EFFECTS OF MICROFINANCE INNOVATIONS ON AVAILING OF FINANCE BY MICROFINANCE INSTITUTIONS TO SMALL AND MEDIUM ENTERPRISES IN KENYA

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DECLARATION

This research project is my original work and has not been presented in any other University for any award.

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This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

The research project is dedicated to my family.

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ABBREVIATIONS

ATM	—	Automated Teller Machine
CBK	—	Central Bank of Kenya
DTM	—	Deposit Taking Microfinance Institution
GDP	—	Gross Domestic Product
GoK	—	Government of Kenya
KES	—	Kenya Shilling
MFI	—	Microfinance Institution
NGO	—	Non-Governmental Organization
SACCO'S	—	Saving and Credit Cooperative Society
SMEs	—	Small and Medium Enterprises
SPSS	—	Statistical Package for Social Sciences
UNDP	—	United Nations Development Programme
USAID	—	United States Agency for International Development

ABSTRACT

The study sought to investigate the effect of Microfinance innovations on availing of finance by Microfinance Institutions to small and medium enterprises in Kenya. There are various challenges that entrepreneurs face in order to access finances because of their education background, gender or age, irregular nature of their business and external factors such as product designs that require minimum account balances to operate. These challenges inhibit them from accessing financial services such as provision of credit, savings and current accounts and funding used for working capital and long term capital for their businesses. MFIs Innovations enable financial products to be available and accessible at the least cost possible to their clients. Some innovations undertaken by the MFIs are technology based, product based, strategy based, location based among other innovations. The project explored product based and location based innovations that are available to small and medium enterprises and the relationship between the innovations by the institutions and availing finance by the MFIs to the SMEs. A census survey was carried out and 6 DTMs out of the 13 licensed by the Central Bank of Kenya were used in this study. The data was collected from the Central Bank of Kenya Annual bank supervision reports, Association of Microfinance Institutions annual reports on the Outlook of the industry and also from annual reports of the individual MFIs under the study. Data collected included the number of deposits accounts to determine availability of finance, number of loans products and saving products introduced and number of branches (location innovation) for a seven year period between 2009 and 2015. The information collected was analyzed using SPSS to determine the relationship between availing of finance by the MFI and Microfinance innovations. The research found that there is a strong positive correlation between innovations and availing of finance and it is important for MFIs to be innovative so as to increase the number of deposits and in turn avail finance to small and medium enterprises in Kenya.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Small and medium enterprises around the world continue to find it extremely difficult to access financial services appropriate to their needs. Financial services include credit, savings, current accounts, trade services, working capital support, long term capital support, insurance among other services, (Kashangaki, 2014).

Growing SMEs are still largely self-financed or use funds from relatives or more expensive money lenders who are in-formal to meet their financial needs and this reduces the profitability and financial stability of the enterprise on a long-term basis. Studies have found that small and Medium Organizations are credit constrained compared to large firms, affecting their possibilities to grow and innovate, (Beck & Demigurc-Kunt, 2006).

There many barriers that SMEs have to access appropriate financial services which include education, gender and age, low and irregular income of the entrepreneurs and product design factors such as minimum account balances. Some barriers that financial institutions experience when providing services include, cost of providing those services and finding regulatory space to innovate, (ATISG, 2010).

The inability to access financial institutions stops the SMEs in developing countries to enter in new business opportunities and hinders economic growth. Innovation in MFIs serves as a means to empower the unprivileged in the society and provides an important means to assist the economic development process, (Vincent 2004). Innovations by

Microfinance institutions can increase the availability to formal financial services by the SMEs in the society. Innovative means of financial services delivery can have a major effect on SMEs. The access to even small amounts of finances has a huge impact on the operations of SMEs. Many studies have focused on the MFIs and the SMEs separately. As a result there are no adequate studies on the effect of MFI innovations on availing finance by MFIs to SMEs in Kenya. It was against this strength that this research was carried out.

1.1.1   Microfinance Innovations

Microfinance provides financial services to low income individuals or solidarity lending groups such as consumers and self-employed, who ordinarily do not access to banking and such services. The services go beyond micro credit and also include savings and transfer of services, (Rosenberg, Lyman, & Christen, 2003).Microfinance institutions share the commitment of serving clients that are not able to get service from the formal financial sector, (Morduch, 1999). According to Haynes, Seawright, & Giauque (2000), microfinance has been able to in allow small and micro entrepreneurs to increase both income and output.

Innovations are improvements in offering products or services that provide some competitive edge over competitors. In developing countries, both positive incentives for income growth and negative incentives related to business survival drive companies to take risk through innovation, (Bradely, 2012). MFIs have in the recent past experience an increase in innovations of loan products partly influenced by donors who see microfinance as a means of alleviating poverty, (Issahaku, Dary, & Ustarz, 2013).

According to Llanto & Fukui (2006) MFI innovation is seen as a production technology, either a services or product, developed for less fortunate individuals at a minimal cost. It may be a new way of evaluating and giving loans to individuals that surmounts problems of information and dispersal of individuals over a given geographical location. An innovation can be a product that meets the risk management needs of less fortunate clients for example micro-insurance and micro-savings.

Lariviere & Martin (1998) asserts that the challenge of MFIs is to get new methods to attract a good number of poor households and small and medium entrepreneurs to financial products and services without affecting the sensitive financial markets or affecting the creation of other financial institutions.

Various scholars have identified various categories of innovations. Lariviere and Martin (1998) identified five types of innovations. Technology, product, strategic, institutional arrangements and donor- incentive innovations. Technology innovation refers to using better technologies in financial services delivery. For example village banking, group lending, having incentives for repayment, such as peer monitoring in groups, incentive for the borrower to repay through progressive lending and having rebates.

Product innovations refer to services offered to clients who may be in groups or individuals, for example, having a product that has both credit and savings services. Strategic innovations are strategies by Microfinance institutions to develop their customers, for example planning for market growth and development, (Buchenau, 2003).

Institutional arrangement innovation is the change of legal status and institutional arrangements to increase the performance of the Microfinance institution, for example

changing a Non-governmental organization into a financial institution, reducing scale of business by commercial banks. Donor incentive innovations refer to those means that are donors have to increase and improve the performance of Microfinance Institutions, for example designs to improve MFIs outreach and viability, (Lariviere & Martin, 1998).

According to Buchenau (2003) focus is on innovation of financial services. He classifies them to new products that match the needs of prospective clients and improving or changing the procedures used in service delivery or to design contracts and enforce them. Agoisin (1999) classifies financial innovations into 3 distinct categories , system innovation, this where a new financial institutions are made to tackle needs of the clients that are not meet are created , process innovation, where new technologies for provision of financial services are created, and product innovation is the creation of new products that could be savings or credit products.

All the scholars mention that innovation is whereby new products are created so as to meet the needs to increase the access of finance by the SMEs or poor clients that they serve and reduce risk on their end.

1.1.2   Availing of Finance by MFIs to Small and Medium Enterprises

Access to financial services means the lack of any hindrances that could be of price or non-price in nature to the use of any financial product or service. It is important to differentiate between actual use and access to financial service. Exclusion from financial services can be ones choice where an individual or organization has access to financial products and services but they have no intention to use them. On the other hand,

exclusion cannot be within ones power where non-price barriers and price barriers that inhibit the accessibility to financial services, (Mujeri, 2015).

According to Ganbold (2008) improving access to credit is increasing the rate to which financial services are availed to all individuals at a price that is price. Measuring use of financial services is easier compared to access to financial services as use can be observed, but is not the case with availing of finance. Availing finance refers to supply of services, whereas use of finance is measured by demand and supply. One of the challenges of analysis of SMEs finance is the definition of what is considered a micro, small and medium or large enterprises. There is no definition that is universal of SMEs and the commonly used method is by defining the number of employees, value of sales, value of assets and size of capital.

The World Bank definition of microenterprise is that, it has up to 10 employees, total assets of up to $10,000 and total annual sales of up to $ 100,000. Small enterprise has up to 50 employees, total assets and total sales up to $ 3 million, medium enterprises has up to 300 employees, total assets and total sales of up to $ 15 million,(Ayyagari, Beck, & Demigurc-Kunt, 2007).

According to the GoK firms are defined as micro when they have 1 to 10 employees and a turnover not exceeding KES 500,000. They are considered small when they have 11 and 50 employees and a turnover not exceeding KES 5 million. The Micro and Small enterprises Act 2013 does not provide a definition of medium and large enterprises, (FSD Kenya , 2015).

