and the study used descriptive inferential analysis of data collected. The study identified that financial innovation was most significant in increasing financial performance, financial literacy programs significantly influence performance of SACCO's while regulatory reforms increases financial performance but not significantly and mobile transactions and accessibility to credit significantly influence financial performance. The study concluded that firms that have not effectively implemented financial innovation financial literacy and regulatory reforms may fail or collapse or otherwise can be absorbed by other well managed SACCO's, financial literacy significantly influence performance of SACCO's while regulatory reforms increases financial performance but not significantly, in general financial inclusion strategies affect the financial performance of registered SACCO'S Kenya. The study also recommended the need to invest in financial innovation strategy to reduce cost and increase efficiency in the sector. To retain and increase financial inclusion,

the organization must provide quality services which is user friendly and meets customer expectations leading to growth of business,

CHAPTER ONE

INTRODUCTION

Access to formal financial services has the ability to help change the lives of low-income households. Usage of saving, transaction and credit services can play an important role in household efforts to even consumption, invest in human or productive capital, and reduce exposure to uncertainties. These facilities are predominantly significant for the deprived in sub-Saharan Africa, who have a tendency of facing fluctuating incomes in agricultural and informal sectors, and who are vulnerable to significant health and institutional shocks. This has led to a rise in financial inclusion initiatives in both developed and developing economies.

However despite the interest in financial inclusion, its effect on savings and credit co-operative financial performance is not evidently known. To date empirical studies done and reviewed have revealed inconclusive and contradictory results on the effect of financial inclusion on banks performance (Chithra & Selvam, 2013).

1.1 Background Information

Cooperative societies as formal organizations empower their membership make efforts to achieve any common objectives on voluntary and democratic basis. According to (John, 2002), the first ever Co-operative movement was started by Robert Owen in the year 1844 and in recent years the SACCO sector has encountered harsh challenges globally as noted by WOCCU, (2012) to include mission drifts, income generation, compliance, competition, insufficient capital among many others. The sectors financial stability will impact broadly on the nation's economic growth and employment creation. SACCOs are required to file audited financial statements every fiscal year and although SACCOs comply with this requirement, financial statements have shortcomings including non-availability on regular basis.

To promote financial transparency SACCOs should provide timely financial updates and external auditors are evaluated every three to five years using competitive bidding process. Going concern is general accounting assumption and according to (Wood & Sangster, 2005) economic entities are assumed to continue operating in the foreseeable future. It's on this basis that financial statements are prepared and auditors express opinion. Financial inclusion strategies involves the quest of creating financial service available at lower costs to business and individuals, regardless of net worth and size correspondingly within a set timeframe (Cyn-Young & Rogelio, 2015).

These strategies are aimed at coordinating the efforts of different stakeholders in an industry by defining their responsibilities prioritizing resource allocation so as to deliver on set objectives. Financial inclusion attempts to disclose and offer resolution to the constraints that eliminate people from partaking in financial sector that is also known as inclusive financing (Rui & Melecky, 2013). A country is said to have a high financial inclusion rates when the highest proportion of all adults have easy access to abroad range of financial services. The products could range from payment services, insurance, credit facilities and pensions among others (Demirgüç-Kunt & Klapper, 2013).

To be effective, financial inclusion strategies needs to be based on the needs, culture and other prevailing condition of a given economy. The United Nations (2012), notes there is no universally accepted financial inclusion strategies except for a guiding framework because every nation is at a different stage of financial inclusion. The best financial inclusion strategies is one that serves all members of its society as they seek economic prosperity by ensuring that all individuals access a wide range of financial services. In the year 2016, the World Bank revealed that more than two billion people worldwide were excluded from formal financial services (Okoye, Adetiloye & Erin, 2017).

This means that the level of financial inclusion still remains low in the world. The population which was unbanked comprised of adults who had no easer entrée to formal financial service in their area or the one that had come up with a deep distrust of the

financial system (Roy, 2017). For the general level of financial inclusion to be advanced across the world, measures are being taken by the World Bank Group known as Universal Financial Access 2020.This is to make sure that the aforesaid unbanked community has the entrée to traditional platforms for instance checking the accounts by the year 2020 as indicated in the Central Bank of Samoa (2017).

Those classified as the underbanked are the individuals who have basic transaction accounts and they are adults who have protected the traditional equipment's for carrying out the transactions like bank account but not sharing to the digital combination of these transition like digital payment. From a global perspective, according to CGAP (Consultative Group to Assist the Poor) (2018) estimates show that 2 billion working age adults, do not have formal accounts with financial institutions. Financial inclusion efforts seek to ensure that all the businesses and households gain access and utilize financial services regardless of their levels of income.

Digital payment terminals are important elements of financial inclusion around the world. In Russia there are over 70 million individuals using payment terminals once every month (CGAP, 2018). In Azerbaijan, there is about 10 bank branches for every 100,000 adults hence the use of payment terminals is seven times more than Russia. The use of payment terminals in other countries such as Brazil, Colombia, India and the USA works as per the set out expectations (CGAP, 2018).Financial exclusion of finance has interrelated social and economic impact in a negative way (Ghosh & Phillips , 2013).

This is due to certain reasons which include inadequate financial service offered, meaning that the individuals who are poor are forced to use ineffective provision at a very high cost with extreme high interest rate on loans, high transaction cost or poor return on savings which leads to poverty. The poor individuals were not able to get access to some of the financial product. Lack of access is brought by total absenteeism of appropriate products or if the products are available, they are expensive (Ledgerwood, Earne & Nelson, 2013).

Poor people are vulnerable to improved events and financial loss, this might be brought by lack of secure saving products and insurance cover. It is hard to build capital due to lack of savings products. Poverty is increased when poor individuals are denied the chance for entrepreneurship which can give them an opportunity to earn income (Gupte, Venkataramani & Gupta, 2013). Performance standards give a standard gauge of dangerous behavior or good performance, thereby helping in setting up credit rating systems for savings and Credit co-operatives. Financial institutions by this time have performance standards and are at present rated in the financial markets by private or even government rating agencies.

Credit rating will be of specific interest to commercial lenders and clients who want to assess the financial standing and performance of savings and credit cooperatives. Short of a commonly accepted and effected set of industry performance standards, it turn out to be fairly challenging to gauge the financial standing and performance of savings and credit cooperatives and make knowledgeable choices on their quality as financial intermediaries (Coulthurst, 2011).In a society, there are groups which are not able to acquire financial services and at the same time they are not capable of accessing social provision, a financial might result to other social exclusion (Daher & Le Saout, 2013).

When it comes to giving products and service that help the poor in coming across their stated goals, there is need for attention to more than just the pure economic of the choices given. How the presentation is done has to do with the acceptance and the application which is determined by the terms of the services and products (Karlan & Morduch, 2009).It is easy to believe that the number of unbanked individuals will reduce significantly in future, due to the vigorous allegation for the development of the economy and decrease in poverty. Starting with country level and grassroots efforts, both for-profit and non-profit are already showing how unbanked doesn't have to be the status quo and the efforts are largely affected by the mobile technology.

In Kenya, there is a widespread of mobile money system application like M-Pesa and Airtel Money in payment of goods and service instead of using cash money. Since 2007,

M-Pesa is being used by the many people the majority being Kenyan adults (Muema, 2013). In application of technology, Kenya has made herself as a worldwide technology pioneer over innovations in agent banking and mobile money which is assisting to further reach the poor. The development and usage of these technology basically changed how financial institutions are capable of offering access to their financial services (Blythin & Cooten, 2017).

1.1.1 Financial Inclusion Strategies

Financial inclusion strategies refers to a process that ensures the ease of access, availability and usage of the formal financial system for all members of an economy (Post & Byron, 2015). It is measured using ease of access, the proportion of adults having access to formal financial services, the average cost of financial services and how affordable they are to common citizenry. A number of strategies have been applied by different nations to drive their financial strategy plan (Soederberg, 2013). One of the commonly used strategies across nations is financial innovation strategy where stakeholders invest in coming up with new ideas that would help spread the accessibility to affordable financial services.

A number of regulators and public-sector stakeholders had been requested to implement a number of comprehensive reform packages with the aim of improving the general level of activity and innovations that were in line with the developed financial inclusion strategies of their economies (Ehrbeck, Pickens, & Tarazi, 2012). Areas of innovations mainly covered development in financial infrastructure especially in credit sharing information systems, safety of the transaction framework, security of payment systems all aimed are bringing down the costs and risks for financial service providers seeking to extent their financial services to the poor population.

Financial inclusion is a process that cannot take place devoid of the support and effort from the government (Fuhrmann, 2017). Research has revealed that there is a relationship between financial inclusion strategies and SACCO performance. The findings has forced

the Central Bank of Kenya to create a policy with the intention of ensuring financial inclusion (Oruo, 2013). The government realizes the fact that financial inclusion cannot take place on its own, therefore there is a necessity to have guidelines that guide the process in the economy.

Another strategy adopted by policy makers across the world include implementation of regulations which are aimed at doing away with barriers and bottlenecks restricting the private sector action of increasing accessibility and affordability of financial services (Mbutor & Uba, 2013). According to Grifoni and Messy (2013), governments together with policy makers have implemented a number of regulatory reforms aimed at extending the level of financial inclusion while at the same time ensuring financial stability. This has been promoted mainly through formulation of enabling policy framework and implementation of legal frameworks facilitate both lower income and difficult to reach customers especially in remote areas to be served by formal financial service providers in a more viable manner.

Financial service providers have also initiate a number of reforms in the product offerings and distribution channels to make financial services easily accessible to poor households at affordable rates (Grifoni & Messy 2013). Another strategy applied to improve the level of financial inclusion in SACCO's is through improvement in the level of financial literacy (Cámara & Tuesta, 2014). Many good innovative financial services may fail to meet their objectives because the target population is not aware of the diverse financial services available for them on the market.

Developing a national education strategy on financial inclusion is important in ensuring that the target customers who were vulnerable are aware of the financial services and products tailored to their needs. This could take the form of informing the general public on the available financial products like micro insurance, basic bank accounts and microcredit services. This strategy has widely been applied in Brazil and Peru to improve the level of financial inclusion (Grifoni & Messy 2013). Mobile banking has also made access of SACCO services from their locations away from banking halls (Lawack, 2013).

Recently SACCO's expanded their branch network to reach majority of potential customers and in response to the intense competition in the SACCO industry. Branch expansion plays a major role in financial inclusion. The SACOs have developed credit products, micro-banking products which are tailor made to serve the lower market (Muema, 2013).

1.1.2 Financial Performance

Financial performance is the outcome of day to day operations of an organization measured in financial terms over a given period of time. Diverse measures have been applied by different scholars to measure financial performance of financial institutions including: Return on Assets (ROA), Return on Equities (ROE), Return on Investment (ROI), market valuations, and the degree of exposure to risks. A detailed description of measuring performance of financial institutions is expounded by Mohammad (2016) using the capital adequacy, asset quality, management quality, earnings ability and liquidity of the institution (Capital adequacy, Asset quality, Management, Earnings, and Liquidity (CAMEL))(Chithra & Selvam, 2013).

Financial performance shows how well an organization make best use of shareholders value and profits and minimizes uncertainties. Information related to the financial performance is derived from a firm's financial statements. Financial statements facilitate an organization to express its financial positions and performance, moreover top management uses the financial statement to draft strategic and financial plans. A variety of performance valuation measures have been established. This measures show the outcomes of firms performance whether good or bad (Mishkin & Eakins, 2011). Financial measurement also helps in the production of financial statements for analysis by the key stakeholder.

A commonly accepted traditional measure of financial performance is profitability. This study use ROA as a measure of profitability in financial performance. Profitability offers clues about the ability of the Savings and Credit Co-Operative to undertake risks, use its

assets to generate income, generate shareholders value and to expand its activity. Financial performance can be studied through financial performance analysis, a process of scientifically making a critical and comparative evaluation of profitability and the financial health of firms through the applications of the techniques of financial statement ratio analysis (Sirari, 2009).

Financial ratios, derived from accounting data, are common internal measures of financial performance (Ongore & Kusa, 2013).According to Kennon (2018), one of the most important profitability metrics is a return on equity, or ROE for short. Return on equity reveals how much after-tax profit a company earned in comparison to the total amount of shareholder equity found on the balance sheet. A business that has a high return on equity is more likely to be one that is capable of generating cash internally. For the most part, the higher a company's return on equity compared to its industry, the better (provided it isn't achieved with extreme risk).

1.1.3 Financial Inclusion and Financial Performance

The business of SACCO's involves taking deposits and using the same deposits to make loans (Fuhrmann, 2017). It could be complicated, but this is the basic model used in banking. In the past Kenyan banks have been accused of not reaching out in areas where the transaction or deposit size is very low. In places with low deposits, the volumes are usually low, and the costs of serving are high. The banks did not see any sense to open up branches in areas with low volumes and the high cost of operation.

Growing financial access over financial inclusion alters the structure of the consumers in regards to saving and borrowing activities. These compositional variations might back financial stability through risk diversification (Hannings & Jansen, 2010). Morgan and Pontines (2014) observed that good financial performance can improve trust in the financial system and consequently improve financial inclusion. On the other hand, too much emphasis on financial performance can delay involuntary financial exclusion. This

is especially in times of regulatory tightening in an attempt to boost profits and cut off risky segment.

