THE RELATIONSHIP BETWEEN OFF BALANCE SHEET FINANCING AND FINANCIAL SUSTAINABILITY OF MICROFINANCE BANKS IN KENYA

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DECLARATION

This research project is my original work and has not been submitted for any award to any other college, institution or university.

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

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DEDICATION

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LIST OF ABBREVIATIONS

CAR	-	Capital Adequacy Ratio
CGAP	-	Consultative Group to Assist the Poorest
FSS	-	Financial Self-Sufficiency
GDP	-	Gross Domestic Product
MFB	-	Microfinance Bank
MFI	-	Microfinance Institution
NGOs	-	Nongovernmental Organizations
OBS	-	Off-Balance Sheet
OSS	-	Operational Self-Sufficiency
ROA	-	Return on Assets
USAID	-	United States Agency for International Development

ABSTRACT

Off-balance sheet financing is one of the major developments in current financial markets, which are engaged by banking institutions. Financial institutions engagement in traditional banking has been shrinking whereas the OBS activities have been growing. It is argued that off-balance sheet activities play an important role in helping the financial institutions to hedge their long-term financial assets in the on-balance sheet and increasing the bank's profitability, while keeping the details of these earnings off from the balance sheet of the commercial banks. For financial institutions including microfinance banks, the expansion toward OBS businesses allow them to downsize their on-balance sheet items by generating additional fee income to offset size reduction of interest rate margins generated from banks' granting loans. The study sought to determine the relationship between off balance sheet financing and financial sustainability of microfinance banks in Kenya. The study employed a descriptive research design and the population of the study was made up of the thirteen microfinance banks in Kenya which are regulated by the central bank as at 31stDecember 2017. This study collected secondary data from the microfinance banks financial statements for a period of five years from the year 2013 to 2017. The study used regression analysis to determine the relationship between the dependent and independent variable and correlation analysis to assess the degree to which two or more variables are associated with or related to each other. The study results revealed that the relationship between off balance sheet financing and financial sustainability was negative and statistically insignificant and that there was a positive and significant relationship between firm size and financial sustainability of microfinance banks in Kenya. The findings revealed that there was a positive and statistically insignificant relationship between liquidity and financial sustainability of microfinance banks and that capital adequacy had a positive and significant relationship with financial sustainability of microfinance banks in Kenya. The study concluded that off balance sheet financing and liquidity does not influence financial sustainability of microfinance banks but firm size and capital adequacy significantly affect microfinance banks sustainability.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Off balance sheet financing be part of the primary improvements within the present monetary markets that involve the banking institutions (Aktan et al., 2013). Financial institutions engagements in the conventional banking have been decreasing while the off balance sheet dealings has been enlarging (Ma'ina et al., 2015). Arguments are that the off balance sheet dealings act a vital task in aiding the financial institutions be cautious of the period which is long monetary items found in on balancing sheet along with growing in the profitability for the banks (Karim, Abd & Gee, 2007). For financial institutions including microfinance institutions, the development of off balance sheet activities allowed downscaling balancing sheet assets via creating extra charges proceeds for compensating the lowering in size for interest rate margins provided by the banks conceding credits (Elian, 2012).

The concept of off balance sheet financing is theoretically explained by the collateralization hypothesis, market regulation hypothesis with diversification hypothesis. The diversification hypothesis argues that the desire to diversify their loan and investment portfolio have provided incentives for banks to use OBS activities (Kasa, 2013). The collateralization hypothesis affirms that banks are usually concerned in credit securitization along with stand-by communication of loans in avoidance for the breach of authoritarian necessities (Elian, 2012). The market regulation hypothesis affirms that safer banks be likely to concern a better degree of OBS activities than precarious institutions (Ghosh & Nachane, 2002). On financial sustainability, the institutionists theory supports that every MFI must seek monetary sustainability by way of exploiting its efficiency along with output, so as to attain self adequacy on finance (Furu, 2017). The welfarist theory supports the creation of commonality institutions that may include NGOs and cooperatives in view of micro-finance as a primary implement for dropping the poorest poverty (Bassem, 2012).

Micro-finance institutions have been established as a fiscal imply to aim precise individuals and also as a communal feature that contributes to the reduction of poverty, empowerment on women, and development in economy as well as creation of employment (Harelimana, 2017). The microfinance is broadly recognized to provide the monetary services that are loans, deposits, savings, and indemnity as well as refund services to the people underprivileged to access the predictable monetary services due to poverty and they are not able to bid securities (Samer et al., 2015). The Kenya Micro-finance segment started in behind 1960s by NGOs introducing pilot schemes offering benefactor funded loan services. Several firms have grown over the period to being self supporting, commercialized and also immensely advantageous firms (Kodongo & Kendi, 2013). Stakeholders and scholars in the Microfinance sector have argued that MFIs ought to be sustainably stable to be able to offer meaningful contribution to the fight against poverty (Samer et al., 2015).

1.1.1 Off-Balance Sheet Financing

Off-balance sheet funding refers to means through which company's structure off balance sheet transactions or otherwise incurs risks of loss that are not transparent to the users of financial statements (Casu & Girardone, 2005). Off balance sheet financing also refers to the financing that is not shown as a liability on a company's balance sheet (Elian, 2012).

Off balance sheet dealings as the banking items among dealings not reflected in the on balance sheet group. The dealings make incomes that are not evidenced in the balance sheet for banks (Karim, Abd & Gee, 2007). According to Al-Awawdeh and Al-Sakini (2017) off-balance items is defined as the financial activities that provide financing sources to the enterprise without stating the financial obligations in the financial statements.

Off balance sheet dealings entails several products that include definite commitments on credit, definite loan letters with rotating underwriting services. To add on, futures, swaps, forwards as well as option contracts are items that have their theoretical ideals are conceded off balance sheet (Saxunova, 2012). Off-balance items include the potential obligations that may arise from the bank issuance bank bonds letters, bail bonds, letters of credit, and unutilized receivables of current account limits or dealing with financial derivatives (Al-Awawdeh & Al-Sakini, 2017). Fee related products encompassing commitments, guarantees as well as derivatives occasionally befall the primary supplies of proceeds for banks. The guarantees credit letters, securitization, derivatives as well as commitments are at times be fall the primary supplies for bank’s incomes (Ma'ina et al., 2015).

The off balance sheet depiction signify that the dealings entail conditional assurance with revenue making commitments to banks however normally they are not recorded as obligations or assets in the conservative ways of accounting (Ma'ina et al., 2015). A universal motive for off balance sheet funding is for acquiring funds that the firm would not have been able to achieve or else. Off-balance sheet financing reduces the exposure to debts. If obligations are not recorded on the statements of financial position, the statement would be more striking with a stronger-appearance (Lobwo, 2004). Another explanation for off balance sheet funding is a decrease in the statement of financial position debt (Lim, Mann & Mihov, 2003). Through engagement in the off-balance sheet dealings, banking institutions can evade the regulatory expenditures as reserve prerequisites with deposit assurance payments are not obligatory on the off-balance sheet dealings (Aktan et al., 2013).