In the United kingdom SMEs are defined as businesses that have less than 250 employees and annual sales of less than £50 million. With this 99 percent of the businesses in the UK that provide employment to 14 million people are SMEs.(Comptroller and Auditor General, 2013).

According to Ayyagari, Beck, & Demigurc-Kunt (2007) SMEs play a key role in economic development, diversification and employment creation, and they create 49 percent of GDP on average in developed countries and 29 percent in developing countries; however they are more credit constrained than large firms. This in mind for the growth of any economy it is important for the SMEs to access funds in an easy and efficient way so as to be able to grow and prosper and in turn the economy will grow.

The focus of the study is on effect of Microfinance institution innovations on availability to finance but it is important to highlight the other sources that SMEs have to access funds. SMEs depend on sources of finance that are informal in the very early stages of their business development. External sources become more crucial as organization begins to expand and their availability can determine the growth path of the Small and medium Enterprise. Sources that are internal can include the entrepreneurs own saving, retained earnings or funding through sale of property. External informal sources can be relatives and close friends or finance from suppliers, (International Finance Corporation, 2010).

The formal financial sector consists of banks, a well-developed securities market, a number of insurance and retirement benefit schemes, MFIs, and deposit taking savings and credit cooperatives. Mobile network operators have also become significant financial sector players by provision of   payments and have more recently acted as a channel for

loans and saving products working in partnership with commercial banks, (FSD Kenya , 2015).

1.1.3 Relationship between MFI Innovation and Availing of Finance by MFIs to SMEs

According to (Mujeri, 2015) finance accessibility is one of the drivers for economic growth especially in countries that are constrained with resources. Availing finance to the less fortunate is important for promoting inclusive economic growth and reducing poverty in any country. Financial intervention is the process by which the finance in the economy is mobilized and used. An inclusive financial system is one that ensures there are resources and capital for investment in the small and medium enterprises.

According to Karlan (2014) the non-profits in microcredit financial institutions have made for-profits financial institutions to copy their financial products and services, bringing in more investor money. The not for-profit developed innovative financial products made the case and then for-profits institutions copied these products. NGOs may be better placed to explore innovative improvements, the reason being that the goal of NGOs is increasing the wellbeing of a population and not to profit, they can innovate with a focus on impact, not mere financial profits.

MFI innovations increase the access to finance by SMEs. According to Sarma & Pais (2011) there various indicators to measure the extent of access to financial services, these include actual usage and outreach dimension. In the case of outreach dimension, it can be categorized into two geographical and demographic penetrations. Geographical

penetration which is the number of banks or ATMs per 1000 square kilometers and demographic penetration is the number of bank branches or ATMs per 100,000 people. In the case of actual usage there two widely used indicators, number of loans per 1000 people and number of deposit accounts per 1000 people. These indicators measure the use of financial services and access to these services.

According to Nugroho & Miles (2009) MFIs are innovative and develop new processes and methods to ensure services offered not only meet the need of the clients but also yield profits for the institution. They innovate to ensure clients make constant repayments by reviewing the rules and procedures. This includes training policies and management of personnel practices and training policies with aim of changing the working units and financial facilities for provision of financial services. New financial products have a huge impact especially in the developing countries, where many MFI services bring new products to markets that require changes in provision of financial services and also affect the MFIs clients by pushing them to achieve creditworthiness by undertaking new business processes.

Miller (1986) postulated that financial innovations ensure organizations are in a position to grow further resulting to financial deepening of the market which also attracting a new investors to the MFIs. The innovations also ensure better returns and client satisfaction by improving efficiency of the MFIs and business clients.

1.1.4 MFIs and SMEs in Kenya

In Kenya, MFIs were started by NGOs in conjunction with the government. The government helped the growth and development by provision of policy framework and

platform for donor support. These Non-governmental Organizations include World Bank, USAID, and UNDP. Commercial banks later started supported theses institutions by providing finance for their day to day operations, (Mutua, 2006). MFIs are vital role in the economy as they serve the less fortunate in the society who are mainly ignored by banks. This is through having products such as credit service and micro savings where banks failed to meet the needs of these individuals.

Statistics have shown that that banks serve approximately 22.6% of the population, 17.9% is served by the MFIs, 26.8% rely on the informal financial services leaving a 32.7% of the population unreached by any financial service. In the recent past , there has been the development of many MFIs that to serve this segment and by doing so some MFIs have transformed to fully fledged banks like Equity Bank K-Rep (now Sidian bank) and Kenya Women Finance Trust, (Mutua,2006).

Currently the microfinance sector has received attention of mobile money companies and banks and it is experiencing a change because of acquiring a larger role in the financial system and being seen as a sustainable business practice. Currently the microfinance sector has gained approval by many in the society with at least one out of five individuals being a member of a MFI or SACCO. Microfinance institutions must therefore be innovative and exceed the microloans to ensure that the industry is sustainable and at the same time profitable, (Imady & Seibel, 2003).

In Kenya there are two categories of MFIs, formal MFIs and informal MFIs based on the guiding law under which they are registered. They are also based on the relationship between the customer and provider in the ownership and management of the finance

provider. Member based MFIs include SACCOs and merry-go rounds. Example of Client based MFIs include Faulu Kenya, KWFT and K-Rep among other, (Kaburi, Ombasa, Omato, & Mobegi, 2013).

According to Kaburi et al (2013) provision of loans by MFIs is either through an individual or group based. The Group based method of loan provision, is similar to the Grameen bank method. Also unregistered shylocks use exorbitant interest rates to lend to individuals, some MFIs charge interest rates monthly which if one is not keen they may think they are low but in actual sense they are higher compared to some commercial banks. It has been studied that group guarantee schemes are an inconvenience to many as individuals wants to plan for their own finances as the group schemes create fear of default among the group members.

According to the SMEs Act (2012) the institutional and regulatory framework for Kenya's SMEs has been based on the organization annual sales and the number of employees. In the Act, a micro enterprise is defined as those organizations that employ less than 10 workers with annual sales of less than KES 500,000 and initial capital of less than KES 5 million for organizations in the service industry services or less than KES 10 million for businesses in the manufacturing sector. Small enterprises are defined as those that engage between 10 to 50 employees with annual sales between KES 500,000 and KES 5 million and initial capital of between 5 million and KES 20 million for organizations in the service sector or between KES 5 million and KES 50 million for business in the manufacturing sector,(Government of Kenya, 2012).

The SME sector in Kenya consists of businesses in the manufacturing and trade sectors, with also heavy engagement in agro-based businesses, which affect directly most of the residents in the country. The SMEs sector includes business in both formal sector and informal sectors which accounts to more than 74% of the number of individuals employed in the country per year and they also contribute to more than 18.4% of the country's GDP, (Ongolo & Awino, 2013)

1.2 Research Problem

Financial innovation is fundamental as it spurs growth of the MFIs worldwide. Presently, innovation is a continuous process geared towards providing a wide range of financial products and finance intermediation which is crucial factor in determining competitiveness and the progress of financial institutions, (Mohanty &Panda, 2007). Therefore, microfinance innovation present opportunities to seize new markets from unsatisfied or unbanked market segment in Kenya.

A study by Kashangaki(2014) found that despite having 43 banks in Kenya and where 6 institutions control 80% of the market, oligopoly manifests itself in the lack of an incentive for the banks to differentiate an offer for the SMEs as they are driven by sales and marketing targets. They sell products which are largely unsuitable to entrepreneurs who are not able to differentiate one financial product from another. To compensate for unsophisticated or non-existence risk assessment practice, credit providers have developed by default difficult and lengthy origination process which compromise effective lending to SMEs.

Microfinance innovation helps in increasing financial availability and affordability of financial services and reduction of information asymmetry. Securitization is also in microfinance which refers to the use of personal savings as collateral to access loans in financial institutions. With this in mind more entrepreneurs will have more access to finance through MFIs given the innovations.

According to a study by Kiboki, Sakwa, & Kirago (2014) they found that SMEs play an important role in the Kenyan economy. Despite interventions form MFIs and other financial institutions such as banks a big percentage of SMEs especially start-ups still face the challenges with finances and thus they rely on savings or even donations from friends and relatives, and also from informal finance, which charge high interest rates. Studies on finance have proved lack of accessibility of finance is a key hindrance to growth of the SME. The studies prove that larger firms' access finance more easily compared to SMEs. This study aims to bring together and analyze the aspect of financial innovation by MFIs to improve access of finance and the effect it has on SMEs in Kenya.