Financial performance is an independent process through which an examination of how the business can use its primary assets (Mutua, 2013). It is as a portion of the financial health of an organization, and it is a means of evaluation of the performance of numerous businesses that function in the industry. Several actions apply in analysis of financial performance, but key thing is that financial measures are in cumulative. The procedures can use line items such as operating income or cash flows, revenues from annual operations and the total sales units. Net Interest Margin of a bank is the difference between interest income generated by a banking financial institution and the interest paid out to the lenders about the assets of the company (Mwangi, 2014).

Financial institutions earn percentage income from the loans within a given period and the other assets less the interest paid by the firm on the borrowed funds (Mwangi, 2014). The return on investment is what the shareholders look forward to getting from the institution at the end of the financial period. It indicates the profit that was made from the total equity that was held by the shareholders. Financial inclusion using mobile and agency banking can have a huge influence to the performance of banks. Improved performance leads to better customer satisfaction, increased customer share, and expanded the range of productivity (Mwangi, 2014). Mobile banking and agency banking are significant tools that boost acquisition and retention of customers. A strategy leads to increased profitability of the organization if properly implemented.

1.1.4 Deposit Taking SACCOs in Nairobi County

According to SASRA (2018) Supervision Report, Deposit-taking SACCO Societies (DT-SACCOs) is a subdivision of the extensive SACCO sub-sector in Kenya. The broader SACCO sub-sector includes the deposit-taking (DT-SACCOs) and the non-deposit taking SACCO societies. The deposit-taking (DT-SACCO's) section of the sub-sector is composed of those SACCO Societies which receive both with-drawable and non-with-

drawable deposits. Whereas the non-withdrawable deposits portion of the business might be used as collateral and are not refundable unless on termination of membership from the SACCO Society, the with-drawable deposits portion of the business can be accessed by the members at any time, hence are request deposits.

The microfinance sector in Kenya has advanced over the years and now comprises of various institutions. This institutions differ in their legal status, the reason of their existence, their location and area of coverage among other factors. These organizations include the informal organization such as Rotating Savings and Credit Associations (ROSCAs), Financial Services Associations (FSAs), Savings and Credit Cooperative (SACCOs), NGOs, to conventional banks (Ledgerwood, Earne & Nelson, 2013). Co-operative movements can be traced back in 1908 in Kenya. However, the movement has evolved over the last 40 years into a powerful force for the social and economic transformation of the society in Kenya.

The co-operative societies in Kenya cut across various sectors and activities such agriculture marketing co-operatives, teachers, tea, employee-based and community based (Co-operative Bank of Kenya, 2013). Deposits taking savings and credit co-operatives (SACCOs) have to a very large extent influenced the Kenyan economy. The SACCOs contribute up to 45% of the Kenyan GDP .This is despite the fact that they were not formerly incorporated in the formal financial system. According to the SACCO supervision Annual report, the Deposit-taking SACCO Societies (DTSs) is part of the greater SACCO sector in Kenya. SACCOs deposits are non-withdrawable in that they may be used as collaterals for loans only, and can only be refunded upon the member's withdrawal from the society (SASRA, 2017).

On the other hand, the deposit-taking segment of the sub-sector is composed of those SACCO Societies which are involved withdrawable and non-withdrawable deposits. The SASRA database clearly indicates that there was an increase of the other key financial indicators like Liquidity, Asset quality and Earnings and profitability with the increase in the Core capital provisions between the year 2013 and 2014.The CCA increased from

7.74 percent to 11.2 percent while the CCD increased 10.9 percent to 16.4 percent. However, despite the indication that increase in the core capital resulted to increase in the financial performance. DTSs, have adopted various strategies to ensure the attainment of the prescribed capital ratios including mobilization of increased shares purchase from the members, recruitment of new members, and retention of surpluses (SASRA, 2017).

1.2 Statement of the Problem

There has been a massive emphasis on delivery of financial services to the poor over the last ten years in the development agenda of most third world countries. This is because it has been found out that reaching out to the unbanked population greatly diminishes poverty (Manyika & Voorhies, 2016).

A number of studies have been conducted on financial inclusion strategies across the world. For instance, Harelimana (2016) examined the level of financial inclusion and the effect that it had on financial outcome of SACCOs in Rwanda over a period of five years spanning 2011-2014. Locally, Muema (2013) examined how financial inclusion strategies affected financial performance of commercial banks in Kenya. The study considered a four-year periodic data from 2008 to 2012 with variables that included: agency banking, mobile banking, Islamic banking, micro banking and internet banking. The findings indicated that financial inclusion strategies greatly affected financial performance of banks.

The study though similar to the current study, it is limited as it was conducted more than five years ago in a setting where scope of financial inclusion strategies had grown in terms of what they can accomplish hence necessitating the need to undertake the current study. The focus was on commercial banks which do not necessarily target poor and low-income customers. In another study, Waihenya (2013) focused on assessing the effect of agent banking on financial inclusion in Kenya where a strong positive relationship was established. Banks with strong agent network posted better financial outcomes compared to those that did not have a well-developed agent network.

Ngigi (2013) also examined how agency banking affected the financial outcomes of commercial banks in Kenya. Makini (2014) examined how financial innovations affected financial outcomes of commercial banks in Kenya where it was established that they improved operations, liquidity levels, and asset quality. In another study, Paye (2013) focused on the effectiveness of SACCOs in implementing financial inclusion strategies in Nairobi. The findings indicated that more than 85% of the developed products met customer needs. However, it was felt that SACCOs needed to diversify their credit facilities and reduce borrowing constraints as they worked against financial inclusion.

From the above discussion, it is evident that a number of studies have been conducted on financial inclusion strategies and financial performance of SACCOs. However, the focus of these studies was limited on the strategies or was done to a specific financial inclusion strategies identified for this study. The developments in technology and level of application of the strategies have grown that the findings may not strictly be applicable in the current settings. This study will therefore aim to fill this gap by assessing the effects of financial inclusion strategies on financial performance of SACCOs in Nairobi County.

1.3 Research Objectives

The study was guided by the following objectives.

1.3.1 General Objective

To investigate the effects of financial inclusion strategies on financial performance of savings and credit co-operative societies in Nairobi County.

1.3.2 Specific Objectives

The study was guided by the following specific objectives:

i. To determine the effect of financial innovation strategy on performance of savings and credit co-operative society in Nairobi City County.

ii. To evaluate the effects of financial literacy programs on performance of savings and credit co-operative society in Nairobi City County.

iii. To assess the effect of regulatory reforms on performance of savings and credit co-operative society in Nairobi City County.

1.4 Research Questions

The study was be guided by the following research questions:

i. What is the effect of financial innovation strategy on performance of savings and credit co-operative in Nairobi City County?

ii. How does financial literacy programs affect performance of savings and credit co-operative in Nairobi City County?

iii. What is the effect of regulatory reforms on performance of savings and credit co-operative in Nairobi City County?

1.5 Scope of the study

This study was be carried out on 40 SACCO's that report their financial performance on the annual publications by central bank as well as financial statements of SACCOS. This includes statement of financial position and director's reports in Nairobi City County. It investigated financial inclusion strategies and financial performance of savings and credit co-operatives. The study was underpinned by three theories that relate to the research objectives and a causal research design was used for the period of 2013 to 2017 using secondary data.

1.6 Significance of Study

The findings of the study brings an addition to the existing literature on financial inclusion and financial performance. It will also assist scholars and researchers on the

subject area to carry out further studies and provide comprehensive insight on the financial inclusion strategies in the financial sector

The findings of the study are important to the savings and credit co-operative institution managers as the managers are able to understand the effect financial inclusion strategies on financial performance and this will provide a better insight.

The study is essential to policy makers and regulators of financial institutions for instance CBK who promote financial inclusion even at the national level in order to ensure sustainable growth in the financial sector. The study would also be important to investors when making financial decisions.

1.7 Limitations of the study

The findings of this study are only directly applicable to Kenya. The financial inclusion indicators for Kenya are not the same as those for other countries hence the reason why the findings may not be directly applicable to a situation in another country. In comparison therefore one needs to be cautious. This study was conducted on registered deposit taking SACCO's in Nairobi County, Kenya. Credit union systems are closely related to the economy of the country they're located in. This has the effect of restricting the relevance of findings to SACCO in Nairobi County, Kenya. Similarities to other economies may exist but findings may differ significantly.

The study focused on variables that include financial innovation strategy, financial literacy programs, regulatory reforms and their effect on financial performance of SACCO's in Nairobi County, Kenya. The results are therefore limited to the SACCO's variables modeled in this study which are not the only factors affecting the performance of SACCO's in Nairobi County, Kenya. The finds of the study show the effects as at December 2018, however with advances in ICT and everyday innovations resulting from competition, the situation could change drastically diminishing the relevance of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Literature review according to Hamari, Koivisto & Sarsa (2014) is one of the sections of the research paper emphasizing on relevant past studies and theories. The theories forming the basis of the study are indicated in this chapter. The chapter also reviews past studies that informed the conceptual framework. This chapter will be divided into sections covering the theories that the study focused on, the empirical literature on the three research objectives, each on its own section. The conceptual framework that draws the picture between the independent and dependent study variables and it will have a section on summary of the literature and research gaps, explaining the reason for undertaking this study.

2.2 Theoretical Review

The theoretical review indicates relevant theories that inform the study. According to Galati & Moessner (2013), theories that the study focused on and help in explaining given phenomena or facts. Such facts reported by theories have undergone consistent testing and are widely accepted. Theories are also seen as analytical tools used to understand, explain and make predictions concerning identified matters under consideration. This study focused on the following theories;

2.2.1 Open System Theory

This theory was formulated by Von Bertanlanffy and Rapoport (1958) to help give the organization an understanding of how to operate and influence the environment in which they would work in. This theory offers managers with explanations, terms and metaphors on how organizations operate and function. The theory is of the view that environmental factors strongly influence organizations. Environment is surrounded by several social,

political and economic forces. Key resources are provided within an environment for sustaining an organization and this results into sustainability, survival and change (Pfeffer & Salancik, 2015).

The theory was developed in response to past theories of organizations like one of Fayol (administrative theories) and Mayo (human relations perspective). According to these theories, organizations were largely treated as self-sustained business entities (Onday, 2016).This theory is a wide model describing basic elements of an entity and how organizations dynamically interact with each other (Hannah, Mary, Bruce & Fabrice, 2009). This study will be built on the open systems theory which offers managers with descriptions, terminology and clarifications about how organizations function.

Open systems theory holds that organizations are strongly influenced by their environment made up of other organizations employing numerous forces of economic, political, or social nature. The environment offers significant resources that withstand the organization and lead to change and survival (Pfeiffer & Salancik, 2015).Jofre (2011), notes that the accomplishment of Open Systems depends largely on defining, implementing, and satisfying goals at hand. The goals that are established to accomplish Open Systems must be evolutionary in nature because of the magnitude of systems and their dynamic

Savings and credit co-operative like any other organization depend on the environment for input resources in form of human capital and at the same time, its customers and competitors are in this environment As such, an organization should comprehend proper way of managing all these stakeholders and resources for sound strategies of financial inclusion. The rational system perspective emphasizes structure as a crucial tool of achieving the goals of an organization (Mutua, 2013). The significance of a comprehensive financial system is extensively acknowledged in the policy circle and has come to be a policy of importance in many countries including Kenya.

Organizations globally do not exist in a void but do work surrounded by a bigger environment, which as a result brings about key challenges or presents unlimited

opportunities for an organization's general performance. An understanding of the environment in which an organization is functioning is therefore of abundant significance in its choice of policies. A predictable 2.5 billion working-age grown-ups worldwide have no access to the kinds of formal financial services delivered by regulated Commercial Banks and Financial Institutions (FI's) (Blair, 2013).

Through responding to the changes in the operating environment, the SACCO's are able to increase the level of financial inclusion in the country. On the other hand, the open systems theory advocates that financial inclusion needs to be conducted within the provisions of the regulations and provisions of the financial regulators. This theory guides the operations of financial institutions in the implementation of financial inclusionstrategies (Kashangaki, 2014.)This theory fits into this study as it was used to explain how well planned and thought out organizational structures support financial innovation strategy that will in turn support financial inclusion for the good performance of SACCO's.

2.2.2 Financial intermediation Theory

This theory was formulated by Allen & Santomero (1997) showing that financial institutions having intermediaries are able to reduce transaction costs through sharing information from the lenders who are the financial institutions to the borrowers, the financial institution clients. The financial intermediaries include elements like bank agents, customer care staffs, brochures and booklets and they affect the functioning of the markets, the credit channels and economic effects. According to Jensen & Meckling (1976), these intermediaries provide liquidity and makes shifts in asset characteristics. The role of the financial intermediaries is to educate the customers on the financial product and services available and which they qualify to access. Through these intermediaries, customer financial literacy is improved on products and services that would benefit them and improve their financial standings.

The theory asserts that financial intermediaries transform the credit portfolio demanded by borrowers into a deposit portfolio desired by lenders (Allen & Santomero, 1998). Demirguc-Kunt & Levine (2014), argues that this is done in two fold. Firstly, an intermediary is in a position to exploit economies of scale considerations by writing and enforcing debt contracts with firms and individuals.