1.1.2 Financial Sustainability

Financial sustainability is the aptitude of continued operation as an advance monetary institution for the country deprived (Ibrahim, 2017). Financial sustainability is also defined as the capability of a microfinance institution to carry on dealings due to practicability of dealings, therefore capability to cover operational, economic as well as management expenses (Bayai & Ikhide, 2016). Sustainability in terms of finances is attributed to an Institution of Microfinance capability of expenses from operations and growth from their own revenue generating activities (Kinde, 2012). Fiscal sustainability is the requirement of building micro economic services lasting and also broadly accessible. Financial sustainability situation be realized when institutions get beneficial adequately for maintenance as well as expansion of its services with no sustained insertions of funding (Khan, Butt & Khan, 2017).

The economic sustainability of micro financial institutions is an essential situation for the institutional continuance (Tehulu, 2013). Financial sustainability ensures the longevity of the organization. Sustainability in microfinance actually goes beyond the financial perspective and could be also appreciated under different aspects like the institutional, market, legal policy environment, and impact aspects (Ibrahim, 2017). Sustainability of finance is of a big essence to all microfinance banks but it apparently appears to have various as well as sophisticated principles that can be barely attained by every micro finance banks therefore merely a small number of the micro finance banks befall economically self sustainable (Khan, Butt & Khan, 2017). MFIs are economically self adequate when they are capable of covering from their self produced proceeds, together with operating as well as financing expenditures with extra type of funding prized by charges in the markets (Kinde, 2012).

Economic sustainability may be measured using several indicators including prepared independence, economic autonomy, and funding confidence index, return on equity as well as return on assets (Kinde, 2012). Operational independence is an indicator of whether proceeds have been made in compensation of the MFI's direct expenditures exclusive of capital expenditures however counting in the real funding expenditures. Economic autonomy is an indicator of the real economic wellbeing of an MFI. It comprises of capital expenditures attuned from operational independence. Economic autonomy is derived from operations divided by operating expenses incurred, which excludes revenue from subsidies (Khan, Butt & Khan, 2017). The purpose of economic autonomy is for the measurement of whether a bank attains sufficient proceeds from credits for covering the operating costs, funding expenditures, credit losses provision as well as capital expenditure (Bayai & Ikhide, 2016).

1.1.3 Off-Balance Sheet Financing and Financial Sustainability

Off balance sheet activities engage risks that may include operational risks, credit risks and also market risks that can impact the solvency as well as liquidity for banks (Casu & Girardone, 2005). Therefore, considerable expansion in derivatives dealings by marketable institutions can be clarified through augmented rates of interests, credit risk as well as the risks from foreign exchange coverage that financial institutions encounter on both international as well domestic markets. These activities provide means of hedging above risks with no needing to produce broad alterations on the financial statements (Aktan et al., 2013). In the off balance sheet funding, the sum liability of an entity raises however the raised debt is not shown in the balance sheet of the entity. This makes the firm reveal improved gearing ratios, acquire extra debts as well as allow the firm obtain extra finances whilst tranquil maintaining its gearing levels with the providers (Karim, Abd & Gee, 2007).

The collateralization hypothesis supports that financial institutions might employ in their usual industry supplementary proficiently plus can also develop extra hastily under different regulatory time, in particular those times that permit for growth transversely status lines with no restriction on financial institutions to profitable as well as speculation companies (Elian, 2012). According to Lozano and Pasiouras (2014) the off balance sheet dealings encompass ability of generating affirmative or negative money flows, with impact on the banks' production mix. To be exact, several off balance sheet activities are frequently effectual alternate for unswervingly provided credits that require same fact obtaining expenditures of instigation whilst others are employed by financial institutions in hedging risks along with generating incomes. Elian (2012) posits that these businesses which are termed as OBS contain the abilities of either adding or lowering the associate risks in terms of off balance sheet proceeds can ambtitudely recompense for raised off the balance sheet exposures. It can also in fact lessen the likelihood of bankruptcy for nearly all the banks.

A study by Barrell (2010) evaluated off balance sheet disclosures in bank predicament purpose sculpt and established that the variance in an alternate of off balance sheet dealings for financial institutions as a result of allocation of returns that are not profitable considerably on an economic environment as well attribute bank wealth sufficiency, liquidity, variations in the prices for houses as well as the present account balance to gross domestic product ratio. Casu and Girardone (2005) carried out a scrutiny of the significance of off balance sheet commodities in explanation of efficiency variance in the European banks also established that the insertion of off balance sheet products leads to a raise in the projected efficiency degrees for every nation. Yeoh (2007) examined the any consequences legally regarding to off balancing finance and concluded that if companies employed off balance sheet for liquidity improvement or in realization of monetary savings, they lead to affirmative results.

1.1.4 Microfinance Banks in Kenya

Microfinance bank is a company that is licensed to do business within the confines of micro financing (Nderitu, 2016). Microfinance banks accept demand deposits and use the deposits as a means to generate capital for the extension of credit to customers (King'ori, Kioko & Shikumo, 2017). Microfinance entails the stipulation of small range monetary services to the short revenue individuals. MIFs are effectual tools for fighting poverty as they provide monetary services to the people who have no access to or are ignored by the banks (Tehulu, 2013). In nations for instance Kenya where poverty intensity is elevated with monetary services not reaching the many greater part, micro finance banks are essential as they encourage commercial dealings along with lessening poverty levels (Kodongo & Kendi, 2013).

The micro finance business in Kenya has come a lengthy approach from the 1980s, with in particular as the attraction Micro-finance Intermediaries Act of 2006 (Mutisya, Okibo & Olweny, 2014). Micro-finance dealings have been in harmony in the country from 2006, where the Kenya's Microfinance Act, (2006) was signed to get micro-financial institutions which are resolute into accepting people to deposit their money in the watch of the Central Bank of Kenya management along with bylaw (Wambugu & Ngugi, 2012). As at December 2016 there were 13 deposits taking microfinance institutions. Part of the many participants in the region; comprise of the Kenya Women Finance Trust, Faulu Kenya, Small and Medium Enterprise Programme, Rafiki Microfinance Bank, Century MFI, Sumac MFI bank limited, Uwezo MFI amongst others (King'ori, Kioko & Shikumo, 2017).

The Kenyan micro-finance segment is part of the mainly effervescent in the Sub-Saharan Africa. FinAccess National Survey (2009) data reveals; amidst 2006 to 2009, practicing micro-finance institutions services locally two folded, from 1.7% of Kenyan people in 2006 to 3.4% in 2009 (Wambugu & Ngugi, 2012). The microfinance banks registered enhanced growth in the year 2016 with total assets increasing by 5 percent from KShs 69.3 billion in December 2015 to KShs 72.5 billion in December 2016. The microfinance sector in Kenya has experienced a rapid growth that has contributed positively to increased access to banking services and products to the lower end and the middle class (Nderitu, 2016). As the micro-finance business has developed as well as hastily stretched both in the country and also worldwide, queries relating to the sustainability as well as out-reach has come in the forefront (Kidzuga, 2013).

1.2 Research Problem

Off balance sheet dealings act essential parts in aiding financial institutions to prevaricate the goals set for a longer period economic resources on the off balancing sheet along with raising their profitability (Karim, Abd & Gee, 2007). Off balance sheet dealings are measured as proceeds producers and also risk managing tools for banks (Ma'ina et al., 2015). However, off-balance sheet financing is an aspect of creative accounting and has become a source of great headache for the accounting regulators the world over. They are struggling hard to crack down on the unhealthy practice; several measures have already been adopted (Lobwo, 2004). In addition, despite the existence of off balance sheet financing mechanisms, international, and the micro-finance subsector have had to compete with many difficulties. Part of the main difficulties encountered is that the borrowers are extremely risky as they are naturally people of low net-value with little or no sucurities that can be obtained by banks in times of failure to pay (Kodongo & Kendi, 2013).