1.3   Research Objective

The research objective of the study seeks to determine the innovations of financial products in the MFIs that are used to avail finance to SMEs in Kenya.

1.4   Value of the Study

The findings of the study will help in reinforcing the existing studies on the how to measure innovation of Micro Finance Institutions and the effect it has on availing finance by MFIs to Small and medium enterprises. The study will be of use to MFIs, SMEs,

donor agencies and governments. MFIS will use the study to ensure that they develop innovative products that may be able to attract and retain entrepreneurs which will in turn help them achieve their milestones in terms of alleviation of poverty.

SMEs will use the research carried out to be informed of innovative financial products that are available in MFIs which may not require collateral as in the case of commercial banks. Donor agencies and Governments will be able to invest in MFIs as it is a more viable channel to increase access to finance as MFIs have more innovative products which attract SMEs compared to commercial financial Institutions which have a profit motive in their operations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter on the literature review studies and reviews the literature on the effect of MFI innovation on the availability of finance by SMEs in Kenya. The Chapter addresses the theoretical review guiding the study, empirical literature and conclusion.

2.2 Theoretical Review

This study bases its arguments on the financial sustainability theory, Strategic theory of financial innovation and information asymmetry theory.

2.2.1 Financial Sustainability Theory

Survival and sustainability in the long-run is important for Microfinance Institutions in being able to cover its day to day operation costs and to reach out to their clients. Given that the goal of MFIs is the elimination of poverty, it is also important that the MFI is able to run its operations efficiently and effectively. Sustainability has implications both internally and externally for the MFIs. Internal sustainability this includes mobilization of savings and deposits, ensuring financial performance of the MFI, motivation of the employees, loan administration cost and other similar costs while external sustainability refers to the availability of funds for loans for disbursement to their target clients (Morduch, 2002).

Sustainability of finance of a Microfinance institution is the capability of generating revenue that will enable the institution to run its daily operations given the services it offers. Financial sustainability can be categorized into, operational and financial self-sustainability. Operational sustainability is when the organization is able to generate sufficient revenue from its own operations to cover all expenses that are administrative but rely on its capital base either on wholly or partly, (Foster, Greene &Pytkowska, 2003).

2.2.2   Strategic Theory of Financial Innovation

The firm's strategy is a core determinant of the innovation it will undertake. Consequently, innovation is formulated within the institution and the strategy that is formulated must be kept to prevent firm's activities from getting out of hand. These often involve deliberate financial engineering, where innovation is systematically planned and strategically put to operation to improve performance of specific sections (Sundbo, 1997).

Tufano (2002) postulated that innovation makes the financial market complete, wide and efficient. This reduces the cost of transactions and gives the participants greater freedom of investment choice thereby satisfying all the participants in the finance industry. A strategic continuous innovation therefore evens the growth curve, revenue, profits and dividend payout to the shareholders.

2.2.3   Information Asymmetry Theory

SMEs operate in an environment characterized by high level of information asymmetry. Small firms have in the past faced with challenges when approaching financial institutions to help in investment of fixed term capital and provision of working capital for the firms' day to day operations. The finance providers have information that is incomplete in regards to the quality of the project to be undertaken and the capabilities of the management of the SME, and thus this will result to adverse selection, (Stilglitz & Weiss, 1981). In the event that the management of the SME do not perform to their best or full capability this will give rise to moral hazard. The challenge of information asymmetry is that it will result in good business projects being turned down by financial institutions and also in the flip side also poor proposals being accepted by MFIs.

In theory financial institutions can reduce risk by vetting firms carefully at the beginning and maintaining continuous review of the business during the life of the loan. These activities undertaken before and during the life of the loan is expensive and if financial institutions are to gain from the transaction, the interest rate charged will be exorbitant. Risk of default by the borrower may be covered by the institution by requesting collateral before availing the funds or by declining application of finances. The concern is that SMEs with good investment projects may be rejected unfairly by the financial institution and this will significantly contribute to the finance gap, (Lean & Tucker, 2001).

Peer selection has a role in preventing adverse selection and hence moral hazard as studied by, (Ghatak, 1999). The researcher found that joint liability lending enables Pareto superior equilibrium in financial markets if the formation of the group is correctly carried out. Groups that has members with the same quality are formed through by

individual selection. The researcher shows that through the individual matching process, the groups will having less risky borrowers, which will eventually reduce moral hazard which leading to a lower interest rate leading to an outcome that is relatively comparable to the individual lending.

2.3   Determinants of Access to Finance

Price and non-price barriers in the use of financial services inhibit the availing of finance by the MFIs. Accessibility to finance then means improving the rate to a fair price for financial services so that it may be available to all, (Ganbold, 2008).

Beck, Demirguc-Kunt, & Martinez (2007) put together indicators of banking sector outreach which can be similarly used for DTMs. Geographic branch penetration is the number of bank branches per 1,000 km^2. Geographic ATM penetration is the number of bank ATMs per 1,000 km^2.Demographic branch penetration: number of bank branches per 100,000 people. Demographic ATM penetration is the number of bank ATMs per 100,000 people. Loan accounts per capita are the number of loans per 1,000 people. Loan-income ratio is the average size of loans to GDP per capita. Deposit accounts per capita are the number of deposits per 1,000 people. Deposit-income ratio is the average size of deposits to GDP per capita.

The first four measure of accessibility of finance the in terms of outreach of the fifth to eight measure the accessibility of finance by the use of banking services. Geographical penetration of the financial institution is indicated by the number of branches and ATMs per square kilometer. They can also be used as a measure for the average distance of a prospective client from the nearest physical bank outlet. Easier geographic penetration

would be determined by higher geographic penetration and smaller distance to the branch. Demographic penetration is measured by Per capita measures of branches. Fewer prospective customers per branch or ATM and therefore easier access is as a result of higher demographic penetration. Higher values for the size of loans or higher deposits to GDP per capita on average indicate that services are more limited and are only available to large enterprises and wealthier individuals, (Beck, Demirguc-Kunt, & Martinez, 2007).

2.4 Empirical Studies

Microfinance innovation brings about financial deepening, increased lending, financial flexibility and ability to monitor loans recipients that eases burden of default for lenders, which allows reduced interest rates on loans. Looked at the strategies applied by equity bank, among these strategies, innovation guarantees firms success through systematic innovation. According to Chege (2008) the success of financial innovation can be pinpointed quite precisely to the method of its implementation. A successful innovation lies in commercializing the new products quickly to benefit from the first mover advantage.

A Study by Mbogo and Ashika (2012) determined factors that affect product innovation in MFIs. Some of the factors included the competitive pressure, legal framework in the environment, and other issues such as leverage of the capital structure, risk and liquidity issues and personnel challenges. Their study found out that legal framework, risk and liquidity management issues and competitive pressure, had the most influence in innovation. They found out that there is a positive correlation between legal framework, liquidity management issues and personnel for Microfinance institutions and innovative

financial products and that risk management, competitive pressure, distribution channels and inadequate finances have a negative correlation with the process of product innovation in the MFIs.

According to Mbogo and Ashika (2012) the market demand should be studied and then innovative products should be developed to meet market demand. Currently the process of financial innovation is market driven, where different segments of the market need innovators who will guide and to tap into different segments and reach out to more different clientele of potential investors. Many MFI clients favor small recurrent finances to increase their flexibility.

A study by Kiraka, Kobia, & Katwalo (2013) asserts that innovation is important on the growth of SMEs in Kenya. Their study targeted small and medium enterprises run by ladies who owned SMEs and had got funds from the Women Enterprise Fund. They performed a study to measure performance of their business after getting the loans. Their study found that their business had grown in terms of the value of the business, sales, personnel and by profit. After acquiring the loan from the enterprise fund most common of the entrepreneurs added new products.