Secondly, financial intermediaries minimize transaction costs through the payment system. Integrating this process at the level of financial intermediaries does away with wasteful duplication of verification costs. Notably also, SACCO's are in a position to reduce the costs that would otherwise be acquired while engaging in the process of borrowing. In the case of DTMs, this is more apparent as the cost of funds is reduced given that the DTMs borrow from other financial institutions at high interest rates and thereafter lend at even higher interest.

According to Scholtens & Wensveen (as cited by Ogilo, 2013), existing financial intermediation theory is shaped on the interpretation that intermediaries help to decrease transaction costs and informational asymmetries. As growths in information technology, deregulation, deepening of financial markets, etc. are likely to minimize transaction costs and informational asymmetries, financial intermediation theory come to the assumption that intermediation befits impractical. This therefore contrasts with the practitioner's view of financial intermediation as a value-creating economic process. It also conflicts with the continuing and increasing economic importance of financial intermediaries.

Zwan (2014), notes that making sense of financialization presents building blocks for a theory of financial intermediation that seeks to appreciating and clarifying the presence and the behavior of real-life financial intermediaries. When data anomalies are not the main focus behind intermediation action and their removal is not the commercial reason for financial intermediaries, the question comes up which example, as a substitute, might more likely explain the essence of the intermediation process. In their view, the concept of value formation in the framework of the value chain might influence that purpose.

Swedroe (2018) notes that in an ideal and efficient market, the financial institutions have clear information and share this information with their clients. As such they improve their financial literacy and knowledge which they used in both short-term and long-term investments receiving high payoffs. This theory fits in this study because it helps borrowers understand that SACCO's are the financial intermediaries and for them to meet their purpose, there must be some regulation of their functions to protect borrowers and savers in their quest for financial inclusion.

2.3.3 Life-Cycle Theory of Saving

The theory was formulated by Modigliani & Brumberg (1954) to offer an explanation on a link between the propensity of people to consume and save at various stages of their lives. The theory argues that the key motive for people to save is provision of adequate resources for their retirement (Wolff, 1979). The theory suggests that people strive to smooth out their consumption patterns over time by ensuring that they save during their working years. This will enable them to support consumption at retirement stage where income is not sufficient. This also helps people to ensure that they maintain the same living standard at retirement phase just as they were living at the time of employment.

The theory argues that people usually accumulate and de-cumulate their level of their wealth on the basis of their age. In youthful stage, people have insignificant accumulation of wealth but this increase as they grow into age towards retirement (Hillier, 2012). This is because young individuals have other commitments including house purchase and education loan payback (Lusardi, 2013).

This theory is relevant to the study because it supports the need for financial literacy programs. Financial literacy programs will educate people on the need to save (among SACCO's) which would mutually benefit the organization and the individuals. At individual level, financial literacy will help one to save for retirement and meeting of unforeseen risks. At the side of the SACCO's, the amount saved from customers would be used in improving financial performance (Cohen & Nelson, 2011).

This model assumes the following human behavior: that they are forward-looking over their life spans; they can predict the financial resources they will have over their lifetime; they understand something about the financial resources they will need in all periods of their lives; and they make informed decisions about the use of their financial resources. Given that financial preparedness for retirement is future looking, the current study infers from life cycle theory to explain how individuals make decisions on deferring current consumptions inform of savings and investments to future savings. This incorporates the usefulness of time value of money based upon discount rates and thus this study explored the moderating effect of demographic characteristics, financial factors and the independent variable of financial literacy on financial preparedness for retirement (Agunga, 2016).

2.3 Empirical Literature

2.3.1 Innovation Strategy and Financial Performance.

Rapid change in technology and increase in competition raises need for SACCO's to be innovative in creation of new products that meet the needs and wants of customers. These innovations affect the manner in which services are offered and the delivery channels in place. The constantly changing demands of customers and fear of reduction in share of the market have driven rapid adoption of technology among. By collaborating and forming alliances with other entities besides integration SACCO's of telecommunication, software and hardware; SACCO's have remained innovative through introduction of new products and ways of doing business and this has enhanced their performance (Oni, 2012).

According to Bolt and Humphrey (2015), e-money, internet and telephone banking besides ATMs significantly influences financial performance in Netherland. A study on how financial innovations impacted financial performance of financial institutions was carried out by Juodelytė (2018) in Vilnius. The key finding from the study was that digital deposits of the bank and the growth in loans determine performance of the

institution. While growth in deposits of the bank has inverse relationship, the growth in loans on the other hand has a direct and significant influence on performance of a financial institution.

According to Malak (2014) in respect to how financial innovation affected financial performance of commercial banks in south Sudan, a significant relationship was established between the study variables. This relationship was also positive in nature, showing that as financial innovation increased, performance of commercial also increased. The study further established positive correlation between the variables.

In a study to assess how financial performance of commercial banks in Kenya was affected by financial innovations, Nyathira (2013) noted that financial innovation through advanced systems of payment improved financial performance. Financial innovation presents more convenience, efficiency and security to 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; this as seen by the negative correlation.

While assessing the influence of financial innovation and performance of Kenyan commercial banks, Ngari & Muiruri (2014) operationalized financial innovation into credit cards, internet banking and agency banking. The finding of the study indicated that a number of financial innovations had been adopted by banking institutions including agency banking, internet, mobile banking and use of credit cards.

With reference to SACCOs in Nakuru, Kibugo (2017) examined how financial innovations influenced their performance. Financial innovation was operationalized under process, product and institutional. It was revealed that most SACCOs use mobile banking as forms of financial innovation which improved on their performance. The study further revealed that through financial innovation, SACCOs were able to remain competitive.

Decker, (as cited by Njuguna, 2015) did a study by studying the effectiveness of Microfinance institutions in financial inclusion in Kenya. He acknowledged that SACCOs should spread their credits and savings as main financial products that are critical to empowerment as the first step towards financial inclusion, balancing their operations as commercial, NGOs or Government programs to meet the financial needs of people at altered levels. Ndege (as cited by Njuguna, 2015) did a study on the relationship between financial sector deepening and economic growth in Kenya and acknowledged a positive connection between financial sector deepening and economic growth in Kenya. From the above discussions, the existing studies on financial inclusion have majored on its effects on macroeconomic variables and have not addressed the challenges facing financial inclusion. Further, the studies are not clear on the extent to which the financial inclusion strategies have been adopted by Kenyan SACCOs.

In another study, George (2013) did a study to determine how financial innovation strategies influenced performance among Kenyan SACCOs. The design adopted was descriptive and a total number of 43 commercial banks were studied. The study established that process innovation significantly influenced performance of Kenyan commercial banks. Muia (2017) assessed how financial innovation influenced performance of Kenyan commercial banks. The study established that financial innovation had significant effect on performance of Kenyan commercial banks.

Using a case of deposit taking SACCOs in Kenya, Nekesa & Olweny (2018) assessed how financial innovation influenced their financial performance. The study revealed that product, process and organizational innovations are crucial forms of financial innovations resulting into financial performance of financial institutions today. Cherotich, Sang, Shisia & Mutung'u (2015) did a study on financial innovation and how it influenced performance of Kenyan financial institutions. A census was employed thus covering all the 43 commercial banks in Kenya. The study established existence of strong and significant link between financial innovation and performance.

A study by Ouma, Omagwa & Ngaba (2018) analyzed how financial innovations influenced performance of deposit taking SACCOs. The study found out that development of new products and services had an influence on performance of financial institutions. A related study by Ngumi (2014) sought to determine how financial innovations influenced performance of lending institutions. Financial innovations were operationalized as mobile banking, internet banking, use of automated teller machines and electronic fund transfer. The study noted that financial innovations had significant influence on performance.

2.3.2 Literacy Programs and Financial Performance.

The private sector and the government have ensured that financial education programs develop to rectify low level of financial literacy. Izquierdo, Ferrera and Chaparro (2016) in the study on financial literacy courses on student achievement in Spain, the study revealed that a positive and significant relationship was established such that those who are financially literate make better decisions which improves their achievement in financial terms. However, courses of finance are effective when people from private institutions are used to teach these courses.

Taylor & Wagland (2013) assessed how to solve challenges related to financial literacy in Australia. From the findings, because programs within schools are regularly evaluated, determination of failure or success of financial literacy in programs of the school becomes hard and challenging. Implementing financial literacy programs in schools require lots of resources besides the costs incurred according to the education commission on literacy. Lack of measurable outcome makes it hard justify continuation of this approach.

Mitchell & Lusardi (2013) studied how financial literacy affected planning in Pennsylvania. From the findings, it is not the sole responsibility of any organization or sector to improve the level of financial literacy in our communities. It however demands response of the community with support across all sectors. Achievement of financial

literacy is cumulative for majority of the people. While it would not be argued that schools should be solely responsible for development of financial literacy of students, it is however seen as a critical factor with significant role to play. Creating a financially literate community is a long-term agenda. Encouraging and facilitating the provision of financial services education in schools is one of the key projects identified in some countries.

Engström & McKelvie (2017) assessed how financial literacy influenced performance of micro-enterprises in the context of informal economies in Ecuador. The study established that financial literacy influences performance of micro enterprises. In India, Barua & Sane (2014) did a study on how financial literacy influences customer growth among SACCOs. The findings of the study indicated that with financial literacy in place, the overall days taken to repay loans by customers of SACCOs reduced and thus performance improved.

Hung, Parker & Young. (2009) studied the role of financial literacy in solving the problem of low financial security among the Americans. The researchers analyzed the secondary data of the empirical research done on role of financial inclusion. The primary data was collected using internet-based survey. It was determined that the three knowledge tests have a strong degree of correlation and that all the correlations are statistically significant. Even though there was degree of stability in the measurement strategy. The study concluded that there is no systematic method applicable in determination of the impact of financial literacy programs. The lack of systematic method creates an opportunity for this research to determine a model to determine the effect of financial literacy on performance.

Onyango (2014) sought to determine whether financial literacy had an impact on the loan repayment practice among the employees of commercial banks. The study adopted the survey method and conducted purposive sampling. The sampling selected the major banks in Nairobi, and random sampling used to select the 100 respondents from five commercial banks. The study established that financial literacy has a positive influence

on personal financial practices, but the same time the research determines that employees of the Kenya Commercial Bank have financial literacy yet they are not good managers of their finances. The study recommended that individuals should adopt comprehensive saving methods and prudent expenditure.

Mwaniki (2014) studied the impact of financial literacy training on financial performance of women self-help groups. The study adopted a survey method, and collected both qualitative and quantitative data. The data was analyzed using inferential and descriptive statistics. The main finding stated that majority of the members were keeping a budget since training, they were borrowing for investment and the training on loan management positively influenced their loan graduation. The study concluded that the knowledge gained meant that the self-help groups would find new means or alternative-banking channels as members had new desire to access financial services. It meant that financial literacy training had opened up more business avenues for the self-help group.

The studies indicated that financial literacy programs affect how individuals invest and manage their expenditure. But it is not clear as to whether such elements of financial literacy translate to better financial performance of banks.With specific reference to SMEs in Kwale in Kenya, Chepkemoi (2017) assessed how financial literacy influenced profitability. Financial literacy was operationalized as book keeping, accessibility, savings and working capital management skills. The study established that financial literacy influenced performance.

2.3.3 Compliance to regulatory reforms and Financial Performance.

Large and complex financial institutions pose a number of risks which can be addressed by reforms within the financial sector (Fiolleau, Hoang, Jamal & Sunder, 2013). Majority of the global financial institutions are moderated by some of these complex institutions within growth in interconnections across the border and within firms themselves. Similar trends contributing towards the past global financial crisis include a surge in level of

leverage, dependence on short term as opposed to long term financing, growth in off-balance sheet activities and growth in revenues from shares as a result of complexities in trading and products (Casu, Ferrari & Zhao, 2013).

On the study about the impact of regulatory reforms on large and complex financial institutions by Ötker-Robe, Pazarbasioglu, di Perrero, Iorgova, Kışınbay, Le Leslé & Santos (2013). The study showed that many banks have phase-in arrangements which allow them to improve their earnings retention through developing a modest and earnings outlook. By developing strong earnings, the banks are able to distribute their dividends across their shareholders and as such they will be able to rebuild on their equity capital ratios in a singular phase-in period. According Ötkern & Pazarbasioglu (2010), the new set capital standards impact the investment decisions that both the savings and credit society makes and their clients, either having tighter or loose trading book exposures.

Haidar (2013) undertook a study on the impact of business regulatory reforms on economic growth, the study noted that the business regulatory reforms set by authority bodies have been expanding over the years. These reforms are used by many financial institutions as a benchmark to measure the level of their success in developing their own rules, regulations, laws and policy making. The study findings further show that the institutions with well-developed regulations and policies reap in terms of improved financial performance and market and economic growth.

Haiyambo (2016) assessed how regulations influenced SACCO's performance in Namibia. The study established that having in place regulations alone does not determine performance of SACCOs, but the regulations need to be sound and progressive enough. In Rwanda, Vianney (2013) sought to find out how regulations influenced performance with reference to commercial banks. With the use a descriptive design, the study established that regulation is one of the pillars of any financial sector. As a recommendation, the study notes that governments need to come up with adequate policies and regulations that encourage positive environment.