In Kenya, microfinance institutions effectively compliment the commercial banks in advancing financial services to the unbanked poor (Nderitu, 2016). However, majority of microfinance banks in Kenya have made losses since the first institution was licensed by the Central Bank in 2009 with most of the licensed Microfinance banks have recording a negative profit growth. The microfinance segment in the country has also encountered various restraints, which hinder their outreach and sustainability (Apalia, 2017). In addition, the microfinance sector has experienced extremely high competition evidenced by the shifting market share and profitability. The competition is among the MFIs sector, mainstream commercial banks and the telecommunication money transfer platforms such as Mpesa (King'ori, Kioko & Shikumo, 2017). Thus, the need to examine the connection among off-balance sheet finances with the sustainability in terms of finance for these institutions in microfinancing in the country.

A study by Calmes & Theoret (2009) examined the effect off-balance sheet dealings on bank profits and found that non-interest revenues produced by OBS dealings do not influence bank returns but the context of the study was listed banks whose share generate returns and not MFBs. A study by Papanikolaou & Wolff (2014) assessed the functioning of both on/off balancing sheet debt in financial institutions for the late 2000s calamity and established that debt, both overt with concealed off balancing sheet, raises the risk individually for the financial institutions building both sheets to be prone to fiscal alarms with the study focusing on commercial banks and not microfinance banks.

In Kenya, Muumbi (2014) studied the effect of lease funds for the fiscal operations in firms quoted on NSE and revealed an affirmative significant connection among lease financing with productivity but the study only focused on lease financing as the only OBS item. Maina (2013) examined the impacts of OBS dealings on the ability to be solvent for business financial institutions locally and concluded that OBS dealings in the trading operations increases overall risks and thus affects solvency and stability of banks though the context of the study was business banks in the country. Relating to the reviewed papers it is evident that the concept of off balance sheet financing and it influence on financial sustainability of microfinance banks has not been extensively studied thus an empirical literature gap. This leads to the research question, what is the connection among off-balance sheet financing with financial sustainability of Kenyan institutions in microfinance?

1.3 Research Objective

To determine the link among off-balance sheet financing with financial sustainability of microfinance institutions in Kenya.

1.4 Value of the Study

The findings of the study shall be helpful to microfinance banks in the country. It seeks to provide useful information on proper utilization and management of the contingent assets and liabilities to maximize the profitability and liquidity of Microfinance banks in Kenya. Bank managers can be in better position to hedge the various known risks with regards to OBS operations. The study will spread to other areas of the banking division so as to improve the performance of banking industry as a whole. Banks will also be able to effectively manage their assets and ensure that there is maximum utilization of the contingent assets and liabilities. This will be through increased income from the off-balance sheet activities. Corporate managers and directors will use the information to maximize on the offers given by commercial banks to enhance trading for their corporations. This will in turn help in the growth of the economy.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter assessed different theories under theoretical review, explored the major determinants of financial sustainability in microfinance banks, reviewed various local and international studies, and presented the conceptual framework and a summarization for the reviewed existing literature.

2.2 Theoretical Review

2.2.1 The Institutionists Theory

The institutionalist theory is associated with Morduch (2000) and Woller et al. (1999). The institutionist advance is based on the logic of market in support of different global companies, like United Nations, the World Bank, the Consultative Group to help the needy and the United States Agency for International Development. This advance is based on the assumption of limited donors for a growing demand for microfinancial services (Conzo, 2014). Institutionalists stress the performance assessment from the point of view of banks to the disadvantage of its clients. They deem fiscal self-sufficiency as a condition that accomplishes in a better way the communal objectives (Bassem, 2012).

According to institutionists, all MFIs ought to project at economic sustainability, exploiting the productivity, preferring extent of out-reach (various beneficiaries) to intensity of out-reach (targeted level of poverty, usually shown by indicators like the normal quantity of loans as well as the quantity of women beneficiaries). This approach puts the institution as the major point of focus in the procedure, instead of the target population and the socio-economic impact or a relevant social return (Bisen, Dalton &

Wilson, 2012). The Institutionists scrutinizes economical intensify as the primary purpose of MFIs. Institutionists states that the fiscal sustainability as gauged by fiscal independence ought to be specified elevated precedence by all micro-finance institutions (Harelimana, 2017).

Institutionalists argue that the commercialization of microfinance allows greater opportunities to fulfill the social mission and increase access to the great demand of financial services to the poor (Bassem, 2012). The institutional advance stresses the significance of economically sustainable micro-finance schemes, and the substance of MFIs to be capable of covering their costs of fund lending from the proceeds acquired from the exceptional credit selectioin, as well as lessening their operational expenditures the much potential manner (Furu, 2017). The Institutionists support that MFIs should concentrate on ensuring that they generate enough internal funds without depending on donor funds or subsidies in order to tackle poverty alleviation menace in a sustainable manner (Brau & Woller, 2004).

2.2.2 The Welfarists Theory

The welfarists (poverty lending) theory is also associated with Morduch (2000). Welfarists base their position on the assumption of their commitment to provide for the very unfortunate. This advance considers the provision of a whole range of services, not only credit or saving, but also non economic services, such as specific entrepreneurial trainings with support able to support the target population in all the business cycle phases, under an economic and a social perspective (Conzo, 2014). The welfarists theory emphasizes on shortage mitigation, situate comparatively better influence on intensity of out-reach relation to breath of out-reach, and measure bank prosperity more so in accordance to communal metrics (Brau & Woller, 2004).

The welfarist approach perceives the micro-finance as a successful means to fighting beside shortage with susceptibility alongside improving the welfare of the deprived. Additionally, this stipulation is in the favor the conceding non financial services for instance education and also practical support to the micro capitalists (Bassem, 2012). The welfarists follow that micro-finance as formed for reducing poverty, their aims being to allow the inferior of the reasonably lively unfortunate and therefore, intensity of out-reach ought to be agreed a superior precedence. Micro-finance banks ought to be capable of serving majority of the potential poor customers, still when it may seem not commercial (Harelimana, 2017).

Welfarists argue that micro-finance institutions may attain sustainability exclusive of attaining fiscal autonomy. It is argued that contributions act as forms of equities, and thus the contributors may be seemed as communal financiers (Mutisya, Okibo & Olweny, 2014). Dissimilar to the private financiers who procure equity in an openly traded entity; communal financiers do not anticipate gaining fiscal profits. In its place, these donors apprehend a societal, or inherent profit (Brau & Woller, 2004). The Welfarists assert that a microfinance institution should be in as far as possible be in a position to serve the poor even when the profitability appears to be at stake, they continue to argue that the operations deficit should be filled through Government and donor support (Bisen, Dalton & Wilson, 2012).