According to Llanto & Fukui (2006) to counter competition from other financial institutions MFIs develop innovative financial products. MFI innovations will give the microfinance institution a competitive advantage over other MFIs as they are pro-active and don not wait for changes in the market so as to tackle the new arising challenges. In order to maintain and attract new clients firms develop innovative products, create new

transaction in order to reduce procedures to avail finances to prospective and current clients.
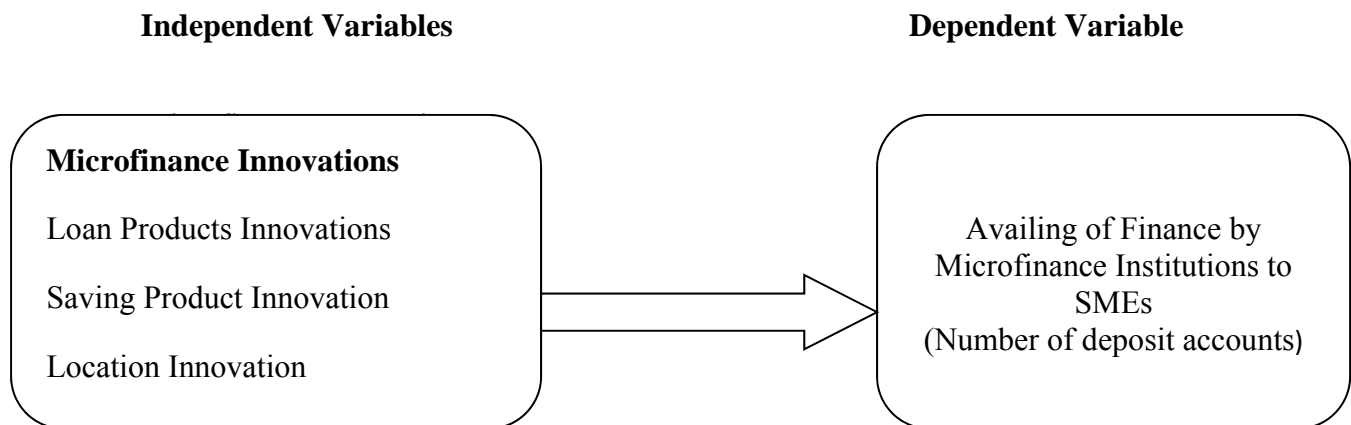
Kiiru (2007) studied the income of rural poor household's income and the effect of microfinance to this household. It was found there was significant there is a positive correlation between microfinance and the rural poor income. The study asserts that provision of cheap finance is the biggest strategy a MFI can undertake in terms of development. The study also found that since entrepreneurs play a vital role in the growth of the economy, MFIs should also be ready to finance their activities in order to spur economic growth. The study also found that it is important for the MFIs to come up with innovative products that will enable them to sustain their activities and day to day operations and also accumulation of assets and creation of wealth by their clients.

According to a study by Wang (2013) on the development of SMEs and the impact of microfinance, it was found that MFIs play a critical role in the growth of profit and sales revenue. It was found in the study that SMEs with high risk and productivity that is low are more likely to seek microfinance. Also from the study it was found that businesses that got funds from MFIs had better financial stability. For SMEs to qualify for financing from MFIs they have to prove that they have innovative products and positive management attitude.

2.5 Conceptual Framework

Conceptual framework refers to the structure that gives form and shape to the whole study and also holds together all the other variables in a logical design. In this research, the framework is the conscience explanation of the occurrence which is studied together

with visual representation of the variables studied, (Mugenda, 2008). The independent variables include number of Loan product innovations, the number of saving product innovation, and number of branches opened, while the dependent variable is the availing of credit by MFIS. The conceptual framework of the study is represented by below.

Independent Variables   **Dependent Variable**

Microfinance Innovations

Loan Products Innovations

Saving Product Innovation   →   Availing of Finance by
                                                 Microfinance Institutions to
Location Innovation   SMEs
                                                 (Number of deposit accounts)

2.6   Summary of Literature Review

The chapter has evaluated literature by other researchers on the topic of availing of finance by Small and medium entrepreneurs and innovation by Microfinance institutions. The existing studies have concentrated on the two issues separately. For instance Kiraka, Kobia, & Katwalo (2013) focused on the importance of MFI innovation on the growth of SMEs in Kenya.

They did not explore on the how it affects access to finance. Similar studies have been carried out on the banking sector by Beck, Demirguc-Kunt, & Martinez (2007) on the access of finance. Similar concept has been used in this study to determine the access of finance by the Microfinance Institutions in Kenya. This research therefore seeks to fill

this research gap by determining effect of MFI innovation on availing of finance by MFIs

to Small and medium enterprises in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter lays out the methodology that was used in completion of the study. It explains the how the study researched was carried out and how data collection and analysis was done. The chapter also explains the design the research adopted and procedures to be conducted.

3.2 Research Design

The research design used the census survey to carry out the research. The researcher carried out research on 6 DTMs out of the 13 that are licensed to operate as DTMs by the Central Bank of Kenya to determine availability to finance by MFIs to SMEs. A detailed study was carried out on the selected DTMs. The study is considered descriptive as it seeks to determine the effect of MFI innovation on availing of finance by MFIs to SMEs. Secondary data was used to carry out the study.

3.3 Population and Sampling

The population of used in the study was DTMs that are licensed to operate by the Central Bank of Kenya. According to the Central Bank there currently 13 deposit taking institutions that are registered and supervised by the institution.

3.4 Census Survey

The researcher focused on the DTMs licensed to operate by the CBK. Census Survey was used to carry out the research .A survey is data collection activity involving sample of the population. A sample of 6 deposit taking microfinance institutions which have been in operation for the last seven years were analyzed out of the 13 DTM registered by the CBK.

3.5 Data Collection

Secondary data was used to carry out the research to collect the innovation of MFI products that have been launched in the last seven years and the extent to how they have increased availability of finance to Small and medium enterprises. Data from MFI reports, Central Bank of Kenya publications and reports for Association of Microfinance institutions were used to carry out the study.

3.6 Data Analysis

The study was carried out using qualitative and quantitative techniques for analysis of the data. Analysis was done by use of tables, graphs and pie-charts to analyze the various innovations of the selected DTMs. Multiple regression was carried out using SPSS software to study the relationship between MFI innovations and availability of finance by MFIs to SMEs. Independent variables in the study were the innovations carried out by the MFIs which include the number of loan products, number of saving products and number of branches launched in the various years of study while the dependent variable

was the number of deposit accounts which was used to determine the availability of finance as shown below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon_i$$

Where:

Y = Number of deposit accounts used to measure the availing of finance by MFIs to SMEs from 2009 to 2015

B_0 = constant term

B_1, β_2, β_3 = Co-efficient

X_1 = Number of loan products introduced from 2009 to 2015

X_2 = Number of Savings product introduced from 2009 to 2015

X_3 = Number of branches opened from 2009 to 2015

ε_i = error term

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents analysis of the data collected from 6 DTMs out of 13 that are licensed by Central Bank of Kenya from the year 2009 to 2015. Report of the finding and data analysis was done using descriptive analysis in the form of tables and charts. Multiple regressions was carried out on the data to analyze the effect of MFI innovation on availing finance to SMEs and the relationship that exists between the variables.

4.2 Respondent Rate

The research study was carried out using secondary data collected from different reports of the DTMs studied and other reports such as Central Bank of Kenya annual bank supervision report and Association of Microfinance Institution reports on the industry. No questionnaires were administered during the study. Data collected was adequate to carry out the study.

4.3 Descriptive Analysis

From the table 1 below, the mean number of deposits accounts in the various DTMs was 295,494 and the highest number of deposits was 1,061,639 compared to Minimum of 736. The mean number of branches was 14.23 and the highest number of branches was 39 compared to a minimum of 2 branches. The mean number of saving products was 5.32 and the highest number of saving products was 8 compared to a minimum of 3 products.

The mean number of Loan products was 5.83 and the highest was 8 against a minimum of 4 loan products.