With focus to Kenyan financial sector, Mwega (2014) analyzed how regulations influenced stability of the sector. The study noted that the financial sector in recent years has been strengthened because of the regulatory reforms in place. Regulatory reforms have enabled financial institutions to develop and offer better products to customers. In an analysis of how regulations by the Central Bank of Kenya influenced financial performance of SACCOs, Kaloki (2018) used a descriptive design and 13 SACCOs were sampled. The study found that key regulations influencing SACCOs performance in financial terms included capital adequacy, statutory requirements and operational requirements.

As a recommendation, the study indicated that SACCOs need to effectively manage their liquidity positions with clearly established capital requirements. With reference to SACCOs in Kenya, Ali (2015) examined the current supervision and regulatory framework in place. Through review of literature, the study established that in Kenya, the supervisory and regulatory framework is not unified since there is involvement of different bodies including churches and clubs in formulation of regulations.

Lastly, Kahuthu (2016) in his study on the Impact of Prudential Regulation on Financial performance of Deposit Taking Savings and Credit Co-operative Societies in Kenya established that core capital positively influenced the financial performance of deposit taking SACCOs in Kenya. Results of the inferential statistics such as ANOVA showed that core capital has a major positive significance on the SACCO‟s financial performance. This study used a comparative design in soliciting information among forty four (44) SACCO's. The research data methodology tool used was a questionnaire and the questionnaires were distributed to the forty four SACCOs in the county

2.4 Conceptual Framework

The relationship between the independent variables and dependent study variable are best explained in a virtual format using the conceptual framework. The graphical depiction makes it easier to understand the independent variables and their indicators and how they

impact the dependent variable. This study will use the conceptual framework to create a clear understanding of the relationship between the variables.

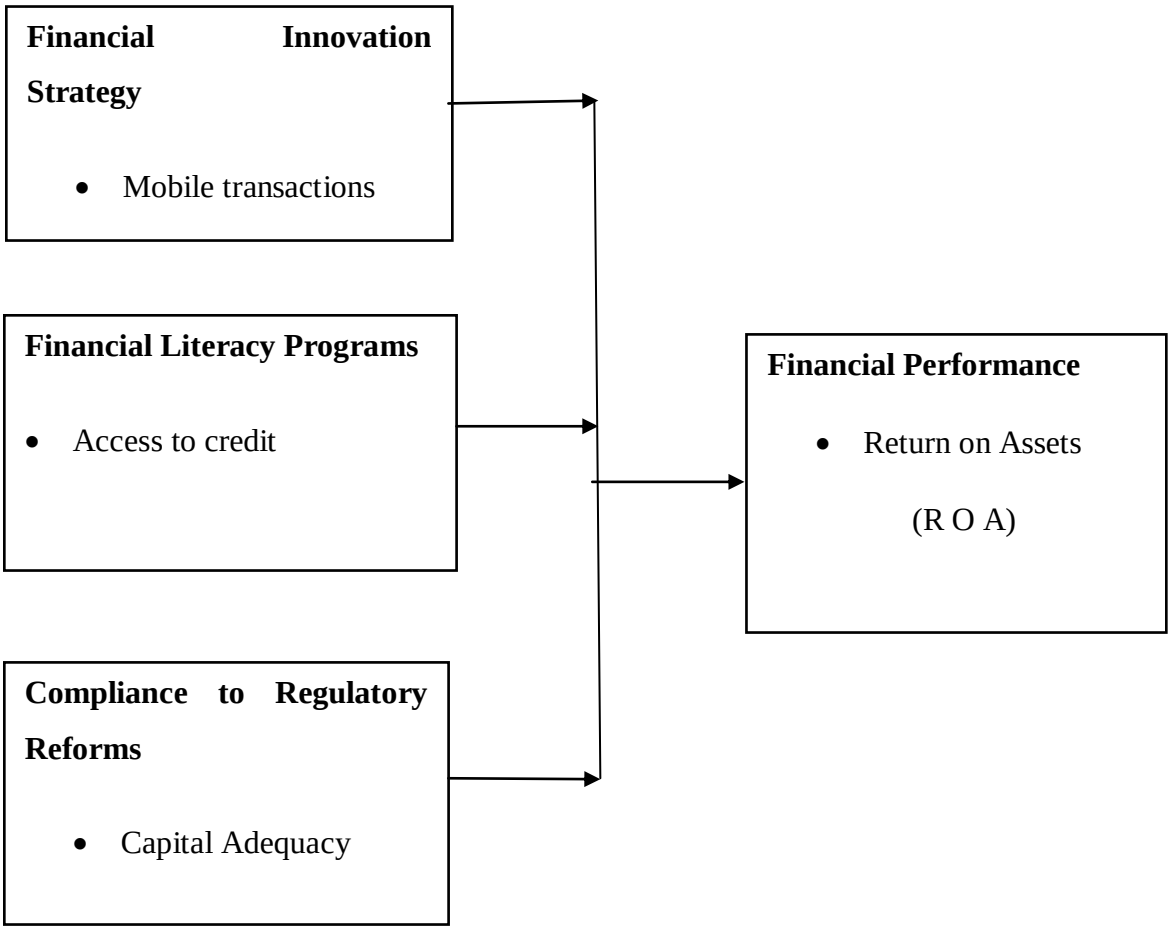


Figure 1: Conceptual Framework

Source: Researcher (2019)

2.5 Summary of Literature review

This chapter has reviewed literature on the relationship between financial innovation strategies, regulatory reforms and financial literacy strategies to aiding. Three theories reviewed explain why SACCO's require financial inclusion strategies and why regulatory reforms too are necessary for the inclusion of all into the financial system. These theories are open systems theory, financial intermediation theory and the life cycle of saving theory. The review also examined the alternative methods of banking that have been adopted by banks in an effort to improve their performance.

These included e-money, internet and telephone banking besides ATMs significantly influences financial performance. The empirical review has shown a number of studies that have examined this relationship. From that, there are inconsistent findings on regulatory reforms, financial literacy strategies as well as the effect of financial inclusion strategies on SACCO's performance. A diagrammatic presentation has been used to depict the relationship that the present study seeks to examine.

2.6 Summary of literature Review and Research Gaps

Author (s)	**Topic of Research**	**Research Findings**	**Research Gap**	**Focus of the Current Study**
Juodelytė (2018)	Impact of Financial Innovation on financial performance of financial institutions in Vilnius	Digital deposits of the bank positively affected the bank performance	Did not review financial literacy and regulations in the financial institutions	Current study covers financial innovation, financial literacy programs and compliance to regulatory reforms in Nairobi county
Malak (2014)	Effect of Financial Innovation on	Financial innovation	Did not review mobile banking,	Study covers financial

	financial performance of commercial banks in South Sudan.	increased performance of commercial banks in South Sudan	financial literacy and regulations in the financial institutions	innovation, financial literacy programs and compliance to regulatory reforms in Nairobi county
Author (s)	**Topic of Research**	**Research Findings**	**Research Gap**	**Focus of the current study**
Kibugo (2017)	Effect of Financial Innovation on performance of microfinance institutions in Nakuru County	SACCO's were able to remain competitive through better implemented financial innovation	Financial innovation was operationalized under process, product and institution	Current study operationalizes financial innovation under mobile banking
Mitchell and Lusardi (2013)	Effect of financial literacy on planning in Pennsylvania	Creating financial literacy is a long term agenda	Financial literacy concentrated on schools to impact knowledge to the community	Current study covers SACCO's as the means to member education on financial management
Mwaniki (2014)	Impact of Financial literacy training on financial performance of women self-help group	The training on loan management positively impacted their loan graduation	Financial literacy was concentrated on women self-help groups	Current study covers deposit taking SACCO's in Nairobi county

Haiyambo (2016)	Assessment of influence of regulations on SACCO performance in Namibia	Too tight restrictions can hinder financial performance	Having in place alone does not determine performance of SACCO's but they need to be sound and progressive.	Current study is on financial innovation, financial literacy programs and compliance to regulatory reforms for the effect on financial performance

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology of the research used in data collection as well as justification of the research methodology that was used in this study. To be precise, it describes the methods of data collection, measurement and analysis approach. The approaches that were used to derive the sample size, research design, target population, and a description of the research instruments that were used. In addition, sampling as well as means of collecting data and statistics that was applied in the data analysis. The discussions hereof are based on the objectives of the study and are all means by which the research questions will be answered.

3.2 Research Design

Creswell (2017) described a research design as a plan of carrying out a study while controlling the factors that may have interference on the study findings validity. In other words, a research design outlines how, where, and when data will be collected and analyzed. This study will use a descriptive research design. This study adopted a causal research design in determining the effect financial inclusion strategies has on financial performance of savings and credit co-operatives.

According to Kuhn & Brewer (2010), a causal design is a research design that seeks to find relationships between independent and dependent variables after an action or event has already occurred.This design was suitable to this study because involved collection, verification and synthesis of evidence to establish facts that defend or refute a phenomenon. A causal research might be used in a business environment to quantify the effect that a change to its present operations will have on its future production levels.

3.3 Study Population

A population is a set of all elements, groups and items with common attributes and characteristics (Yin, 2013). There are 40 registered deposit taking SACCOs operating in Kenya. The study population comprised of the 40 registered deposit taking SACCOs in Nairobi County (SASRA, 2017) .Further, Mugenda & Mugenda (2003), defines a population as a well-defined set of people, services, elements and events, group of things or households that are being investigated and according to the Central Bank of Kenya annual bank supervision report of 2018.

3.4 Sample Design

According to Lavrakas (2008), a sample design is the framework, or roadmap, that serves as the basis for the selection of a survey sample and affects many other important aspects of a survey as well. The target population for this study was 40 SACCO's as they have pertinent information that would respond to the research topic on effect of financial inclusion strategies and financial performance.

3.5 Data Collection Instrument

Bryman (2012), notes that data collection is the process of gathering and measuring information on variables of interest in an established systematic fashion that enables one to answer stated research questions, test hypothesis and evaluate outcomes. Further, a data collection instrument refers to the device used to collect data. In this study, a data collection sheet was prepared by the researcher to aid in data collection which is attached at the appendix.

3.6 Operationalization of Variables

	Variable	Indicator	Measured by Ratios
Independent Variable	Financial Innovation	Mobile transactions	No. of transaction done over mobile platform for firm i / No. of transactions done over mobile platform for the industry
	Financial Literacy Programs	Access to Credit	Ratio of loans to the deposit balance
	Compliance to Regulatory Reforms	Capital Adequacy	Core capital / total assets
Dependent Variable	Financial Performance	Return On Assets	Net income / Total Assets

Figure 3.1: Operationalization of variables table

Source: Research data, 2019

3.7 Data Collection Procedure

The study used secondary data for five years (2013-2017) and was obtained from annual publications by central bank as well as financial statements of SACCOS. This includes statement of financial position and directors reports. Secondary data from SASRA was used to supplement data issued by Kenya National Bureau of Statistics (KNBS). The completed form was scrutinized for any errors, cleaned and all the final cleaned data coded to SPSS for further analysis.

3.8 Data Analysis and Presentation

After data entry, all errors were eliminated and frequency analysis was done such that descriptive analysis was computed. Means and standard deviations was obtained from descriptive analysis. Inferential statistics such as multiple regression analysis was used to determine the relationship between independent variables (Financial Innovation Strategies, Financial Literacy Strategies and Regulatory Reforms) and the dependent variable (Financial Performance).

The regression Model followed this format:

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon}$$

Where: Y = Financial Performance

Financial Performance = Measured by ROA

β_0 = Constant

β_1 β_2 β_3 =Coefficient of the effects of financial inclusion strategies on financial performance of deposit taking SACCO's in Nairobi County

X_1 = Mobile Banking

Where

X_1= Value of mobile transactions done over mobile platform for firm i

X_2 = Accessibility to credit

Where

X_2 = Ratio of loans to the deposit balance

X_3 = Capital Adequacy,

Where

X_3 = Measured by the capital held by the SACCO i.e. (Core capital to total assets)

ε = Error Term

Presentation of results for both the descriptive and inferential statistics was through tables. Quantitative data was presented using mean and standard deviations with the aid of Statistical Package for Social Sciences (SPSS)

3.9 Ethical Considerations

Ethics refers to the norms or standards of acceptable behavior that dictate choices about our moral behavior especially on how we relate to each other. According to Cooper & Schindler (2008), the role of ethics in research is to ensure that nobody suffers adverse consequences or gets harmed during the course of the research exercise. On the other hand, Mugenda and Mugenda (2003) argue that, protecting the welfare and rights of the respondents is the main ethical consideration for the researchers. This being a study based on secondary data, the ethical issues that the study faced were very few. One of the major ethical issues was consent.

Since the study used secondary data and is publicly available for consumption, no further consent was necessary but the researcher ensured that all sources of secondary data used was acknowledged in the data analysis. Lastly, there was a huge need for beneficence. Such that whatever information was accessed should not portray the firms in a bad light and should solely be for the relevance of the research.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

The study sought to investigate the effects of financial inclusion strategies on financial performance of savings and credit co-operative societies in Nairobi County. The study concentrated on savings and credit co-operative societies in Nairobi County. This chapter presented the data findings to verify the how financial inclusion strategies influences financial performance of savings and credit co-operative societies in Nairobi County.