2.2.3 The Collateralization Hypothesis

The authors of the collateralization hypothesis are Benveniste &Berger (1987) which states that colleterazation allows institutions to maximize on the allotment of sharing risks by way of transferring risks from risk-averse individuals to the risk neutral individuals. The propositions predict an affirmative connection among securitization with instutional risk, since the pooling setback is more sensitive in institutions that are risky (Ghosh & Nachane, 2002). The hypothesis explains that the authoritarian resources rations as well as fixed rate deposit assurance worsen in the commercial banks the under-investment predicaments that occur when firms have extreme out-standing risky debts. The problems can be solved by way of of stand-by credit letters and also sales on credit, furthermore it is more imperative for under-capitalized institutions (Duran & Lozano, 2013).

The collateralization hypothesis states that stand-by credit letters along with sales on credit are alternates for collateralized loan claims as institutions are outlawed from giving collateralized deposits (Barrell et al., 2010). According to the theory, credit sales along with stand-by credit letters encompass payoffs features that resemble the collateralized debts. Akin to the collateralized debts, these off balance sheet dealings allow financial institutions to trade a fraction of cash-flows related to new venture prospects. The capability of engaging in off-balance sheet dealings consequently allows institutions to venture in credits with affirmative net current worth (Duran & Lozano, 2013). According to the collateralization hypothesis, OBS activities improve the allocations of risks amidst the risk averse individuals along with risk neutral savers as secure chattels are sold to the risk averse individuals by way of collateralization with alternative, whereas the risk neutral investors procure the deposits for the banks (Kasa, 2013).

2.2.4 The Market Discipline Hypothesis

The market discipline hypothesis is associated with Berger (1991), Boot & Thakor (1991) and Koppenhaver & Stover (1991). This stipulation is in the argument that since off balance sheet dealings are not insured, reliant prospect alleges linked to other alleges on the institutions, those having safer investment situations would be engaged in extra off-balance sheet dealings for the mitigation of banks' risks. The bank clients would put extra worth on these alleges when institutions are safer (Khasawneh & Hassan, 2010). Thus, institutions that have previously issued off balance sheet products shall have a motivation reducing their risk situations by easy of giving out extra off-balance sheet products ((Kasa, 2013).

The market discipline hypothesis explains that off balance sheet collateralization can arise in bigger amounts for the safer institutions or persuade riskier institutions to turn to be safer. The theory is based on the argument that standbys along with dedications are un-insured dependent alleges whose worth appreciates with the security of the issuing institution. This offer motivation for the institutions that provide these alleges to raise their security and also provides moderately safer institutions a proportional improvement in providing this alleges (Ghosh & Nachane, 2002). According to the theory, provided the conditional character of OBS linked chattels along with the risk-aversion of institutions' complements in OBS activities; investors put much worth on those chattels if they are provided by institutions having little insolvency risks. Institutions having low insolvency risks take on OBS activities to a greater degree (Duran & Lozano, 2013)

2.2.5 Diversification Hypothesis

This stipulation states that bank take on off the balance sheet dealings so as to spread their assets portfolios so as to attain profitability in the entity spreading alongside avoiding the fury of dissatisfied institutional owners. The theory propose a negative connection among institutional risks and OBS dealings and that OBS risk is not an alarm for well spread investors and hence off balance sheet dealings have no impact on logical risks (Kasa, 2013)

2.3 Determinants of Financial Sustainability

2.3.1 Outreach

Out-reach is the amount of customers that are attended to by a micro-finance bank. It is frequently professed in two features that are depth with breadth of out-reach (Ibrahim, 2017). Outreach entails the ability to reach as many clients as possible including a great quantity of deprived customers as well. Reaching as many clients as possible is the breadth aspect of outreach whereas realization a huge amount of deprived customers is the depth (Mahapatra & Dutta, 2016). The span of out-reach is linked to the definite figure of deprived individuals attained with fiscal services, whilst the intensity of out-reach is how profound within the underprivileged people a bank is capable of reaching. Triumphant banks have to gratify the communal objective of arriving at numerous extra deprived groups alongside being capable of sustaining their corporate operations over a lengthy time economically. (Abdulai & Tewari, 2017). Outreach may be measured by the following indicators, namely; total figure of customers and fraction of women customers, figure of dynamic borrowers and savers, average loan size and distribution of branches.

2.3.2 Size of the Firm

An institutional size takes an essential part in decisive the type of affiliation the entity have in and outer of its working surrounding and hence profitability. The theory of intermediation modernization foresees the increased efficiency and effectiveness with regards to quantity to the size of a financial institution, owing to economies of scale (King'ori, Kioko & Shikumo, 2017). The large sized institutions, in relation of sum resources for instance, shall encompass more chances of diversifying their institutional operations, acquire the advantages of economies to scale and also be highly proficient when offering their services (Elian, 2012). The smaller micro-financial institutions particularly are at a difficulty, such as besieged to cover the company's high expenditures on operation as well as spread their commodities so as to contend with the larger micro-finance banks (Mahapatra & Dutta, 2016). Size captures the economies or diseconomies of scale of an institution and normally the natural logarithm of sum asset of MFIs is employed as a alternate of size.

2.3.3 Liquidity

This is explained as the institutions' capability meeting the demands for funds (Abdulai & Tewari, 2017). Liquidity is to decide on the fiscal soundness of businesses or individual venture selection. Liquidity of a company is a significant factor of consideration for the company's financial sustainability (Mahapatra & Dutta, 2016). Risks on liquidity arise when a micro-finance bank is not able to convene its necessities for cash or settlement of liabilities on a well-timed with a cost-effective way. MFI with inadequate liquidity might be less immune towards future uncertainty, timely delay of refinancing, disruption in meeting growth projections and increased portfolio at risk (King'ori, Kioko & Shikumo, 2017).

2.3.4 Capital Adequacy

A microfinance that reveals an affirmative resources support is competent to seize the advantages of cost-effective ventures that can earn superior profits in prospect. A well-capitalized microfinance institution faces reduced probable expenditures of fiscal misery and such a benefit will then be interpreted to fiscal sustainability of microfinance institution (Mahapatra & Dutta, 2016). In the event of loss of assets, higher capital level relative to its assets ensures the institutions would have sufficient funds of its own to cover the loss or there is adequate capital intensity that is requisite for the absorption of possible losses whilst offering sustainability of finance (King'ori, Kioko & Shikumo, 2017). The capital adequacy ratio gauges the institutions' assets to shield its depositors alongside insuring steadiness. A soaring capital adequacy ratio lessens an institutions' insignificant achieve from rising the asset's portfolio risk. Capital adequacy ratio is a gauge of the institution's resources and is used in protecting the depositors of funds as well as promoting the steadiness along with competence of monetary schemes (Ma'ina et al., 2015).

2.4 Empirical Review

Al-Awawdeh and Al-Sakini (2017) studied the off balance objects with their effect in fiscal operation levels for financial institutions. The research sampled 13 listed Jordanian commercial banks from 2009 to 2016. The outcome of the paper revealed that the capacity of Jordanian business financial institutions off balance objects was elevated as they constituted more than one-fifth of the sum resources. Using the regression model, the study revealed that the off balance objects had an affirmative impact with importance on statistics of the assets' return speed and profits. This study also established that size of banks along with ratio of the loan services offered by the institutions had an affirmative and arithmetic implication effect on the assets' rate of return and return on equity.