Table 1 Descriptive Statistics of the DTMs

	N	Minimum	Maximum	Mean	Std. Deviation	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Number of Deposits Accounts	31	736.00	1061639.00	295494.3548	334519.83836	.176	.821
Number of Branches	31	2.00	39.00	14.2258	11.93792	-1.245	.821
Number of Saving Products	31	3.00	8.00	5.3226	1.55750	-.818	.821
Number of Loan Products	31	4.00	8.00	5.8387	1.43983	-1.298	.821
Valid N	31						

Figure 1 Number of Deposit Accounts
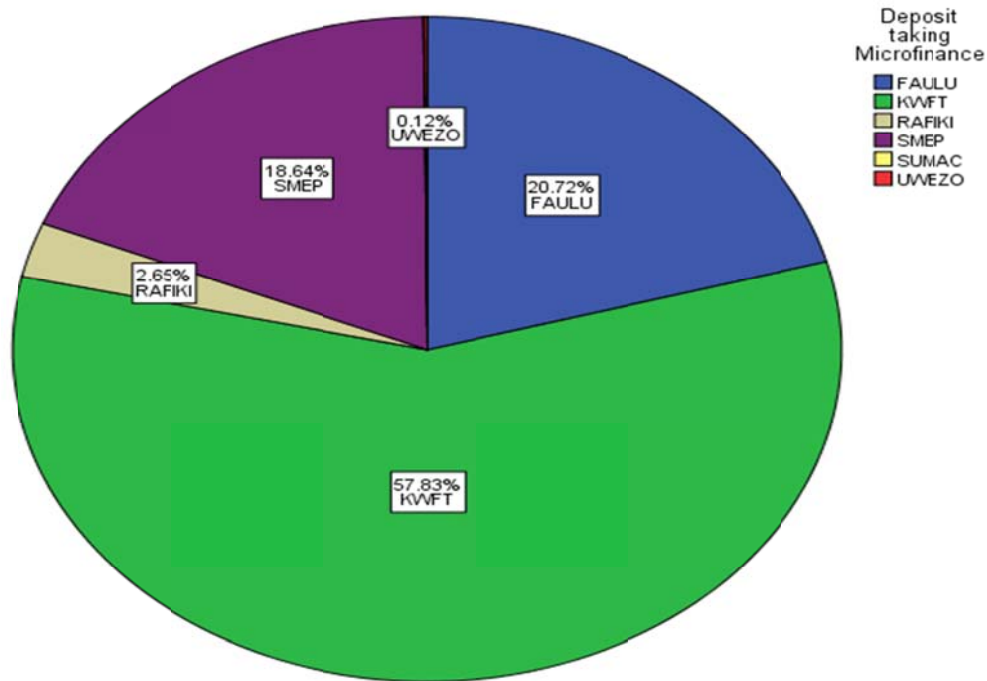
From the figure 1 above, 57.83% of the deposit accounts are in KWFT, followed by

Faulu at 20.72%, SMEP at 18.64%, Rafiki at 2.65% and Uwezo and SUMAC are below

1%

Figure 2 Growth of Number of Deposits Accounts
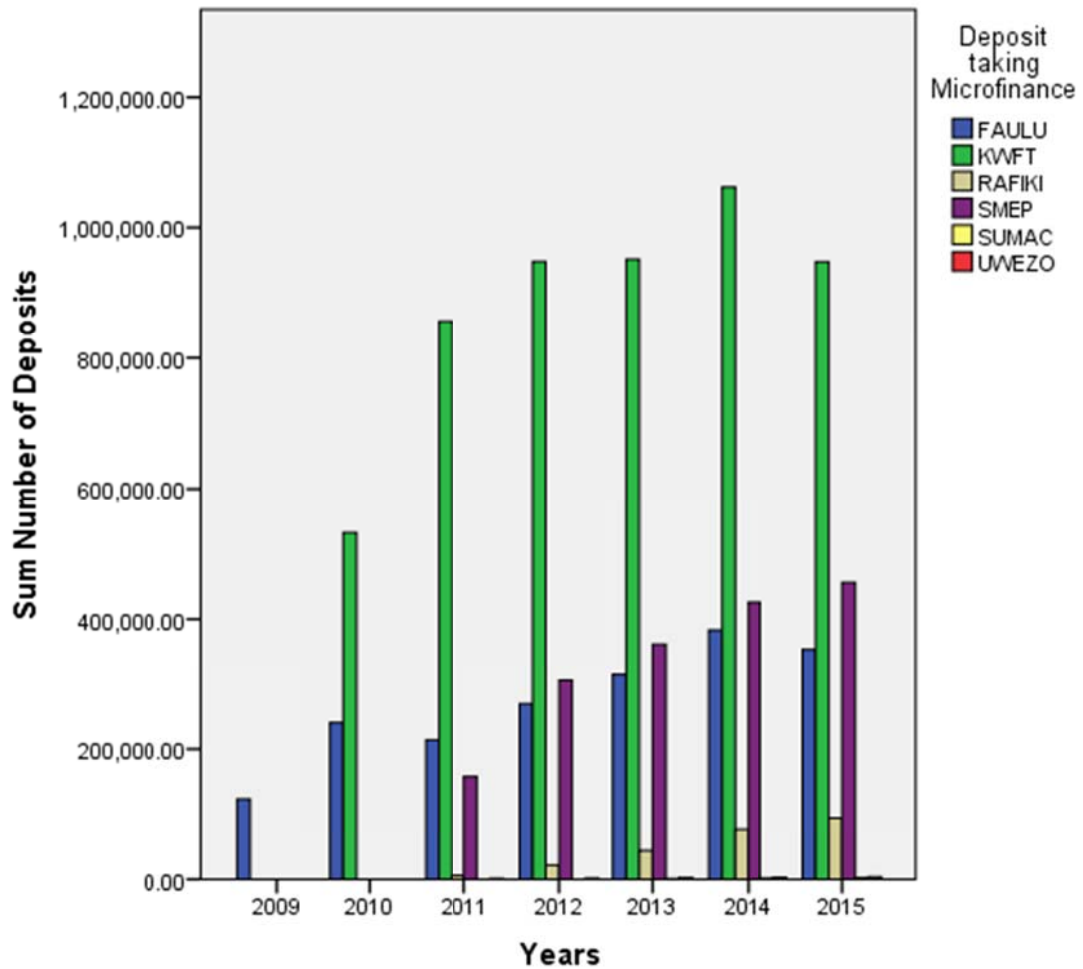
From the figure 2 above shows Faulu was the first DTM to be licensed by the central

bank of Kenya. KWFT followed later in 2010. In 2010 KWFT has had the highest

number of deposits compared to the other DTMs. The number of the two large DTMs has

however dropped in 2015 as a result of increased innovations by the smaller DTMs. In

2015 KWFT had 954,570 deposit accounts, Faulu 353,392 deposit accounts, SMEP

456,317 deposit accounts, Rafiki with 94,535 deposit accounts, SUMAC 1,352 and Uwezo 3,540.