4.2 Descriptive Statistics

This section presents the findings of the descriptive statics on the study variables indicators which are how mobile transactions, access to credit and capital adequacy affect the performance of savings and credit co-operative societies in Nairobi. Descriptive statistics such as means and standard deviations were used to present that quantitative data with the use of Statistical Package for Social Sciences (SPSS) version 23.0. The findings of the descriptive statistics were presented as follows.

Table 4.1: Descriptive Statistics Results of the Main Variables

	Mean	**Std. Dev**
Mobile transactions	6.8357	.93245
Access to credit	1.0670	2.49067
capital adequacy	.2278	.23267
financial performance	.1373	.07828

Source: Research data (2019)

Table 4.1 above indicates that mobile transactions were having a mean of 6.8357 which implied that mobile transactions significantly contribute to a firm's financial performance. The findings also reveal that mobile transactions were used by majority of the firms as indicated by standard deviation .93245. This shows that mobile banking offers a high level of reliability and convenience since agents are located even in small market centers and customers can undertake transactions from the comfort of their homes. This system therefore offers a great potential for formal financial providers to reach low-income rural people.

These findings collaborated with a study undertaken by Kibugo (2017) when he looked at how financial innovations influenced the performance of savings and credit cooperative societies. Financial innovation was operationalized under process, product and institutional. It was revealed that most SACCOs use mobile banking as forms of financial innovation which improved on their performance. The study further revealed that through financial innovation, SACCOs were able to remain competitive. Accessibility to credit in the study as supported by a mean of 1.0670 established that majority of the SACCO's had well thought out financial literacy programs that in turn enhanced the credit uptake

The standard deviation of 2.49067 which indicated that to a great extent those who are financially literate make better decisions in regards to access to credit which improves their achievement in financial terms. However, the study by Mitchell & Lusardi (2013) on how financial literacy affected planning in Pennsylvania. The findings revealed that it was not the sole responsibility of any organization or sector to improve the level of financial literacy in our communities. It however demands response of the community with support across all sectors. Achievement of financial literacy is cumulative for majority of the people and it surely enhances the financial performance of the institution.

Capital adequacy had a mean of .2278 and a standard deviation of .23267. This indicates that guidelines set by the governing bodies have a positive impact on the financial performance of an organization. These regulations are used by many financial institutions

as a benchmark to measure the level of their success in developing their own rules, regulations, laws and policy making. The study findings further show that the institutions that strictly adhere to the regulations and policies reap in terms of improved financial performance and market and economic growth.

Consequently, almost all SACCO'S are sensitive to potential massive deposit withdrawals from lack of proper underpinned financial inclusion strategies. Financial performance had a mean of .1373 and standard deviation of .07828 with minimum value of .01 and .76 maximum. This implies that there are numerous factors that have contributed to this greater level of inclusion that has in turn lead to a great upward trend to the financial performance of SACCO's; one, expanding reach of the major types of financial providers, commercial banks, savings and credit co-operatives societies (SACCOs) and micro finance institutions(MFIs) through proper governing guidelines for protecting the SACCO members (CBK, 2012).

4.2.1 Financial Innovation

The study sought to establish the yearly value of money moved through mobile banking during the study period. The study determined a natural logarithm of the data and calculated its average. The findings were as indicated in the table 4.2

Table 4.2 Results for Financial Innovation

Years	Mobile transactions (log)
2013	6.809
2014	6.923
2015	6.787
2016	6.833
2017	6.823

Source: Research data (2019)

From the findings in Table 4.2, the study established that the value of the money over the mobile platform varies from 2013 all across 2017 with 2014 recording the largest transaction. The study established that in the inception month, the total amount moved through mobile banking had a logarithm of 6.8 which grew from month to month during the year 2013 to its close. In the year 2014, there was a rapid growth that was experienced across all savings and credit cooperation societies and the value of money moved through mobile banking at its close had a natural logarithm of 6.9.

These findings agree with the findings of Nyathira (2013) who acknowledged that financial innovation by means of advanced systems of payment enhanced financial performance. Financial innovation presented more opportunities, convenience, efficiency and security to SACCO customers subsequently resulting to more demand (uptake) for the new innovations. Demand for traditional payment systems reduces as customers switch to the more effective payment systems and greatly increases their convenience. For the year 2015, there were lowest transactions in the study period of 6.787 but generally there is no much variation in mobile transactions between 2013 and 2017.

These findings coincide with, a study by Nekesa & Olweny (2018) who using a case of deposit taking SACCOs in Kenya assessed how financial innovation influenced their financial performance. The study revealed that product, process and organizational innovations are crucial forms of financial innovations resulting into financial performance of financial institutions today and a number of financial innovations had been adopted by savings and credit societies including agency banking, internet, mobile banking and use of credit cards.

4.2.2 Financial Literacy Programs

The study used accessibility to credit as a measure of financial literacy, which was eventually measured using amount of loans and deposit balances. The study used the data collected on loans and deposit balances and calculated the natural logarithm of the final

data and calculated its average to adequately determine how financial literacy affected performance of savings and credit co-operative societies in Nairobi County. The findings in Table 4.3

Table 4.3: Financial Literacy

Years	Loans and Deposit Balances (Log)
2013	0.771
2014	0.868
2015	1.829
2016	0.916
2017	0.922

Source: Research data (2019)

From the findings in Table 4.3 above the study established that the amount of Loans to Deposit Balances varies over the years. In 2015 the amount of Loans to Deposit Balances was the highest with a logarithm of 1.829, this implies that SACCO's reviewed there strategies to make it possible for its members to access credit easily. Financial literacy not only helps one make choices while confident and sure, but also enables individuals to respond competently to changes that affect their everyday financial security including events in the general economy like collapse of financial markets, rising unemployment and the threat of rapid inflation.

These findings are in agreement with the findings of Chepkemoi (2017), who established that financial literacy programs were a necessity to the performance of microfinance institutions. 2013 had the lowest credit accessibility of 0.771 indicating that there was a possibility of less financially literate households which made it more likely for them to unknowingly commit financial mistake and less likely to engage in recommended financial practices and less likely to be able to cope with sudden economic shocks (Lusardi *et. al* , 2012). But as the years went by, the amounts of loans to deposit balances went increasing and that shows there was a positive impact on the financial literacy

programs undertaken by the various SACCO's in Nairobi County. The decline in 2015 and the subsequent rise in 2016 henceforth is supported by a study by

4.2.3 Compliance to Regulatory Reforms

The study determined compliance to regulatory reforms using Capital Adequacy of the SACCO's under the study. This was measured using Core Capital and total asset. To effectively determine the effect of regulatory reforms on performance of savings and credit co-operative societies in Nairobi County, the study calculated core capital ratio (core capital to total asset) and calculated its average. The finding in Table 4.4

Table 4.4: Compliance to regulatory Reforms

Years	Core Capital Ratio
2013	0.214
2014	0.189
2015	0.181
2016	0.210
2017	0.276

Source: Research data (2019)

The findings in Table 4.4 Indicate that there was a varying core capital ratio from 2013 to 2017. The findings revealed that the regulations were considerably favorable therefore the SACCO's were able to meet their payments when they fall due. The level of core capital of the SACCO'S was also high enough to cover volatile funding if the value of this ratio is higher than 100 %. 2017 had the highest core capital ratio 0.276 and lower in 2015 with 0.181, the year 2016 had 0.210, and while 2013 had 0.214 and 2014 had 0.189 respectively. These findings were in agreement with the findings of Mwega (2014) who analyzed how regulations influenced stability of the financial sector.

The study noted that the financial sector in recent years has been strengthened because of the regulatory reforms in place and given that the primary purpose of finance is to

facilitate productive economic activity, the aim of regulation is to maintain financial stability and to promote economic growth. This was a delicate balancing act, as too great a focus on stability could stifle growth, while a dash for growth is likely to sow the seeds of future crises. Regulatory reforms have enabled financial institutions to develop and offer better products to customers. In an analysis of how regulations by the Central Bank of Kenya influenced financial performance of SACCOs.

According to Haiyambo (2016) Capital adequacy has been used as the best parameter for measuring banks' performance and the amount of capital a bank has in its balance sheet determines the soundness and healthiness of the bank and its ability to protect its lenders from the uncertainties of the economy. Banks' performance should be focused on fulfilling the legal obligation towards its lenders.

4.2.4 Financial Performance.

The study used return on asset and calculated its average to assess the effect of financial inclusion strategies (Financial innovation, financial literacy and compliance to regulatory reforms) on firm performance of savings and credit co-operative societies in Nairobi County. The findings in Table 4.5

Table 4.5: Financial Performance.

Years	Return on asset (ROA)
2013	0.128
2014	0.114
2015	0.161
2016	0.141
2017	0.138

From the findings in Table 4.5, Return on asset varies from 2013 to 2017. 2015 had high ROA with 0.161 followed by 2016, 2017, 2013 and 2014 with 0.141, 0.138, 0.128 and 0.114 respectively. According to Morgan & Pontines, (2014), whose findings were based

on descriptive statistics and the correlations, respectively, of the variables used in his study, they noted that developing economies are seeking to promote financial inclusion, i.e., greater access to financial services for low-income households and firms, as part of their overall strategies for growth and financial development

And that good financial performance is the importance of financial institutions, it is more pronounced in developing countries because financial institutions are usually under developed and they are considered the merely major source of finance for the majority of the underbanked and are usually the main depository of economic savings. These findings of the current study implies that firms were able generate majority of its finances (net income) from utilization of well thought out financial inclusion strategies (in 2015 16.1% of its net income was as result of using total asset followed by 2016, 2017, 2013 and 2014 with 14.1%, 13.8%, 12.8% and 11.4% respectively.

These findings are in line with a study by Morgan & Pontines (2014) whose overall Index of financial inclusion was obtained using the formula suggested by Sarma (2008). The index ranged from zero to 100 percent. A value of zero would indicate imperfect inclusion while that of 100 suggests perfect financial inclusion. From their investigation the index raised from 46 to 99.6 during the study period. This implied that in general financial inclusion in Kenya is nearing a perfect state and this is also supported by FSD report 2016 which placed Kenya to be above 75% in financial inclusion. Financial institutions are important financial intermediaries in the economy who perform the basic functions of accepting deposits, lending the money and offering transfer services.

The savings and credit cooperative societies also represent a vital link in the transmission of government's economic policies particularly monetary policy to the rest of the economy (Ongore & Kusa, 2013). In emerging market economies like Kenya, micro finance institutions remain the dominant channel of financial intermediation. Bank deposits represent the most significant component of money supply used by the public and changes in money growth are highly correlated with changes in prices of goods and

services in the economy. For savings and credit cooperative societies to efficiently perform their intermediation role of providing liquidity, they must be stable. SACCO's stability has been a key international agenda by policy makers since the Global Financial Crisis of 2007-2009.

The financial Stability Board and Basel Accord have been key in enhancing financial stability. For Kenya one of the mandates of the Central Bank is to foster financial stability through regulation of the sector (Central Bank of Kenya, 2017).

4.3 Regression Analysis

The main objective of the study was to investigate the effects of financial inclusion strategies on financial performance of savings and credit co-operative societies in Nairobi County. To verify, this study used regression analysis. The findings are on subsequent sections. This summary provides an insight ability of the regression to effectively account for the total variation in organization performance. The Table 4.6 below demonstrates how observed y-values are highly dispersed around the regression line.

Table 4.6: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.938[a]	.880	.878	.02729

a. Predictors: (Constant), capital adequacy, accessibility to credit, mobile transactions

From the findings in Table 4.6, the three independent variables (financial innovation strategies, financial literacy programs and compliance to regulatory reforms) that were studied, explain the value of adjusted R Square which was at .878 and which represents 87.80%. This shows that the percentage change in financial performance of savings and credit cooperative societies in Nairobi County is explained by relationship financial inclusion strategies that include financial innovation strategies, financial literacy strategies and regulatory reforms. The implication of these findings to the current study is therefore that apart from financial inclusion strategies, there are other factors with an

influence on financial performance which future studies should focus on. More specifically, these other factors explain 12.2% change in financial performance. Table 4.7 below gives the findings on the Analysis of Variance (ANOVA) that was conducted at 5% level of significance.

Table 4.7: ANOVA

Goodness of fit of the regression model was tested using Analysis of Variance (ANOVA). The ANOVA results are as shown in Table 4.7 below

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Regression	1.073	3	.358	480.569	.001[b]
Residual	.146	196	.001		
Total	**1.219**	**199**			

a. Dependent Variable: financial performance

b. Predictors: (Constant), capital adequacy, accessibility to credit, value of mobile transactions

Source: Research Data (2019)

Table 4.7 above shows a number of items including the value of F calculated and the p-value showing significance. The significance value is 0.001 which is less than 0.05 thus the model is statistically significant in predicting how financial innovation strategy, financial literacy programs and compliance to regulatory forms influenced the financial performance of deposit taking SACCO's in Nairobi County. From the findings, it can be seen that F calculated at 480.569 significance while the value of F critical (at degrees of freedom 4, 71) is equivalent to 2.6506. Thus, it can clearly be shown that F calculated is greater than F critical, and hence the overall regression model was significant / fit in estimating the interaction between financial inclusion strategies and financial performance. Table 4.8 below gives the beta coefficients and p-values.