Khan, Butt and Khan (2017) examined the aspects that are affecting fiscal self-sufficiency of microfinance instituitons in Pakistan, India and Bangladesh. The study used panel data on MFIs of from the three countries from 2011 to 2015. The findings revealed that the quantity of MFI and the portfolio for loans and finally the summation of all assets had a strong influence; the risk of portfolio the outreach length, managing incompetence alongside routine expenditure ratio have unconstructive effect in fiscal independence.

In Kenya, Nderitu (2016) examined the impact of growth on the prosperity of institutions of the microfinance nature on the country via the design of descriptive study and 9 Microfinance banks in Kenya from 2011 to 2015. The study analyzed data through descriptive relationship as well as regression analysis. The results discovered microfinance banks were profitable since return on assets increased within the considered research period. The study also found that bank size and financial performance were moderately correlated and concluded that capital adequacy, liquidity, asset quality and logarithm of assets did not significantly influence MFBs profitability.

In Kenya, Wafula (2016) examined the determinants of sustainability of finance for the MFIs in the country. His research employed regression sculpts in the examination. The paper revealed that capital sufficiency, liquidity along with leverage is considerably correlated with fiscal sustainability while economic performance is not. The study concluded that liquidity be affirmatively as well as considerably related to economic sustainability. His study even concluded that there was an affirmative connection among liquidity with fiscal sustainability.

Ye (2015) studied the connection amid the growth of off-balance sheet doings with the institutions' bankruptcy, overall and also credit risks. The study measured various forms of possibility variables and incorporated bank's risk characteristics and focused on joint stock business financial institutions with government owned business financial institutions. The results revealed that the expansion of off-balance sheet doings for the government owned business banks raises all the study variables in considerable manner. The study also established the making of OBS doings reduces the general associated risk significantly in joint-stock business financial institutions' test.

Muthomi (2015) examined the connection amid the sustainability of finance with out-reach of micro-finance institutions in Kenya using cross sectional information for year 2013 and 2014. Findings of this paper revealed a strong affirmative connection among the sustainability of finance with out-reach of micro-finance institutions locally. This research even established that there existed a positive affiliation amid out-reach of micro-finance institutions and the amount of branches and that micro-finance institutions governed by CEOs that are male encompass advanced standard out-reach relating to the active customers attended to contrast to the micro-finance institutions headed by female CEOs.

Irving and Smith (2014) investigated if the operations of an organization from 2007 to 2009 for the financial hard times were associated with off-balance sheet arrangements (OBSAs), and in essence those of the financial resources which were transferred as well as the fluctuating interest rates. Through the matching of scores with propensity in firms which were not banks, the study found that that the use of OBSAs was associated with almost 10 percent lower buy-and-hold returns during the crisis. The study however did not find a significant relation for a placebo test one year before the crisis. In addition, the study did not find a relation for companies that use only on-balance sheet accounting.

Munene (2014) investigated the impact of lease funding on fiscal performance for the firms quoted at the NSE using a descriptive research design and targeted the 62 listed companies in the NSE from 2009 – 2013. Using the regression model, the results revealed that lease funding with the firm's size had negative impacts on return on assets whilst liquidity with leverage had affirmative impacts on return on assets. This paper made conclusions that lease funding as a form of off balance sheet financing does not impact the fiscal performance of the quoted entities in Kenya. While the connection can be negative, it failed the connotation analysis at all the satisfactory degrees of implication.

Aktan et al (2013) examined the impact of OBS doings in the operations of financial institutions quoted in the Istanbul Stock Exchange (ISE). The study used dealings of operations that included institution's risks exposure, leverage, profitability as well as liquidity positions. The results revealed that the institutions' specific risks with foreign exchange-rate risks be affirmatively linked to the off balance sheet businesses thus an indication that the off balance sheet businesses raises institution's particulars as well as the exposure to risk of the foreign exchange of all financial institutions in Turkey. These findings even showed that off balance sheet businesses, because of its hedging opinion, advances institutions stock proceeds but encompass an unconstructive effect on ROE but off balance sheet doings do not encompass a statistically considerable effect on liquidity or leverage.

Tehulu (2013) studied the factors affecting sustainability in finance for the institutions of microfinancing in East Africa using the Binary probit and ordered probit regression models to analyze data from 23 microfinance institutions within East Africa from 2004 to 2009. The findings established that that sustainability of finance for the MFIs was affirmatively plus considerably influenced by loans amount as well as size. The study though revealed that organization incompetence with portfolio risk encompassed a negative as well as considerable effect on the sustainability of finance.

In Kenya, Kidzuga (2013) studied the relationship amidst the fiscal sustainability with out-reach of microfinance institutions in the country. This research adopted a descriptive survey design approach and sampled 30 MFIs while regression replica was employed in the analysis of facts. Research findings established that the increase in branches, average number of active clients and the high percentage of women clients has enabled achievement of a greater depth of outreach. The findings established a positive correlation between outreach with sustainability of finance. The research concludes that there is a strong connection among fiscal sustainability with outreach of microfinance institutions in Kenya.

Karim, Abd and Gee (2007) analyzed how Off Balance Sheet dealings for Kenyan owned business financial institutions influence the performance of banks in stipulations of exposures of banks to different risk types, institutional proceeds along with the institutional leverage. The findings revealed that affiliation among OBS businesses with interest-rate risks, unsystematic risks, and also overall risks for the institutions was not considerable. Their study also found that that market risks be considerably affected by the OBS businesses plus there be no considerable connection among OBS businesses with leverage, liquidity ratio along with ROE.

Lim, Mann and Mihov (2003) investigated the market valuation of working leases by comparing the effect of working leases on credit ratings with earnings of newly issued debts to that of financial statement credit. The study revealed that working leases are considerably less imperative than financial statement credit for company credit ratings additionally that working leases encompass similar influence as financial statement credit on earnings of newly issued bonds. The study also revealed that while affecting credit off balance sheet might be helpful in maintenance of elevated credit ratings, bond earnings reveal the OBS liabilities, in spite of their imperfect revelation, in similar way as financial statement obligation.

2.5 Conceptual Framework

Conceptual structure is the replica that shows as well as clarifies the connection among a variety of variables. The goal of a theoretical structure is to group along with depict perceptions related to the research along with plot their connections. The independent variable for this study will be off balance sheet financing while the dependent variable will be financial sustainability where outreach, firm size, liquidity and capital adequacy will be incorporated as control variable as shown by figure 2.1

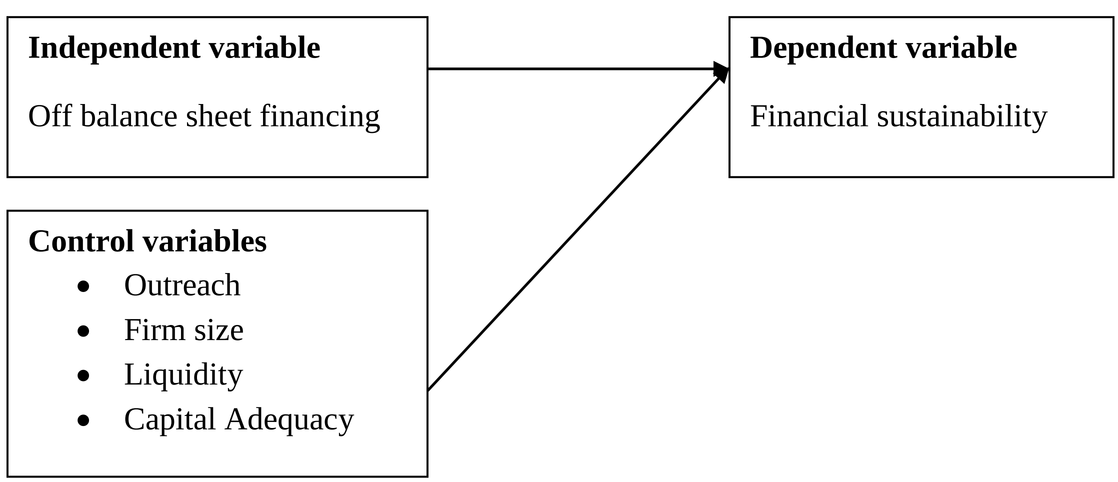

Figure 2.1: Conceptual framework

Source: Author (2018)