Figure 3 Number of Branches
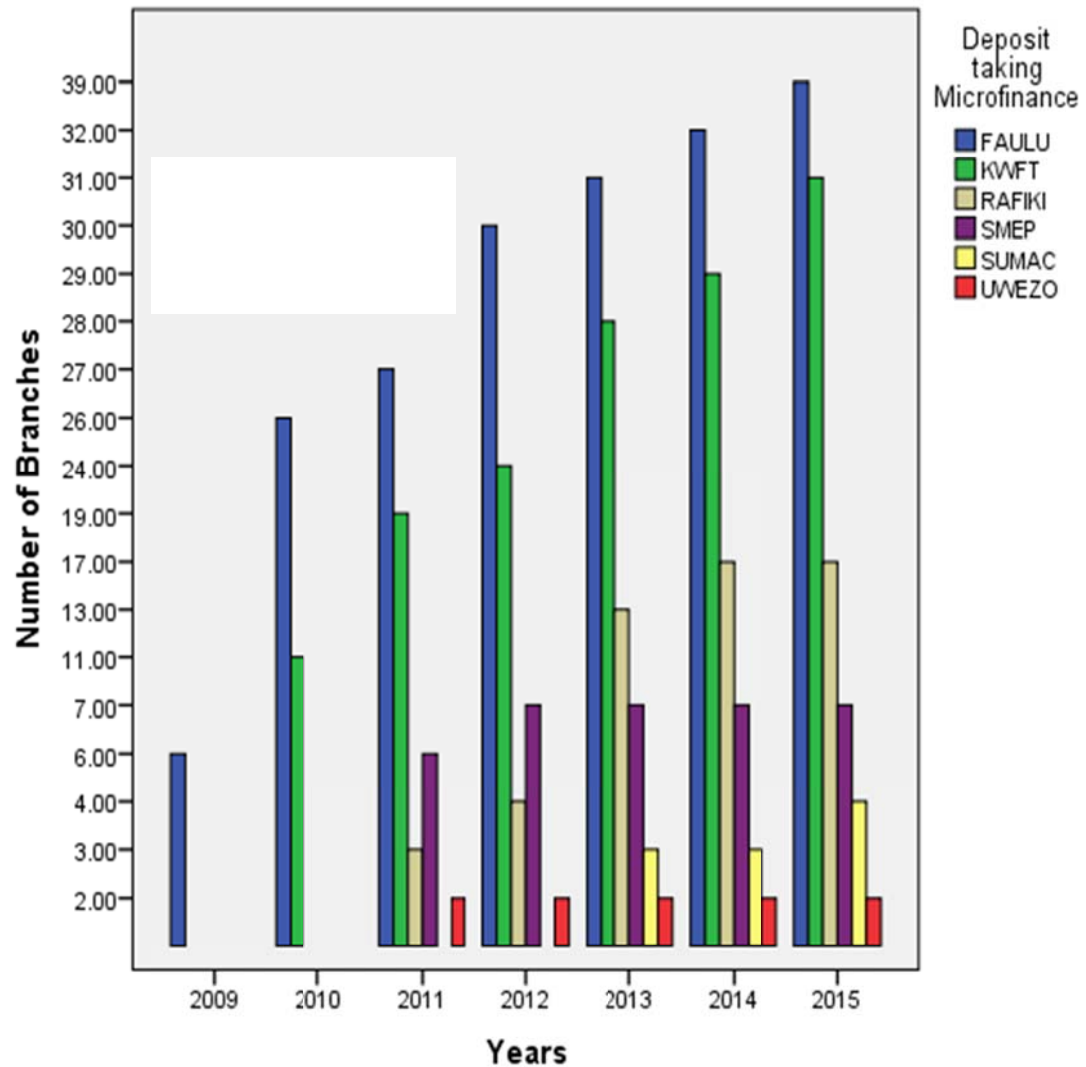
From the figure 3 above it can be noted that the DTMs have been investing in opening new branches from 2009 to 2015. In 2015 Faulu has the 39 branches; KWFT had 31 branches, Rafiki 17 branches, SMEP 7branches, SUMAC 4 branches and Uwezo 2 branches.

Figure 4 Number of Saving Products
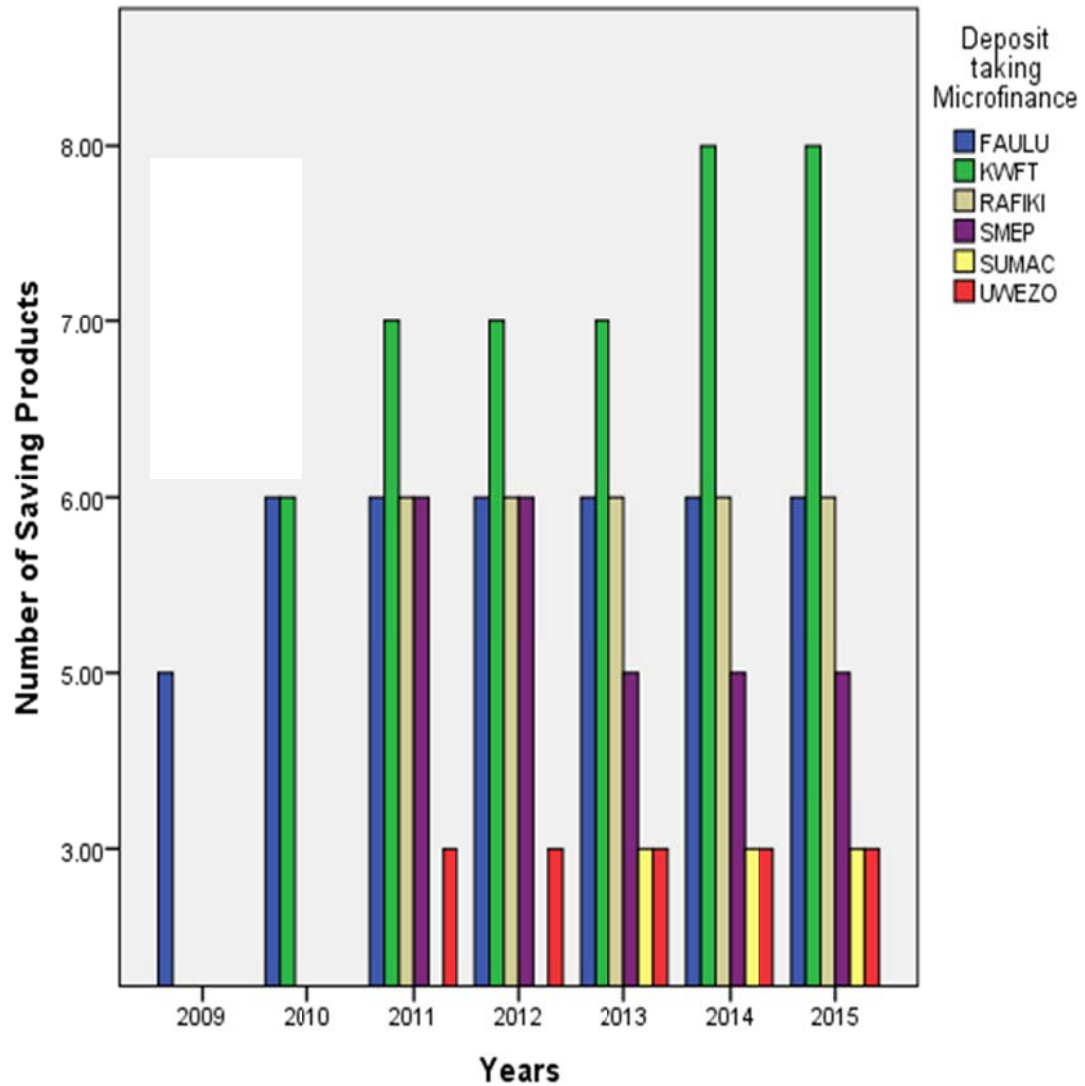
From the figure above since 2011 KWFT has the highest number of savings products. It has 8 products as at 2015. Faulu and Rafiki have 6 saving products while SMEP has 6 products and Uwezo and Sumac have 2 saving products.

Figure 5 Number of Loan Products
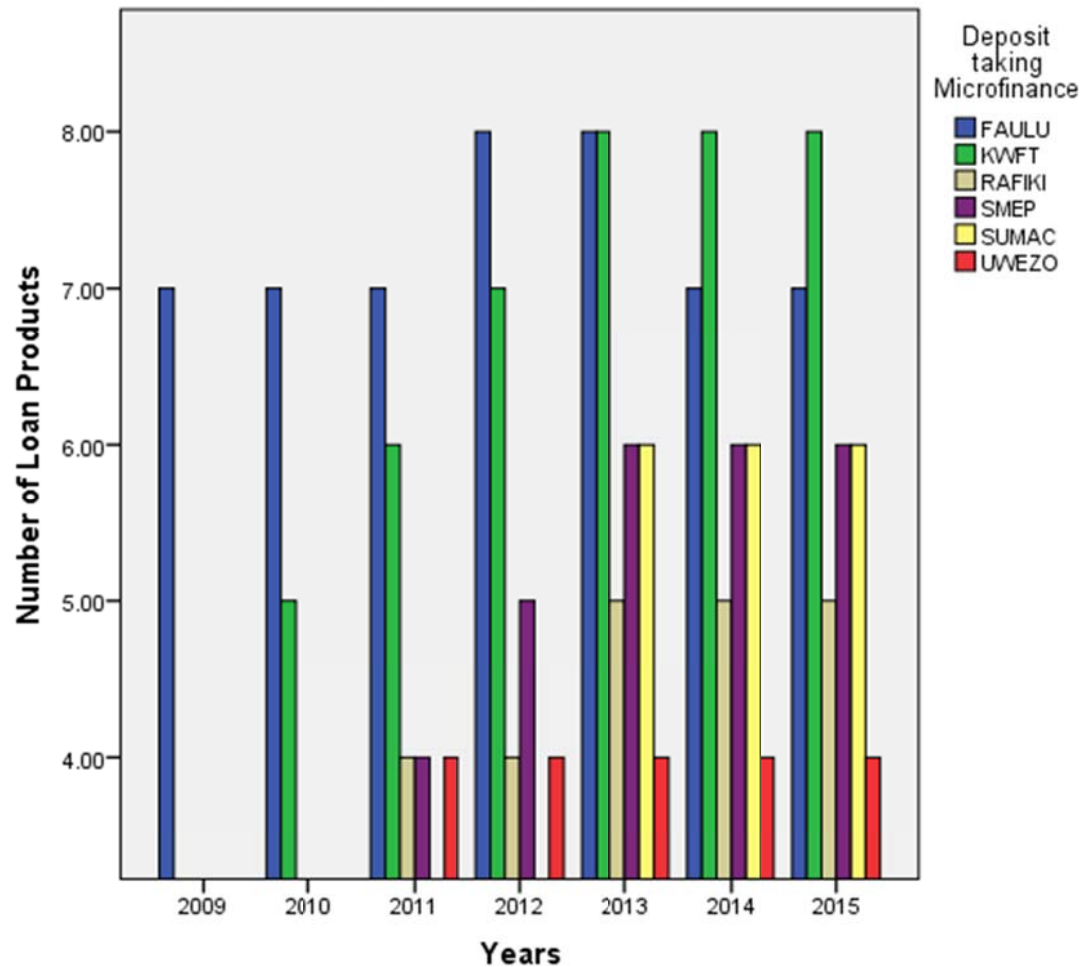
From the figure5 above KWFT has the highest number of loan products. In 2015 KWFT had 8 loan products, Faulu 7, SMEP and Uwezo had 6, Rafiki has 5 loan products and Sumac have 4 loan products.