Table 4.8: Coefficient of Determination

	Unstandardized Coefficients		Standardized Coefficients	t value	Sig.
	B	Std. Error	Beta		P value
(Constant)	.410	.022		18.447	.001
Mobile transactions	.043	.003	.507	12.251	.002
Accessibility to credit	.018	.001	.583	20.623	.004
Capital adequacy	-.005	-.013	.015	-.389	.003

a. Dependent Variable: financial performance

Source: Research Data (2019)

The established regression equation by the study resulted into the following regression model;

$$\mathbf{Y = 0.410 + 0.043X_1 + 0.018X_2 - 0.005X_3}$$

Where Y = Financial Performance of deposit taking SACCO's in Nairobi city county

X_1 = Financial Innovation Strategy (Mobile Transactions)

X_2 = Accessibility to credit

X_3 = Compliance to Regulatory Reforms (Capital Adequacy)

From the above regression coefficient Table 4.8, the findings indicated that when mobile transactions, accessibility to credit and capital adequacy are kept constant, financial performance would be at 0.410. As shown in the table, the findings also indicated that an increase in mobile transactions would in turn increase financial performance by .043. An increase in Accessibility to credit by SACCO's would increase financial performance by .018. Capital adequacy also would decrease financial performance by -.005 when there is unit increase.

The relationships of p-values for variables mobile transactions and access to credit were significant as the values were less than 0.005 and all are significant with value of mobile transactions (t = 12.251, p = <0.005), Accessibility to credit (t = 20.623, p = <0.005) and compliance to regulatory reforms through capital adequacy (t = _.389), p = <0.005) Therefore mobile transactions and accessibility to credit significantly influence financial performance. Value of money moved through the mobile plat form was found to have a greater influence at 4% on the performance of deposit taking SACCO's in Nairobi County as compared to accessibility to credit at 2%.

The findings are in line with Malak (2014) who established that financial innovation has positive influence on financial performance. In a study to assess how financial performance of commercial banks in Kenya was affected by financial innovations, Nyathira (2013) noted that financial innovation through advanced systems of payment improved financial performance. Kibugo (2017) revealed that through financial innovation, SACCO's were able to remain competitive. In another study, George (2013) did a study to determine how financial innovation strategies influenced performance among Kenyan commercial banks, it was established that process innovation significantly influenced performance of Kenyan commercial banks.

On the other hand, the p-value for financial innovation was 0.02 indicating that it was quite significant. The findings contradicts Cherotich, Sang, Shisia & Mutung'u (2015) who did a study on financial innovation and how it influenced performance of Kenyan financial institutions and established existence of strong and significant link between financial innovation and performance. The findings however contradicts with Muia (2017) who assessed how financial innovation influenced performance of Kenyan commercial banks and established that financial innovation had significant effect on performance of Kenyan commercial banks.

4.4 Interpretation of the Findings

The study sought to establish the effect of financial innovation strategy, financial literacy programs and compliance to regulatory reforms on the financial performance of deposit taking savings and credit cooperative societies in Nairobi County. The results of the study were then compared to the existing literature. Analysis was done using descriptive statistics such as means and standard deviations. The findings were presented inform of tables. Regression analysis was used to establish the relationship between dependent and independent variables. Analysis of variance (ANOVA) was used to test the goodness of fit of the regression model to the data collected.

In summary, this study found that all the factors influences financial performance of SACCO's. Financial Innovation strategy was most significant in increasing financial performance. The study also identified that when other factors are kept constant, financial performance would be at 0.410. Financial innovation and financial literacy significantly influence financial performance of SACCO's while regulatory reforms increases financial performance but not significantly. The p-values for variables mobile transactions and accessibility to credit were significant as the values were less than 0.005 while the p-value for capital adequacy was 0.6 indicating that it was not significant. Therefore mobile transactions and accessibility to credit significantly influence financial performance.

In regard to how the value of money moved via mobile transactions influences the financial performance of deposit taking savings and credit cooperative societies in Nairobi County the findings indicated that it enhances the financial performance in the microfinance institution and improves the services offered to the members of the SACCO and the firm is able to come up with innovative products and services thus boosting efficiency.In respect to in what way financial literacy programs influences the financial performance of deposit taking savings and credit cooperative societies in Nairobi County

the findings indicated that producing a financially literate community is a long-term agenda.

Inspiring and enabling the provision of financial services education in the community is one of the key projects identified in some deposit taking savings and credit cooperative societies in Nairobi County. It is highly effective, allowing the institution to do the right thing at the right time, every time. A budget can be set aside for member education and tis will greatly influence uptake of credit. In regards to how compliance to regulatory reforms influences the financial performance of deposit taking savings and credit cooperative societies in Nairobi County the findings indicated that the industry regulatory reforms set by authority bodies have been increasing over the years.

These reforms are used by many financial institutions as a yardstick to know to what degree of their success in developing their own rules, regulations, laws and policy making can be of profitability to their firms Haidar (2013). The study findings further show that the institutions with well-developed regulations and policies reap more benefits in terms of improved financial performance and market and economic growth. Regulations help make activities more efficient, maximizing operational performance and organizations take advantage of opportunities for growth

In view of how the independent variables (financial innovation strategy, financial literacy programs and compliance to regulatory reforms) influenced the dependent variable, i.e. performance of the deposit taking SACCO's in Nairobi County, the findings established that growing financial access over financial innovation strategy alters the structure of the consumers in regards to saving and borrowing activities. It provides more efficiency and effectiveness in conducting their businesses with the micro finance institution. Decent financial performance can increase trust in the financial system and therefore advance financial inclusion.

On the other hand, too much stressing on financial performance can postpone involuntary financial exclusion. Particularly in periods of regulatory tightening in an effort to increase

profits and cut off risky segments. Financial literacy too is significant as it helps clients with making informed decisions as they indulge on credit uptake. This leads to higher profitability and impressive financial performance, which enhances the performance of the SACCO.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the study findings where the objective was to investigate the effects of financial inclusion strategies on financial performance of savings and credit co-operative society in Nairobi County. The chapter also presents the conclusions of the study, recommendations for policy and practice and suggestions for further research in relation to the effects of financial inclusion strategies on financial performance of a SACCO. The study sought to establish the effect of financial innovation strategy, financial literacy programs and compliance to regulatory reforms on the financial performance of savings and credit co-operative society in Nairobi County.

The SACCO's reviewed under the study were the 40 SACCO's in Nairobi County. The results of the study were then compared to existing literature. Analysis was done using descriptive statistics such as means and standard deviations. The findings were presented inform of tables. Regression analysis was used to establish the relationship between dependent and independent variables. Analysis of variance (ANOVA) was used to test the goodness of fit of the regression model to the data collected.

5.2 Summary

The study main objective was to investigate the effects of financial inclusion strategies on financial performance of savings and credit co-operative in Nairobi County. The study concentrated on financial innovation strategies, financial literacy strategies and regulatory reforms as the main financial inclusion strategies. On the other hand performance of the SACCO's was measured by return on assets. Inferential statistics was used to test the effect of the relationship between the independent variables (Financial Innovation

Strategies, Financial Literacy Strategies and Regulatory Reforms) and the dependent variable (Financial Performance).

In summary the study identified that all the factors (Financial Innovation Strategies, Financial Literacy Strategies and Regulatory Reforms) influences financial performance of SACCO's. Financial Innovation was most significant in increasing financial performance. Financial Innovation and Financial Literacy significantly influence performance of SACCO's while Regulatory Reforms increases financial performance but not significantly. The p-values for variables mobile transactions and accessibility to credit were significant while the p-value for capital adequacy was not significant. Therefore mobile transactions and accessibility to credit significantly influence financial performance.

The negative coefficient of capital adequacy indicated that relation might be non-linear due to possible bureaucratic bottlenecks and managerial inefficiencies suffered by SACCO's. The first objective of the study was to determine the effect of financial innovation strategy on financial performance of savings and credit co-operative society in Nairobi County. The study established that the value of money transacted over the mobile plat form has a positive and significant effect on the financial performance of savings and credit co-operative society. The research shows that mobile banking to a larger extent impacts the financial performance of savings and credit co-operative society in Nairobi County.

It helps reduce unnecessary cost, increase efficiency and improves on service delivery to customers that is evident in the large number from the annual publications of the financial statementsThese illustrates that savings and credit cooperative societies have continued to be innovative in establishment of new ways which clients access their accounts, payment of bills and purchasing of products in that product, process and organizational innovations are crucial forms of financial innovations resulting into financial performance of financial institutions today. Financial innovations that were

operationalized were mobile banking, internet banking, use of automated teller machines and electronic fund transfer. The study noted that financial innovations had significant influence on performance with mobile banking having the greatest significance as it improved financial operations.

The second objective was to evaluate the effects of financial literacy programs on performance of savings and credit co-operative society in Nairobi City County. The study established that financial literacy programs has a positive and significant effect on the performance of savings and credit co-operative society in Nairobi City County. The study also found out that it has impact on the financial activities of individuals, this was evident from the amount of loans disbursed to the member deposits and the amount of money a SACCO had used on member education. This was in turn replicated in the performance of the savings and credit co-operative society.

The findings of these study were found to be similar to the findings of previous studies which established that those who are financially knowledgeable or better yet financially literate make better decisions which improves their achievement in financial goals. However, member education needed allocation of more budget to effectively have a larger outreach and contribute on financial inclusion. Further, from the reviewed literature, studies that focused on financial literacy in Pennsylvania noted that it was not the sole obligation of any organization or sector to improve the level of financial literacy in our communities.

It nonetheless demands response of the community with support across all sectors. Achievement of financial literacy is cumulative for majority of the people. However, people that were keen on member education had well informed credit uptakes and greater deposit balances. Further, with financial literacy in place, the general days taken to pay back loans by customers of SACCOs will reduce and thus performance of the firm improves. The significant obstacle to performance and growth of sustainable small and medium scale enterprises (SMEs) throughout the developing world is a lack of

knowledge, skills, attitude and awareness to cope and direct the finances of their SACCO of choice in a hardy, transparent, and professional way.

Financial literacy can be operationalized as book keeping, credit uptake, savings and working capital management skills. The study established that financial literacy influenced performance of the SACCO's reviewed.

The third objective was to assess the effect of regulatory reforms on performance of savings and credit co-operative society in Nairobi City County. The study established that the SACCO society's regulatory framework purposes at enhancing transparency and accountability in the management of deposit taking SACCOs. For transparency and accountability to be achieved, two important ingredients need to be present; maturity of the market which can self-regulate itself or presence of a regulator who provides basic minimum prudential standards to be observed by all the players in the market.

The study also established that regulatory reforms are used by many financial institutions as a benchmark to measure the level of their accomplishment in developing their particular rules, regulations, laws and policy making. The study findings additionally show that the institutions with well-developed regulations and policies gain more in terms of improved financial performance and market and economic growth. Therefore most institutions ensure the core capital is at a level where the clients have security and confidence with them. These findings were in support of existing literature.

From the evaluations of how regulations influence stability of the micro finance sector, the conclusion is that the financial sector in current years has been reinforced because of the regulatory reforms in place. Regulatory reforms have permitted financial institutions to improve and offer superior products to customers and the current set of capital standards influence the investment decisions that both the savings and credit society makes and their clients, either having tighter or loose trading book exposures. Crucial regulations in the study influencing SACCO's performance in financial terms included capital adequacy, statutory requirements and operational requirements.

Having picked Capital adequacy as an indicator in this study, the study indicated that SACCOs need to efficiently manage their liquidity positions with undoubtedly established capital requirements. Lastly, in relation to SACCOs in Kenya, with prudential regulation on core capital there is influence on the financial performance of deposit taking SACCOs in Kenya. Regression analysis proved the existence of a strong relationship (R = 0.938) between SACCO performance and Mobile banking, Credit uptake and compliance to regulatory reforms.

The regression analysis findings also established that Mobile banking, Credit uptake and compliance to regulatory reforms can account for 87.8% of the total variance in the performance of deposit taking SACCO's in Nairobi County. Analysis of variance (ANOVA) verified that the regression model had goodness of fit and was reliable in establishing the effect of financial inclusion strategy on financial performance of savings and credit co-operative society in Nairobi County

5.3 Conclusion

The study concludes that financial innovation as a financial inclusion strategy has a positive and significant influence on the performance of deposit taking SACCO's in Nairobi County. Mobile banking helps decrease avoidable cost, increase efficiency and improves on service delivery to customers that is evident from the value of mobile transactions over the mobile plat form indicated in the annual publications of the financial statements and directors reports. Mobile banking is one of the innovative models of providing banking services to the unbanked. The strategy has brought efficient financial service providers within the reach of millions of people in Kenya thus reducing financial exclusion.

On the effect of financial literacy programs on the performance of deposit taking SACCO's in Nairobi county, the study concludes that through member education ,those who are financially informed or better yet financially literate make better decisions which improves their achievement in financial goals. Their credit uptake and accessibility to credit is tremendous. However, member education needed allocation of more budget to effectively have a larger outreach and contribute on financial inclusion. This in turn has a positive and significant effect on the performance of the deposit taking SACCO's as the credit uptake is remarkable.