2.6 Summary of Literature Review

This reviewed some local and international researches among them Al-Awawdeh and Al-Sakini (2017) which studied OBS things with their effect on fiscal performance levels of the financial institutions though the focus was commercial banks. Khan, Butt and Khan (2017) examined the factors that are affecting the financial self-sufficiency of MFIs and OBS financing was not one of the determinants. Ye (2015) focused on OBS businesses and institutional risks but financial sustainability while Aktan et al (2013) assessed the influence of OBS doings in banks' performance and focus was financial institutions not micro-finance institutions.

Nderitu (2016) examined the impact of growth on productivity of microfinance institutions in Kenya and Wafula (2016) assessed the factors affecting sustainable fiscal in MFIs in Kenya but the studies did not incorporate off balance sheet financing as a determinant. Kidzuga (2013) on the other hand examined the connection among fiscal sustainability with out-reach of MFIs in the country. The reviewed studies focus either on financial sustainability and those on off balance sheet financing focus more on commercial banks and not microfinance banks.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter comprises of design used for the study, the study target population, method of collecting facts, diagnostic tests with the data scrutiny technique comprising of the analytical model and the tests of significance.

3.2 Research Design

The design of the study is the research project's format. It identifies what kind of data ought to be gathered, the information sources and the procedures for gathering facts. Its aim is of ensuring that the gathered facts are reliable to intend of the research and that the procedures for gathering facts are precise (Cooper & Schindler, 2011). According to Kothari (2011) a study propose comprises a blue-print for the gathering, measurement as well as scrutiny of facts, it assist in the allotment of inadequate possessions by production of vital options in relation to whether the paper incorporated interviews, experiments, past records scrutiny, observations, replications or a mixture of the above.

To examine the connection among OBS financing with the sustainability of finances for the institutions in microfinance in Kenya this research will employ the descriptive format propose as it determines as well as reveals the way effects are and is interested in how as well as why a factor results to variance in another (Cooper & Schindler, 2011). The expressive advance tries to find out responds to the queries, when, who, how what, where and why. It is employed when there already exist information relating to the predicament moreover it is quite well prearranged in the presumption. Descriptive survey will be ideal as it is employed in gathering of facts relating to the present situations of a phenomenon with intends of these procedures is of describing what subsist among reverence to the situational variables.

3.3 Population

A research population is defined as a separate or specific group of data, cluster of items, family units, organizations, facilities, elements or events that are being researched. Cooper and Schindler, (2011) defines the population as a well definite or specific group of individuals, set of items, entities, essentials or trial that are being examined. This study's population shall be made up of the thirteen microfinance banks in Kenya whish are regulated by the central bank as at 31st December 2017. The study will consider a census of the total population as the number of the microfinance banks in Kenya is small and finite

3.4 Data Collection

This study will collect secondary data of microfinance banks financial statement, that entails the balance sheets as well as statement of comprehensive income. The secondary data will include data on off balancing sheet items, financial sustainability measures, and data on the number of borrowers, assets of the microfinance banks, liquidity and capital adequacy metrics. The data will be obtained commencing the year 2013 up to 2017, a period of five years. The data shall be cross checked with that data published by the Central bank annual banking supervisory reports to ensure reliability.

3.5 Diagnostic Tests

The study will under a number of diagnostic tests to evaluate the applicability of the adopted analytical sculpt. The paper will check for multicollinearity, heteroscedasticity, autocorrelation and for normality. Multicollinearity refers to the correlation between independent variables and will be determined through the variance inflation factors (VIF) and the Tolerance levels. Heteroscedasticity on the other hand arises when the error-term variance in the regression sculpt is not stable across interpretation and will be assessed using the Breusch-pagan test for heteroscedasticity.

The study will also assess for autocorrelation which arises when the error-term values are successively inter-reliant and it occurs when the error-term values in a particular time are linked to values of different time. The Durbin Watson (DW) test will be sued to assess for autocorrelation. Finally, the collected will tested for normality using skewness, kurtosis and the Kolmogorov and Shapiro Wilk test.

3.6 Data Analysis

The collected facts will be scrutinized by use of explanatory as well as inferential statistical methods where descriptive statistics shall be applied in summarizing data into meaningful distribution of scores using the mean, standard deviation, maximum and minimum values among other. Inferential statistical tolls will entail regression analysis, which shall be employed to determine the connection amongst dependent alongside independent variable and correlation analysis which will be employed to assess the degree to which two or more variables are associated with or related to each other. The analysis of data will be aided the statistical analysis software referred to as the Statistical Package for Social sciences

3.6.1 Analytical Model

This research will employ the regression sculpt, which will be developed as follows

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where

Y is financial sustainability measure using the operational self-sufficiency ratio?

X_1 Is OBS funding that is measured using the ratio of off balance sheet items which includes commitment and guarantees to total assets

X_2 is outreach measured using the average loan size

X_3 is size of MFB calculated using the natural log of assets

X_4 is liquidity measured using the liquidity ratio

X_5 is capital adequacy proxied using the liquidity ratio

β_1- β_5 = regression coefficients

β_0 & ε = Constant and the error term respectively

3.6.2 Tests of Significance

The t and the F-test will be employed to test the statistical importance of the factors which were independent and the dependent variable respectively. The statistical significance test shall be carried out at 5% levels of significance. Additionally, the coefficient of determination (r square) shall be applied to assed the explained change from total variation.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND INTERPRETATION

4.1 Introduction

This section gives findings of the evaluated secondary data. This chapter presents results of the rate of response gathered, statistics which is descriptive in nature, diagnostic tests, correlation analysis, regression analysis as well as interpretation of results.

4.2 Response Rate

The population of this research was made up of thirteen microfinance banks locally regulated by the central bank as at 31stDecember 2017. Complete data was however obtained from 9 microfinance banks, which made up the rate of response to be 69.2% that was considered enough for this study.