4.4 Correlation Analysis

From the correlations table 2 below it is shows that we can establish the relationship between numbers of deposits and the number of saving, loan and branch innovations because the Pearson Correlation is high on all the independent variables.

Table 2 Correlations

<div align="center">Correlations</div>

		Number of deposits	Number of Branches	Number of Saving Products	Number of Loan Products
Pearson Correlation	Number of deposits	1.000	.706	.870	.637
	Number of Branches		1.000	.722	.799
	Number of Saving Products			1.000	.544
	Number of Loan Products				1.000

4.5 Multiple Regression Analysis

Analysis by Multiple regressions was used in determining the effect of Microfinance Innovations in availing of finance by MFIs to SMEs in Kenya. The analysis also shows the relationship between the variables. The explained variable in the study refers to the number of deposits while the predictor variables are the number of saving, loan products and branches that the DTMs innovated.

Table 3 Multiple Regression Model

<div align="center">Model Summary[b]</div>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.893[a]	.797	.774	.51428	.708

a. Predictors: (Constant), Number of Loan Products and Number of Saving Products, Number of Branches

b. Dependent Variable: Number of deposits

As shown above in table 3, R Square shows the variability in within the variables and how they affect each other. It shows how the dependent variable that is number of deposits accounts changed with the independent variables which were number of loan and saving and the number of branches. The R square 0.797 means that 79.7% of the changes in the number of deposit accounts are explained by the variations in the MFI innovations. From the above analysis the Durbin-Watson is 0.708 indicating positive correlation.

Table 4 Analysis of Variance

<div align="center">ANOVA^a</div>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.024	3	9.341	35.319	.000^b
	Residual	7.141	27	.264		
	Total	35.165	30			

a. Dependent Variable: Number of deposits
b. Independent Variables : Number of Loan Products, Number of Saving Products, Number of Branches

The F ratio in the above table is 35.319 and significant at sig= .000. A linear relationship exists between the dependent and independent variables.

4.6 Regression Coefficients

From the table 5 below on regression coefficient results the established multiple regression equation becomes:

$Y = 0.851 - 0.006X_1 + 0.537X_2 + 0.205X_3 + 0.514$

Where Y is availing of finance by MFIS, X1 the number of branches, X_2 is the number of saving products introduced and X_3 is the number of loan products introduced.

Table 5 Regression of Coefficients

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	.851	.637		1.337	.193	-.455	2.157		
1 Number of Branches	-.006	.016	-.070	-.397	.695	-.039	.026	.244	4.096
Number of Saving Products	.537	.087	.772	6.143	.000	.358	.716	.476	2.102
Number of Loan Products	.205	.109	.273	1.883	.070	-.018	.428	.359	2.786

a. Dependent Variable: Number of deposits accounts

The coefficients assess the various variables in the multiple regression equation and the contribution of each variable in determining of the variable that is dependent. Results show that the number of saving products has the highest influence in determining the number of deposits with a beta of 0.537. This is then followed by was the number of loan products introduced with a beta of 0.205. Then lastly we have number of branches with a beta of -0.006.

4.7   Discussion of Research Findings

Data analyzed was from six Deposit taking MFIs that are registered by the Central Bank of Kenya. Faulu Kenya was the first DTM licensed by the Central Bank of Kenya to take deposits from clients. KWFT followed suit in 2010 to be second to be licensed. This was followed by Uwezo and Rafiki DTM in 2011 and finally Sumac DTM in 2013.As at 2015 the Central Bank of Kenya has registered 13 deposit taking MFIs in Kenya.

From the analysis of the data it was found that there exists a relationship that is strong between innovation of saving and loan products by the institutions to availing of finance by this institutions to SMEs in Kenya. The data measures the goodness of fit using the $R^2= 0.81$ meaning that 81% of the change in the number of deposit accounts is as a result of the by the variables that are dependent e, while 19% is determined by other external factors that were not considered in the study. 1.731 is the correlation that indicates there is positive correlation between the dependent and independent variables. Standard deviation is 0.5221.

The findings revealed that MFI innovation have an effect on the availability of funds by the MFIs. As shown above the saving products   introduced have the greatest impact on the availing of finance followed by the number of loan products and lastly the number of branches. Faulu Kenya is the oldest DTM licensed by the Central bank of Kenya in 2009 and has the largest number of branches. It started with 6 branches and now has 39 branches nationwide. Despite of this, KWFT licensed in 2010 has the largest number of deposits accounts. It has 54.80% of the market share by the number of deposit accounts it has. As at 2015 it had 1,029,967 deposit accounts. KWFT started with 11 branches in 2010 which have grown to 31 branches nationwide.

KWFT has the largest number of loan products in comparison with the other DTMs in the market. It has 8 loan products and 8 saving products which have drove its dominance in the market. According to the findings above innovation of loan and saving products has the highest impact on availing of finance to small and medium entrepreneurs in Kenya.

In 2015 the number of deposits of the large two deposit taking has been on a downward trend. Despite having more branches compared to the smaller DTMs. The smaller DTMS have been investing in opening new branches and having new innovative savings and loan products. SMEP which was licensed in 2011satrted with 4 loan products and as 2015 they have 6 loan products. Sumac licensed in 2013 has 6 loan products and Rafiki in licensed in 2012 joined the market with 4 branches as end of 2015 it had 17 branches in different parts of the country. The innovation by the small DTMs has resulted to the increase of number of deposits in the respective DTMs and has also led to the drop in number of deposits in the two large DTMs in the market.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1   Introduction

This   chapter includes the summary, conclusion and recommendations of the research carried out. The summary contains key findings. The research objectives were used as a basis for the recommendations and conclusion of the findings of the research on the effect of innovative products on availing finance by the MFIs.

5.2   Summary of Findings

The study was carried out to establish the effect of Microfinance innovations on availing of finance by Microfinance Institutions to small and medium enterprises in Kenya. Findings of the research carried out showed that there exists a positive relationship between the Microfinance innovations and availing of Finance. The study showed that 79.7 % of the variations of the Number of deposits are determined by the number of product innovations and location innovations. Thus the innovations greatly influence the availing of finance by the Microfinance Institutions.

The findings show that saving products introduced has the greatest impact in determining the number of deposits of an MFI which also measures the availing of finance. This is shown by the beta of the 0.537 in the multiple regression equation. Among the DTMs KWFT has the highest number of saving products, having 8 products, Faulu and Rafiki have 6 loan products, SMEP has 5 products lastly Uwezo and sumac have 3 products.

In the study it was found that despite Faulu DTM having a bigger market share compared to SMEP, SMEP provides more funding to SMEs compared to Faulu DTM. SMEP offers 100% of its finances to SMEs in the Agri-business and other businesses. Faulu offers 70% of its financing to SMEs. This is followed by KWFT which has the largest market share which offers 92% of its finances to SMEs, Uwezo 70%, SUMAC 83%, and Rafiki 77% despite having a small market share.