In relation to the effect of compliance to regulatory reforms on the performance of deposit taking SACCO's in Nairobi County, the study concludes that to make sure that deposit taking societies regularly meet the capital adequacy ratios thereby safeguarding members' investments and improve the growth of the SACCO, SASRA ought to come up with vetting criteria in recruitment of knowledgeable managers who can confidently influence the policy and direction of the Society towards better retained earnings, SASRA can also enhance supervision of the Deposit taking SACCO's and increase penalties for noncompliance of the capital adequacy ratios.

The capital requirements improved the SACCO's' size resulting to increased bank activity and consequently improved firm performance. The study concluded that capital requirement regulation improved performance of deposit taking SACCO's in Nairobi County. The study also concluded that financial innovation strategy has a significant influence on the performance of SACCO's while regulatory reforms increases financial performance but not quite significantly. The study also concluded that there is a direct strong relationship between financial inclusion strategies and financial performance of SACCO's. Therefore at a great extent financial inclusion strategies affect the financial performance of registered SACCO's Kenya where they influence.

The research findings would guide the industry regulator in coming up with low cost effective policies that would result to better performance of Deposit Taking Microfinance

Institutions. The understanding of how each capital structure variable influences financial performance, the regulator would find it useful in setting minimum capital requirements among other regulatory policies. The study also concludes that there is a strong relationship between employees' performance and Motivation, Organizational Culture and Employee Training.

The study also concluded that Motivation, Organizational Culture and Employee Training have a combined positive effect on the employees' performance of selected universities in Kenya where they influence 87.8% of the total enhancement in SACCO performance

5.4 Recommendation for policy and practice

The study identified that Financial Innovation was most significant in increasing financial performance therefore firms that have not effectively incorporated innovations strategies may have limited avenue for collection of finances, record keeping and avenue of service delivery. The study also recommended that the need to invest in financial innovations to reduce cost and increase efficiency in the sector to retain and increase financial inclusion.

The study recommends that the organization must provide quality services which are user friendly as a means to meet customer expectations leading to growth in business, SACCO's should encourage their customers to fully embrace technology use particularly for services such as cash deposits, cash withdrawals and account opening which can be achieved through creating awareness in market segments as this would enhance performance and collection of information to fit the needs of the customers.

To the government, through SASRA and other SACCO regulating bodies, the study recommends that it should simplify its registration and capital requirements for one to run a SACCO so as to realize its vision 2030 sustainable development goals of reducing the unbanked. The government of Kenya in the year 2017 allowed SACCO's to use creative methods to get access to customers in marginalized areas in terms of financial access.

Over the past seven years, the deliberation has been on whether the financial inclusion processes and regulations put in place by SACCO's and the respective authorities have been substantial in opening up most parts of the country to financial services. This research recognized that financial inclusion elements are important in making access to financial services better. Therefore, government policy makers, especially at the Central Bank and other regulatory bodies should encourage banks to continue using aspects of financial inclusion in expanding their businesses across the country due to its effectiveness

The study recommends that policy makers of the micro finance institutions should continue to invest in financial literacy programs through arrangement of workshops and seminars in which potential customers learn different aspects of financial management. It has been determined that allocation of money on member education have an impact on the credit uptake and in turn an increase in the financial performance of SACCO's. It means that financial institutions of the same nature as SACCO's should also be encouraged to come up with policies that aim towards increasing the number of agents.

Such policies open up the savings and credit society to new clients and new sources of revenues. There has been a significant increase in the number of customers using the element of mobile banking. Micro finance policy makers should emphasize on the creation of more internet and mobile-based platforms while cutting down on the number of physical offices around the country. Even though ATMs have a positive effect on financial inclusion, they tend to play almost the same role as the mobile banking element.

5.5 Suggestions for Further Research

The current study focused on SACCO's in Nairobi, Kenya which is one of the many financial institutions in Kenya. Therefore, future studies should take a comparative approach by comparing other financial institutions in the country. Regression results showed that the identified factors explained only 88.0%of financial performance are explained by financial inclusion strategies applied by the SACCO's in Nairobi County in

Kenya. Thus, future studies should focus on exploring other factors like the government policies that influence financial performance of SACCO's in Nairobi, Kenya apart from the ones identified in this study.

Additionally, this study only focused on three financial inclusion strategies. These strategies were financial innovation strategy, financial literacy programs and compliance to regulatory reforms. The three factors could only explain 87.8% of the total variance on the performance of deposit taking SACCO's in Nairobi County. This implies that that there are other factors that also greatly influence employee. Further studies should be carried out to pin-point those other factors. Moreover, other financial inclusion strategies such as use of point of sale systems, spread of branches and use of agents and representatives can be investigated to determine their impact on financial performance of a SACCO.

Further study in future can be done with emphasis on periods of economic shocks. The focus in this case should be how financial inclusion strategies affects financial performance of SACCOS when it is not business as usual. For example when the regulations are too tight for SACCO operations, when the unbanked willingly choose to be left out of the financial services and growth or when there is economic recession or boom. Further studies can also be done on the effect of financial inclusion strategies with focus on rural self-help groups in terms of sources of funding and investments. The study in this case would seek to establish the effect of financial inclusion strategies on self-help groups or even rural table banking cooperatives and ultimately the impact on their performance.

REFERENCES

Ali, A. E. E. S. (2015). The regulatory and supervision framework of Microfinance in Kenya. *International Journal of Social Sciences Studies*, *3*, 123.

Allen, F., & Santomero, A. M. (1998). The theory of financial intermediation. *Journal of Banking & Finance*, *21*(11-12), 1461-1485.

Agunga, M. (2016). *Effect of financial literacy on financial preparedness for retirement among permanent and pensionable employees in state owned corporations in Nairobi, Kenya*. Retrieved from https://ir-library.ku.ac.ke

Barua, R. & Sane, R. (2014). *Repayment in microfinance: The role of financial literacy and caste*. Discussion papers in Economics, *14*(6), 1-25.

Blair, C. (2013). *Financial-inclusion*. Retrieved November 29, 2018, from https://www.icpak.com/wp-content/uploads/2015/05/the-accountant-aug-sep14

Bolt, W. & Humphrey, D. (2015). Assessing bank competition for consumer loans. *Journal of Banking & Finance*, *61*, 127-141.

Bruton, G., Khavul, S., Siegel, D., & Wright, M. (2015). New financial alternatives in seeding entrepreneurship: Microfinance, crowdfunding, and peer-to-peer innovations. *Entrepreneurship Theory and Practice*, *39*(1), 9-26.

Bryman, A. (2012). *Social research methods*. (4th Edition) Oxford: Oxford University Press

Blythin, J & Cooten, J. (2017).. *The Development of FinTech in Nairobi: Contributions to Financial Inclusion and Barriers to Growth Masters in Management Thesis Lund University school of management*. Retrieved from http://lup.lub.lu.se/luur/download?func=downloadFile&recordOId=8917326&fileOId=8917329

Cámara, N., & Tuesta, D. (2014). *Measuring financial inclusion*: A multidimensional index.

Casu, B., Ferrari, A., & Zhao, T. (2013). Regulatory reform and productivity change in Indian banking. *Review of Economics and Statistics*, *95*(3), 1066-1077.

Central Bank of Kenya (2017) *Annual supervision report*

CGAP (2018). *What is Financial Inclusion and Why is it Important?* Consultative Group to Assist the Poor.

Chepkemoi, M. (2017). The Effects of Financial Literacy Training on Business Profitability in Coastal Region: A Case of Kwale County SMEs. *Strategic Journal of Business & Change Management, 4*(3).

Cherotich, K. M., Sang, W., Shisia, A., & Mutung'u, C. (2015). Financial innovations and performance of commercial banks in Kenya. *International journal of economics and commerce management II* (5), 1242-1265.

Chithra, N., & Selvam, M. (2013). *Determinants of financial inclusion*: An empirical study on the inter-state variations in India.

Cohen, M & Nelson, C. (2011). *Financial Literacy: A Step for Clients towards Financial Inclusion. Global Microcredit Summit Commissioned Workshop Paper November 14-17, 2011 – Valladolid, Spain*

Communications Commission of Kenya. (2012) *Mobile ventures Kenya*. Quarterly Sector Statistics Report, 2nd Quarter, October December 2011/2012.

Coulthurst, M. (2011).The strengths and limitations of credit as a tool for alleviating poverty. *Word Development journal*. (4) 58-59.

Cooper, B. and Schindler, P. (2008) *Business Research Methods*, Mc Graw Hill: Berkshire.

Creswell, J.W., (2017). *Research design. Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks CA: Sage.

Cyn-Young, P., and Rogelio, V. (2015) *Financial inclusion, poverty, and income inequality in developing Asia,* Asian Development Bank Economics Working Paper Series.

Daher, L., & Le Saout, E. (2013). Microfinance and financial performance. *Strategic Change, 22*(1-2), 31-45.

Demirgüç-Kunt, A. (2014). Presidential address: Financial inclusion. *Atlantic Economic Journal, 42*(4), 349-356.

Demirguc-Kunt, Asli; Klapper, Leora; and Singer Dorothe (2013) *Financial inclusion and legal discrimination against women evidence from developing countries*. Policy Research working Paper 6416; World Bank.

Dupas, P., Green, S., Keats, A., & Robinson, J. (2013). *Challenges in banking the rural poor: Evidence from Kenya's western province* (No. w17851). National Bureau of Economic Research.

Ehrbeck,T, Pickens, M & Tarazi, M (2012) *Financially Inclusive Ecosystems: The Roles of government today*. Research & analysis publication.

Engström, P., & McKelvie, A. (2017). Financial literacy, role models, and micro-enterprise performance in the informal economy. *International Small Business Journal*, *35*(7), 855-875.

Fiolleau, K., Hoang, K., Jamal, K., & Sunder, S. (2013). How do regulatory reforms to enhance auditor independence work in practice . *Contemporary Accounting Research*, *30*(3), 864-890. FORTUNE (Oct. 24, 2016),

Fuhrmann, R. C. (2017). *The Banking Industry Guide*. CFA Institute Industry Guides, 2017(1), 1-57.

Galati, G., & Moessner, R. (2013). Macroprudential policy–a literature review. *Journal of Economic Surveys*, *27*(5), 846-878.

George, W. F. (2013). The Effectiveness of Financial Innovation Strategies on the Financial Performance of Commercial Banks in Kenya. *Unpublished MBA project*

Ghosh, A. and Phillips, S. (1998), *Warning: Inflation May be Harmful to Your Growth*, IMF Staff Papers, 45(4), 672-710.

Grifoni, A., & Messy, F. A. (2013). Current status of national strategies for financial education: A comparative analysis and relevant practices. *OECD Working Papers on Finance, Insurance and Private Pensions*, (16), 1.

Gupte, R., Venkataramani, B., & Gupta, D. (2013). Computation of financial inclusion index for India. *Procedia-Social and Behavioral Sciences*, *37*, 133-149.

Haidar, J. I. (2013). The impact of business regulatory reforms on economic growth. *Journal of the Japanese and international economies*, *26*(3), 285-307.

Haiyambo, E. (2016). *An impact assessment of the regulation of microfinance institutions in Namibia* (Doctoral dissertation, Stellenbosch: Stellenbosch University).

Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does gamification work?--a literature review of empirical studies on gamification. In *System Sciences (HICSS), 2014 47th Hawaii International Conference on* (3025-3034). IEEE.

Hannah, Sean T.; Uhl-Bien, Mary; Avolio, Bruce; and Cavarretta, Fabrice L., (2009). *"A framework for examining leadership in extreme contexts". Management DepartmentFacultyPublications.39*.http://digitalcommons.unl.edu/managementfacpub/39

Harelimana J.B. (2016). Financial Inclusion and Financial Performance of Microfinance Institutions in Rwanda: Analysis of the Clecam Ejoheza Kamonyi. *Business Economic Journal*, 7: 269.

Hillier, F. S. (2012). *Introduction to operations research*. Tata McGraw-Hill Education.

Hung, A., Parker, A. M., & Yoong, J. (2009). *Defining and measuring financial literacy*.

Izquierdo, M. G., Ferrera, J. M. C., & Chaparro, F. M. P. (2016). The effect of financial literacy courses and their teachers on student achievement. In *XXIII Encuentro de Economía Pública* (66). Servicio de Publicaciones.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, *3*(4), 305-360.

John, A. C. (2002). Roch dale Pioneer. The Oxford Companion to British History.

Jofre, S. (2011). Strategic Management: The theory and practice of strategy in (business) organizations. Kgs. Lyngby: DTU Management. DTU Management 2011, No. 1

Juodelytė, L. (2018). *Impact of financial innovation on the financial performance of the traditional financial intermediaries* (Doctoral dissertation, ISM University of Management and Economics).

Kahuthu, D.G.(2016). *Impact of Prudential Regulation on Financial Performance of Deposit Taking Savings and Credit Co-operative Societies in Kenya*, Unpublished PhD Thesis, Nairobi: Jomo Kenyatta University of Agriculture and Technology

Kaloki, J. D. (2018). Effect of Central Bank of Kenya Regulations on the Financial Performance of Microfinance Banks. *Strategic Journal of Business and Change Management 5,* 584-623.

Kariuki, J. W. & Muturi, W. (2015). Effect of financial literacy on loan repayment a case of ecumenical churches loan fund, Kenya. *International Journal of Social Science and Information*.3,

Karlan, D., Morduch V. (2009). *"Teaching entrepreneurship: Impact of business training on microfinance institutions and clients"*. Yale University Economic Growth Center Working Paper.