4.3 Descriptive Statistics

Descriptive statistics was applied in summarizing data into meaningful sharing of scores using mean, standard deviation, maximum and minimum values among other. Table 4.1 shows the descriptive statistics results

Table 4.1: Descriptive Statistics

	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**	**Skewness**	**Kurtosis**
Financial sustainability	45	-.691	.314	.01151	.244723	-1.198	.964
Off balance sheet financing	45	.000	.207	.01918	.047198	.795	1.402
Firm size	45	1.903	4.509	3.13684	.845601	.419	-1.345
Liquidity	45	.090	2.170	.38760	.329849	.981	1.659
Capital adequacy	45	-.150	3.100	.47596	.502078	.564	1.885

Source: Author (2018)

Table 4.1 show that financial sustainability had a mean figure of 0.01151 with minimum as well as maximum figures of -0.691 and 0.314 while off balance sheet financing had the mean figure of 0.01918 and minimum as well as maximum figures of 0.000 and 0.207 respectively. The results further indicate that firm size had a mean value of 3.13684 with minimum and maximum values of 1.903 and 4.509 respectively. The findings indicate liquidity had the mean figure of 0.38760 with minimum as well as maximum figures of 0.090 and 2.170 while capital adequacy had a mean of 0.47596 with its minimum-maximum values of -0.150 and 3.100 respectively. The skewness value of -1.198, 0.795, 0.419, 0.981 & 0.564 while the kurtosis values of 0.964, 1.402, -1.345, 1.659 & 1.885 prove that data gathered had a distribution curve that was normal as the figures were found between -2 to +2 threshold respectively.

4.4 Diagnostic Tests

The study carried out multicollinearity test, normality test and test for linearity. The results were presented as follows

4.4.1 Multicollinearity Test

Table 4.2: Multicollinearity Test

	Collinearity Statistics	
	Tolerance	**VIF**
Off balance sheet financing	.830	1.204
Firm size	.622	1.608
Liquidity	.789	1.268
Capital adequacy	.613	1.632

Source: Author (2018)

The multicollinearity results on table 4.2 indicate that all the variance inflation factors (VIF) are less than the recommended value of 10 thus an indication that there is no multicollinearity among the study variables. Therefore, the assumption of multicollinearity has not been violated.

4.4.2 Normality Test

Normality was assessed using the Kolmogorov-Smirnov and Shapiro-Wilk test. Table 4.3 indicates the findings.

Table 4.3: Normality Tests

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Financial sustainability	.186	45	.000	.885	45	.000
Off balance sheet financing	.426	45	.000	.478	45	.000
Firm size	.223	45	.000	.884	45	.000
Liquidity	.244	45	.000	.579	45	.000
Capital adequacy	.209	45	.000	.654	45	.000

a. Lilliefors Significance Correction

Source: Author (2018)

The findings on table 4.3 prove that all p values representing financial sustainability, off balance sheet financing, firm size, liquidity and capital adequacy both under the Kolmogorov-Smirnov and Shapiro-Wilk test are less than 0.05 level of significance. This indicates that the variables are normally distributed.

4.4.3 Linearity Test

The normal p-p plot of the regression residual was used in assessing the linearity of the study variables. Figure 4.1 shows the findings

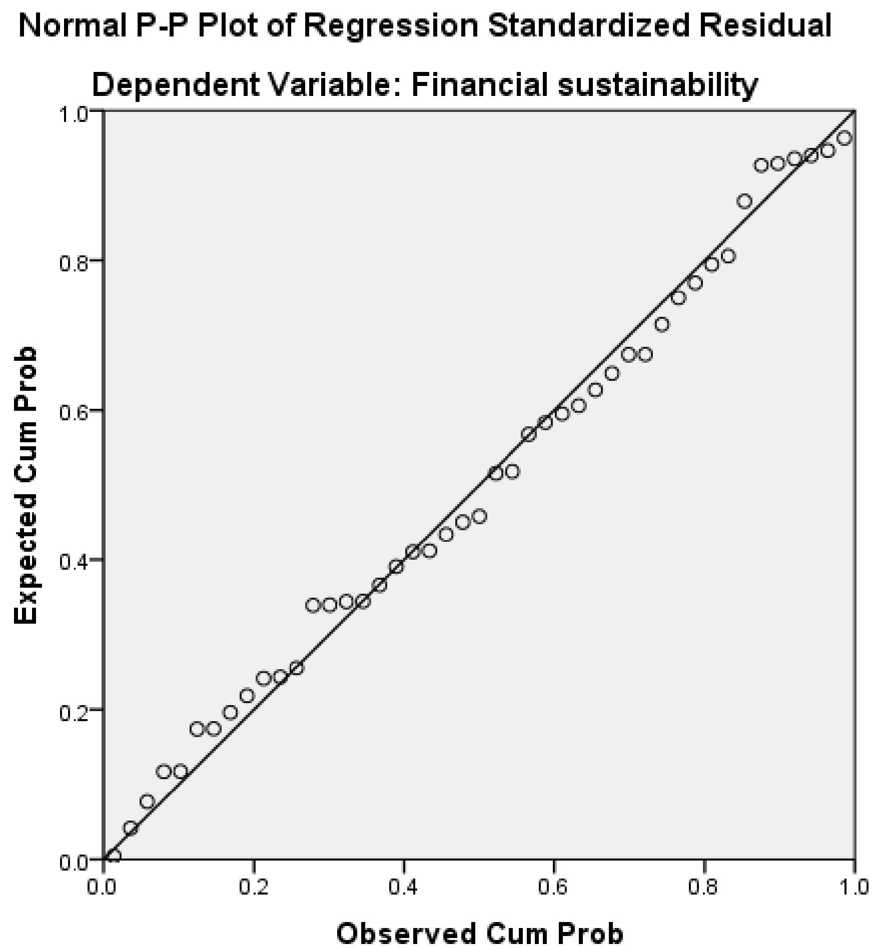

Figure 4.1: Normal P-P Plot

Source: Author (2018)

The ordinary p-p plot on Figure 4.1 shows that the linearity assumption has not been violated as he plotted data points fit with the line of the best fit.

4.5 Correlation Analysis

Correlation analysis was employed for assessing the level of two or more factors are associated with or related to each other. Table 4.4 show the correlation findings.

Table 4.4: Correlation Matrix

	Financial sustainability	**Off balance sheet financing**	**Firm size**	**Liquidity**	**Capital adequacy**
Financial sustainability	1				
Off balance sheet financing	-.013	1			
Firm size	.354*	.410**	1		
Liquidity	.030	-.107	-.298*	1	
Capital adequacy	.116	-.242	-.540**	.455**	1

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

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

Source: Author (2018)

Table 4.4 indicates that correlation of balance sheet financing and financial sustainability was weak as negative as indicated by the correlation value of -0.013 while the correlation between firm size and financial sustainability was weak and positive as shown by the correlation value of 0.354 respectively. Additionally, the correlation between liquidity and financial sustainability was week and positive while the correlation between capital adequacy and financial sustainability was also week and positive. According to the correlation values, there is no multicolinearity among the research variables since all the correlation values are less than 0.7.

4.6 Regression Analysis

Regression analysis was applied in finding out the relationship of dependent with independent variable. The regression results are presented as follows:

4.6.1 Model Summary

Table 4.5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.535[a]	.286	.215	.216842	1.844

a. Predictors: (Constant), Capital adequacy , Off balance sheet financing , Liquidity , Firm size

b. Dependent Variable: Financial sustainability

Source: Author (2018)

Table 4.5 shows model summary results. The results indicate that the R square value is 0.286 that shows the independent factors of the study account for 28.6% in the change for the factors which are dependent. The Durbin Watson statistic figure of 1.844 proves there lacks autocorrelation as the value lies within the recommended values of 1.5 and 2.5 respectively.