From the study it was noted that the number of deposits in the two DTMs with the largest market share that is KWFT and Faulu have declined over the period under study despite having opened new branches. This is as a result of the smaller DTMs, introducing innovative new products that have increased their market share. This can be seen with SMEP which has not opened any new branches in the period of study but has introduced new innovative products which has in turn increased their number of deposits and in turn had an impact in availing of finance by the institution.

5.3 Conclusion

The study was able to establish that there is relationship between the innovations that Microfinance institutions undertake and availing of finance to SMEs in Kenya. Data collected and analyzed showed that exist a positive correlation between the MFI innovations and availability of finance by the MFIs to SMEs. MFIs have come up with innovative products that allow SMEs to access funds from their institutions. Example of Loan products included Asset Financing, Invoice discounting and Local Purchase Order financing among other loan products which SMEs require for daily operations of their businesses.

From the study the number of deposits has increased during the period of study indicating increase in the availing of finance by the MFIs to the SMEs. The main drivers for increase in deposits are the number of innovative products introduced by the MFIs. It can also be noted that the smaller institutions are investing in new innovative products and opening new branches so as to reach out to as many entrepreneurs as possible. This can be seen by the steady growth in the number of deposits.

It is important for the Deposit taking institutions to invest in innovation of different kinds. Innovation should not only be limited to location innovation or loan and saving products innovations independently, but they should be done simultaneously so as to increase the availing of finance to entrepreneurs. This will also ensure that they increase and maintain the number of deposits in the institution.

5.4 Recommendations

MFIs should have innovative products so as to reach as many small and medium entrepreneurs. From the study there is a correlation between the number of innovative products and availing of finance by the SMEs. The MFIs should also open new deposit taking branches especially in the rural areas as most of the DTMs are located in urban areas. MFIs should also market their products so that more small scale traders can be aware of their products as there are more tailored to meet their needs.

Given the findings of the study, DTMs should not only invest in Location innovations to attract new deposits but they should have innovative products that will be able to meet the clients need. From the study it is clear that having the most number of branches does

not necessarily mean having more availability of finance but rather also having innovative products.

The government also put in place mechanism that regulates Non-deposit taking Microfinance institution so that they do not exploit SMEs with products that are not genuine or are expensive on the long-run. Getting information of such institutions is not easy as they are not answerable to any regulatory authority.

5.5 Limitations of the Study

There were varied limitations when the study was being carried out. The main challenge was the lack of data from certain DTMs which were not availing their financial statements for gathering of information. The study was carried out using publicly available data from Central Bank of Kenya and Association of Microfinance Institutions reports.

Another challenge was that the study was based on Deposit taking Microfinance institutions only and there are also other MFIs that are non- deposit taking. Reports on credit only Microfinance Institutions are not easily available.

The study did not explore all the available innovations of that are available in the Micro finance institutions such as technology innovations, where technology is used in delivering financial services, Institutional arrangement innovation, where change of legal status to improve performance among other innovations that are available and the effect it may have in availing finance to small and medium entrepreneurs.

5.6 Suggestions for Further Research

Further research should conducted out by carrying out the same research but using non-deposit taking Microfinance institutions to see whether the same results with be achieved. Another study can be carried out to establish between deposit taking and non-depositing MFIs which of the two avails more finance to SMEs.

Research on other innovative products other than saving products innovation, loan product innovation and location innovation should be conducted and determine the impact it has on availing of finances.

Research study should be carried on the small and medium entrepreneurs to determine which products they find innovative and the characteristics of these products. The study will assist Microfinance institutions to design products that meet the need of the clients. This will increase the accessibility of finance by the SMEs and will reduce the financial obstacles that face them in day to day management of their businesses.

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APPENDIX

I.   List of DTMs and data collected for the dependent and independent variables

	DTM	Year	Total Number of Deposits Accounts	Percentage relating to SMES	Number of SME Deposit Accounts	Number of Branches	Number of Savings Products	Number of Loans Products
1	FAULU	2009	176,317	70%	123,422	6	5	7
2	FAULU	2010	343,650	70%	240,555	26	6	7
3	FAULU	2011	305,598	70%	213,919	27	6	7
4	FAULU	2012	384,718	70%	269,303	30	6	8
5	FAULU	2013	448,828	70%	314,180	31	6	8
6	FAULU	2014	547,380	70%	383,166	32	6	7
7	FAULU	2015	504,846	70%	353,392	39	6	7
8	KWFT	2010	578,797	92%	532,493	11	6	5
9	KWFT	2011	930,807	92%	856,342	19	7	6
10	KWFT	2012	1,030,614	92%	948,165	24	7	7
11	KWFT	2013	1,034,218	92%	951,481	28	7	8
12	KWFT	2014	1,153,955	92%	1,061,639	29	8	8
13	KWFT	2015	1,029,967	92%	947,570	31	8	8
14	RAFIKI	2011	7,498	77%	5,773	3	6	4
15	RAFIKI	2012	27,863	77%	21,455	4	6	4
16	RAFIKI	2013	56,763	77%	43,708	13	6	5
17	RAFIKI	2014	100,377	77%	77,290	17	6	5
18	RAFIKI	2015	122,773	77%	94,535	17	6	5
19	SMEP	2011	157,863	100%	157,863	6	6	4
20	SMEP	2012	305,447	100%	305,447	7	6	5
21	SMEP	2013	361,510	100%	361,510	7	5	6
22	SMEP	2014	426,007	100%	426,007	7	5	6
23	SMEP	2015	456,317	100%	456,317	7	5	6
24	SUMAC	2013	887	83%	736	3	3	6
25	SUMAC	2014	1,629	83%	1,352	3	3	6
26	SUMAC	2015	2,599	83%	2,157	4	3	6
27	UWEZO	2011	962	90%	866	2	3	4
28	UWEZO	2012	1,448	90%	1,303	2	3	4
29	UWEZO	2013	2,166	90%	1,949	2	3	4
30	UWEZO	2014	3,211	90%	2,890	2	3	4
31	UWEZO	2015	3,933	90%	3,540	2	3	4

II.   List of Licensed DTMs by the Central Bank of Kenya.

Choice Microfinance Bank Limited

 P. O. Box 18263-00100, Nairobi

Website: www.choicemfb.com

Date Licensed: 13th May, 2015

Branches: 1

Faulu Microfinance Bank Ltd

P. O. Box 60240-00200, Nairobi

Website: www.faulukenya.com

Date Licensed: 21st May, 2009

Branches: 32

Kenya Women Microfinance Bank Ltd

P. O. Box 417900506, Nairobi

Website: www.kwftdtm.com

Date Licensed: 31st March, 2010

Branches: 29

SMEP Microfinance Bank Ltd

 P. O. Box 64063 00620,

Website: www.smep.co.ke

Date Licensed: 14th December, 2010

Branches: 7

Remu Microfinance Bank Ltd

P. O. Box 2083300100, Nairobi

Date Licensed: 31st December, 2010

Branches: 3

Rafiki Microfinance Bank Ltd

Postal Address: 12755-00400, Nairobi

Website: www.rafiki.co.ke

Date Licensed: 14th June, 2011

Branches: 17

Uwezo Microfinance Bank Ltd

Postal Address: 16540-0100, Nairobi

Website: www.uwezodtm.com

Date Licensed: 08 November, 2010

Branches: 2

Century Microfinance Bank Ltd

 P. O. Box 38319-00623, Nairobi

Date Licensed: 17th September, 2012

Branches: 1

Sumac Microfinance Bank Ltd

 P. O. Box 116870-0100, Nairobi

Website: www.sumacdtm.co.ke

Date Licensed: 29th October, 2012

Branches: 3

U&I Microfinance Bank Ltd

 P.O. Box 15825-00100, Nairobi

Website: www.unimicrofinance.co.ke

Date Licensed: 8th April, 2013

Branches: 2

Daraja Microfinance Bank Ltd

P.O. Box 100854-00101, Nairobi

Website: www.darajabank.co.ke

Date Licensed: 12th January, 2015

Branches: 1

Caritas Microfinance Bank Ltd

P.O. Box 153520-0100, Nairobi

Website: www.caritasmfb.co.ke

Date Licensed: 2nd June, 2015

Branches: 1

Maisha Microfinance Bank Limited

P.O. Box 493160-0100, Nairobi

Website: www.maishabank.com

Date Licensed: 21st May, 2016

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