Kashangaki, J. (2014). *Transforming SME finance*. Nairobi, Kenya: FSD Kenya.

Kennon, J (2018). *Return on equity (roe) and income statement analysis*. Retrieved fromhttps://journals.sagepub.com/doi/abs/10.1177/0266242617717159?journalCode =isbb

Khun, J & Brewer, E (2010). *Causal _ comparative design. Encyclopedia of research design*. Available from www.googlescholar/com

Kibugo, M. K. (2017). *Effect Of Financial Innovations On Performance Of Microfinance Institutions In Nakuru Town, Kenya* (Doctoral dissertation, COHRED-JKUAT).
K-rep Bank. (2012)

Lavrakas, P. (2008). *Encyclopedia of Survey Research Methods.* Vol. 1 & 2. Sage Publications, Los Angeles, United States of AM

Lawack, V. A. (2012). Mobile money, financial inclusion and financial integrity: The South African case. *Washington. Journal of Technology & Arts, 8*, 317 - 318.

Ledgerwood, J., Earne, J., & Nelson, C. (Eds.). (2013). *The new microfinance handbook: A financial market system perspective*. World Bank Publications.

Lusardi, A., & Mitchell, O. S. (2013). *Financial literacy and planning: Implications for retirement wellbeing* (No. w17078). National Bureau of Economic Research.

Malak, M. P. (2014). *The effects of financial innovation on the financial performance of commercial banks in South Sudan.* Unpublished MBA project

Manyika, J & Voorhies, (2016). *What Digital Finance Means for Emerging Economies*,

Mbutor, M. O., & Uba, I. A. (2013). The impact of financial inclusion on monetary policy in Nigeria. *Journal of Economics and International Finance*, *5*(8), 318.

Mishkin, F & Eakins S. (2011). *Financial institutions and the markets* (7th ed.), New York:

Pearson Education ltd.

Modigliani, F. and Brumberg, R. (1954) *Utility Analysis and the Consumption Function*: An Interpretation of Cross-Section Data. Post-Keynesian Economics.

Mohammad K. A. (2016). *Measuring Financial Performance Based on CAMEL: A Study on Selected Islamic Banks in Bangladesh, Asian Business Consortium*, 47-56

Morgan, P., & Pontines, V. (2014). *Financial Stability and Financial Inclusion. Asian Development Bank Institute*. ADBI Working Paper 488.

Muema. J. (2013). *An analysis of the Determinants of Foreign Direct Investment in Kenya*. Unpublished MBA project, University of Nairobi.

Mugenda, O., & Mugenda, A. (2003). *Research methods: Quantitative and Qualitative methods*. Revised in Nairobi.

Muia, S. W. (2017). *The Effect Of Financial Innovations On Financial Performance Of Commercial Banks In Kenya* (Doctoral dissertation, KCA University).

Musabwasoni, G , Mulyungi P & Muganamfura D.(2018). Effects of Financial Literacy on loan Repayment among Small and Medium Entrepreneurs of Microfinance Institutions Case Study of Inozamihigo Umurenge SACCO in Nyaruguru District. *Journal of Business and Management.* 20, (5). 19-37

Mutua, R. (2013). *Effects of mobile banking on the financial performance of commercial banks in kenya*. Unpublished MBA project, University of Nairobi

Mwaniki, G. O. (2014). *The relationship between financial literacy and loan performance amongst customers of deposit taking microfinance institutions in kajiado county.* Unpublished MBA project, University of Nairobi

Mwangi, N. S. (2014). *The effect of lending interest rates on financial performance of deposit taking micro finance institutions in Kenya.* (Unpublished Master of Science in Finance thesis, University of Nairobi).

Mwega, F. (2014). *Financial regulation in Kenya: Balancing inclusive growth with financial stability*.Working paper

Nekesa, S. M., & Olweny, T. (2018). *Effect of Financial Innovation on Financial Performance: A Case Study of Deposit-Taking Savings and Credit Cooperative Societies in Kajiado County.* Unpublished MBA project. University of Nairobi

Ngari, J. M. K., & Muiruri, J. K. (2014). Effects of financial innovations on the financial performance of commercial banks in Kenya. *International Journal of Humanities and Social Science, 4* (7), 50-70

Ngigi, J. K (2013).*The relationship between agency banking and financial performance of commercial banks in Kenya.* Unpublished MBA project, University of Nairobi.

Ngumi, M. C. (2014). *The effect of financial innovations on financial performance of commercial banks in Kenya.* Unpublished MBA project, University of Nairobi.

Njuguna, P (2015). *The effect of financial services by microfinance institutions on financial inclusion in kilifi county, Kenya*. Unpublished MBA project, University of Nairobi

Nyathira, N. C. (2013). *Financial innovation and its effect on financial performance of commercial banks in Kenya.* Unpublished MBA project, University of Nairobi.

Ogilo, F. (2013). The Impact of Credit Risk Management on Financial Performance of Commercial Banks in Kenya. *Journal of DBA Africa Management Review.*

Okibo, B. W., & Makanga, N. (2014). Effects of micro finance institutions on poverty reduction in Kenya. *International Journal of current research and Academic Review, 2*(2), 76-95.

Okiro, K., & Ndungu, J. (2013). The impact of mobile and internet banking on performance of financial institutions in Kenya. *European Scientific Journal, 9*(13).

Okoye, L. U., Adetiloye, K. A., Erin, O., & Evbuomwan, G. O. (2017). Impact of Banking Consolidation on the Performance of the Banking Sector in Nigeria. *The Journal of Internet Banking and Commerce, 22*(1), 1-16.

Onday, O (2016, March). *Classical to modern organization theory*. Retrieved from https://www.researchgate.net/publication/304988642_classical_to_modern_organization_theory

Onyango ,V . (2014). An Assessment of Financial Literacy on Loan Repayment in Ngara, Nairobi County. *Research Journal of Finance and Accounting,* 5(12), 181-192.

Ongore V.O & Kusa G. B. (2013). Determinants of Financial Performance of Commercial Banks in Kenya, *International Journal of Economics and Financial Issues. 3*(1) *237-252.*

Oni, E. O. (2012). Assessment of the Contribution of Microfinance Institutions to Sustainable Growth of Small and Medium Scale Entreprises in Nigeria. *Interdisciplinary Journal of Contemporary Research in Business*, 3(9),1099-1109

Oruo, J. (2013). The Relationship Between Financial Inclusion and GDP Growth in Kenya. *Unpublished Manuscript submitted with the University of Nairobi*.

Ötker-Robe, İ., Pazarbasioglu, C., di Perrero, A. B., Iorgova, S., Kışınbay, T., Le Leslé, V. & Santos, A. (2013). *Impact of regulatory reforms on large and complex financial institutions* (No. 2010/16). International Monetary Fund.

Ouma, A. A., Omagwa, J., & Ngaba, D. (2018). Financial Innovations and Performance of Deposit Taking SACCO's in Nairobi City County, Kenya. *International Journal of Economics, Business and Management Research,* 2, (2),

Paye, D.D (2013). *The effectiveness of Microfinance institutions in financial inclusion*. Unpublished MBA project, University of Nairobi.

Pfeffer, J. Salancik, G. R (2015) *New Directions for Organization Theory: Problems and Prospects.* Oxford University Press,

Post, C., & Byron, K. (2015). Women on boards and firm financial performance: A meta-analysis. *Academy of Management Journal*, *58*(5), 1546-1571.

Roy, R. (2017, November 10). *Banking on the Unbanked* [Blog post]. Retrieved from https://mastercardfdn.org/banking-on-thenbanked//

Rui, H. and Melecky, M. (2013). *Financial Inclusion for Financial Stability: Access to Bank Deposits and the Growth of Deposits in the Global Financial Crisis*. Washington, D.C.: World Bank.

Sarma, M. (2008), *Index of Financial Inclusion,* ICRIER Working Paper, August 2008.

SASRA, (2017) *SACCO Supervision Annual Report*: An annual report on the operations and performance of Deposit Taking SACCO Societies (DT-SACCOs) in Kenya, Nairobi

SASRA, (2018) *SACCO Supervision Annual Report*: An annual report on the operations and performance of Deposit Taking SACCO Societies (DT-SACCOs) in Kenya, Nairobi

Singh, C., Mittal, A., Garg, R., Goenka, A., Goud, R., Ram, K., & Kumar, U. (2014). *Financial inclusion in India*: Select issues.

Soederberg, S. (2013) *Universalizing Financial Inclusion and the Securitization of Development,* ThirdWorldQuarterly, 34:4, 593612, DOI: 10.1080/01436597.2013.786285

Swedroe, L. (2018, July 3). *Invest in Your Own Financial Literacy*. {Blog Post}Retrieved From https://blog.apastyle.org/apastyle/2016/04/how-to-cite-a-blog-post-in-apa-style.html

Tang, Z., Hull, C. E., & Rothenberg, S. (2012). How corporate social responsibility engagement strategy moderates the CSR–financial performance relationship. *Journal of Management Studies*, *49*(7), 1274-1303.

Taylor, S., & Wagland, S. (2013). The solution to the financial literacy problem: what is the answer? *Australasian Accounting Business & Finance Journal*, *7*(3), 69.

Von Bertalanffy, L., & Rapaport, A. (1958). *General Systems: Yearbook of the Society for the Advancement of General Systems Theory*, Vol. I 1956.

United Nations (2012). *Sustainable Development in Kenya: Stocktaking in the run up to Rio*+20. Nairobi Kenya

Vianney, K. J. M. (2013). *The Relationship between Regulation and Financial Performance of Rwanda Commercial Banks*. Unpublished MBA Research Project, University of Nairobi, School of Business.

Waihenya, M (2013) *The effect of agent banking on financial inclusion in Kenya*, Unpublished MBA project, University of Nairobi.

WOCCU. (2012). WOCCU Annual Report 2012. *Building a Global Community*, 2,3. Available from http://www.woccu.org/Retrieved 05/22/2019.

Wood, F., & Sangster, A. (2005). *Business Accounting* 1(Vol. 10). London: Pearson Education Limited.

Yin, R. K. (2013). *Validity and generalization in future case study evaluations.* Evaluation, 19(3), 321-332.

Zwan, N. (2014). *Making sense of financialization. Socio-Economic Review*, Volume 12, Issue 1, 1 January 2014, Pages 99–129,https://doi.org/10.1093/ser/mwt020

APPENDICES

Appendix 1: Data Collection Sheet

1. Name of Firm ……

2. Year Of Establishment ……..

3. Number of employees……..

Below 100 [ ] 101 - 500 [ ] 501 - 1000 [ ] Above 1000 [ ]

	2013	**2014**	**2015**	**2016**	**2017**
Financial Performance					
R. O. A					
Net Income					
Total Assets					
Mobile Banking					
Value of mobile transactions done over mobile platform for firm **i**					
Accessibility To Credit					
Loans					
Deposits Balance					
Capital Adequacy					
Core Capital					
Total Assets					

Appendix II SACCO's reviewed under the study

NO	SACCOS NAME
1	AFYA SACCO SOCIETY LTD
2	ARDHI SACCO SOCIETY LTD
3	ASILI SACCO SOCIETY LTD
4	CHAI SACCO SOCIETY LTD
5	CHUNA SACCO SOCIETY LTD
6	COMOCO SACCO SOCIETY LTD
7	ELIMU SACCO SOCIETY LTD
8	FARIJI SACCO SOCIETY LTD
9	FORTUNE SACCO SOCIETY LTD
10	FUNDILIMA SACCO SOCIETY LTD
11	HARAMBEE SACCO SOCIETY LTD
12	HAZINA SACCO SOCIETY LTD
13	JAMII SACCO SOCIETY LTD
14	KENPIPE SACCO SOCIETY LTD
15	KENVERSITY SACCO SOCIETY LTD
16	KENYA BANKERS SACCO SOCIETY LTD
17	KENYA POLICE SACCO SOCIETY LTD
18	KINGDOM SACCO SOCIETY LTD
19	MAGEREZA SACCO SOCIETY LTD
20	MAISHA BORA SACCO SOCIETY LTD
21	MURATA SACCO SOCIETY LTD
22	MWALIMU NATIONAL SACCO SOCIETY LTD
23	MWITO SACCO SOCIETY LTD
24	NACICO SACCO SOCIETY LTD

25	NAFAKA SACCO SOCIETY LTD
26	NAKU SACCO SOCIETY LTD
27	NASSEFU SACCO SOCIETY LTD
28	NATION SACCO SOCIET Y LTD
29	NEST SACCO SOCIETY LTD
30	SAFARICOM SACCO SOCIETY LTD
31	SHERIA SACCO SOCIETY LTD
32	STIMA SACCO SOCIETY LTD
33	TELEPOST SACCO SOCIETY LTD
34	TRANSCOM SACCO SOCIETY LTD
35	UFANISI SACCO SOCIETY LTD
36	UFUNDI SACCO SOCIETY LTD
37	UNITED NATION SACCO SOCIETY LTD
38	WANA-ANGA SACCO SOCIETY LTD
38	WANANCHI SACCO SOCIETY LTD
40	WAUMINI SACCO SOCIETY LTD