4.6.2 Analysis of Variance

Table 4.6: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.754	4	.189	4.011	.008[b]
	Residual	1.881	40	.047		
	Total	2.635	44			

a. Dependent Variable: Financial sustainability

b. Predictors: (Constant), Capital adequacy , Off balance sheet financing , Liquidity , Firm size

Source: Author (2018)

The results on table 4.6 indicate the F statistics figure of 4.011 is statistically important as indicated by the P figure of 0.008 which is lower than the significance figure of 0.05. This means the regression model is fit and important for the study.

4.6.3 Regression Coefficients

Table 4.7: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.673	.178		-3.773	.001
	Off balance sheet financing	-.938	.760	-.181	-1.234	.224
	Firm size	.191	.049	.661	3.904	.000
	Liquidity	.012	.112	.016	.105	.917
	Capital adequacy	.206	.083	.422	2.474	.018

a. Dependent Variable: Financial sustainability

Source: Author (2018)

The coefficient findings prove that the correlation of OBS financing with financial sustainability was negative and statistically insignificant. The results however indicate presence of a positive and strong correlation of firm size with financial sustainability in microfinance financial institutions locally. Additionally, the results discover existing strong and statistically insignificant correlation of liquidity with sustainability in financing for the microfinance banks locally. These results finally indicate that availability of enough capital had a strong correlation of financial sustainability of the MFB in Kenya. From the findings on table 4.7 the following regression equation was formulated

$$Y = -0.673 - 0.938X_1 + 0.191X_2 + 0.012X_3 + 0.206X_4 + \varepsilon$$

4.7 Discussion of the Findings

The study results developed a poor and statistically insignificant correlation of OBS financing with financial sustainability of microfinance financial institution. This result means that off balance sheet financing lacks an important impact in the suitability of financing for MFB locally. A study by Karim, Abd and Gee (2017) revealed that the correlation of OBS actions with the risk in interest, risk in lack of systems, the general risks associate with banks was not important. This study also found that risks from the market were affected by the OBS actions and there lacked an important correlation of OBS actions with profits, leverage, and the ration of liquidity. Al-Awawdeh and Al-Sakini (2017) however revealed OBS products had a strong impact on statistical significance on the assets' return rate as well as on the profits. Ye (2015) established development of OBS business reduces general risks largely for the commercial banks that have stock being joined.

Secondly, findings established a positive and significant correlation of size of the company with sustainable financing in microfinance financial instruction locally. This finding therefore indicates that firm size significantly impacts the sustainability of financing for the microfinance banks of Kenya. Mahapatra and Dutta (2016) posits that larger firms will have a greater capacity to invest and obtain financing than smaller firms and that they can also exert a greater influence on markets. Khan, Butt and Khan (2017) revealed that the size of Microfinancing institutions as well as the portfolio of loans contain strong influence but the risk portfolio, the outreach of breath, inefficiencies of poor management as well as ratio of costs incurred in operations all have a poor influence on the ability to sustain themselves financially. Wafula (2016) concluded that liquidity was positively and significantly associated with financial sustainability.

Thirdly, the research findings revealed existing positive and unimportant correlation of liquidity with sustenance financing for the MFB. Therefore, the finding indicates that liquidity lacks an important impact with sustainability in financing locally. Kodongo and Kendi (2013) supports that banks with inadequate liquidity might be less immune towards future uncertainty, timely delay of refinancing, disruption in meeting growth projections and increased portfolio at risk. Al-Awawdeh and Al-Sakini (2017) established that bank size as well as the level of facilities offering credit as allowed by the financial institution possessed strong importance on the resources return rate and on the return on equity.

Lastly, the results of the research found availability of capital had strong and statistically important effect on financing sustainability for the MFB. This finding therefore indicates that capital adequacy significantly impacts the sustainability of finances in microfinance banks of Kenya. King'ori, Kioko and Shikumo (2017) are in agreement that in case resources are lost, higher capital level relative to its assets ensures the institutions would have sufficient funds of its own to cover the loss or there will be enough capital amounts needed to incorporate the losses that could have been incurred potentially while ensuring substance of financing is constant. Nderitu (2016) however concluded that capital adequacy, liquidity, asset quality and logarithm of assets did not significantly influence MFBs profitability.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter gives a summarization for the study, the conclusions as well as the recommendations in accordance with the research findings, shortcomings of the research with proposals for additional research.

5.2 Summary

This study set out to determine the correlation of off balance sheet finances with sustainability of finances in MFB locally. The research utilized descriptive research structure while the population for the study being made up of 13 MFB locally which are monitored via the central bank as at 31stDecember 2017. This study collected secondary data from the microfinance banks financial statements for five years from 2013-2017. This study applied regression analysis to find out the correlation of dependent with independent variable with correlation analysis to assess the degree to which two or more variables are associated with or related to each other. Complete data was obtained from 9 microfinance banks which made up for the rate of response of 69.2% that was considered enough for the study.

The descriptive results established financial sustainability had a mean of 0.01151 with minimum & maximum figures of -0.691 and 0.314 while off balance sheet financing had a mean of 0.01918 and minimum & maximum of 0.000 and 0.207 respectively. These results further indicate that firm size had a mean value of 3.13684 and minimum &

maximum values of 1.903 and 4.509 respectively. The findings indicate liquidity had a mean of 0.38760 with minimum & maximum figures at 0.090 to 2.170 while capital adequacy had a mean of 0.47596 with minimum & maximum figures of -0.150 to 3.100 respectively.

These results from correlation analysis revealed that the correlation between of balance sheet financing and financial sustainability was weak as negative as indicated by the correlation value of -0.013 while the correlation between firm size and financial sustainability was weak and positive as shown by the correlation value of 0.354 respectively. Additionally, the correlation between liquidity and financial sustainability was week and positive while the correlation between capital adequacy and financial sustainability was also week and positive respectively.

The results of the model summary established that the independent variables of the study explain 28.6% of the change for the dependent factor with regression model being fit and significant for this study. These coefficient results established that the correlation of OBS financing with financial sustainability was negative and statistically insignificant and there existed strong as well as significant correlation of firm size with financial sustainability in microfinance banks of Kenya. The results revealed a strong but statistically insignificant correlation of liquidity with financial sustainability in microfinance banks and that availability of capital had strong important correlation with financial sustainability of MFB in Kenya.

5.3 Conclusions

The results of the research revealed a negative and statistically insignificant correlation of OBS financing with sustainability in financing for MFB. With regards to this research, the conclusion drawn is that OBS financing lacks an important influence in sustainability of finances in Kenyan MFB.

Additionally, this study results found a strong important correlation of firm size with financial sustenance in MFB of Kenya. This finding led to this conclusion that firm size significantly influences sustainability of financing for Kenyan MFB.

Further, the results on liquidity revealed a strong but unimportant correlation of liquidity with financial sustainability in microfinance banks. The research therefore concludes; liquidity lacks an important influence on financing sustenance for Kenyan MFB.

Finally, findings revealed that capital adequacy had strong and statistically important impact in financing sustainability in MFB. The research based on this observation therefore concluded availability of capital significantly influences the financing sustainability in Kenyan MFB.

5.4 Recommendations

The findings on the correlation of OBS financing with microfinance banks financial sustainability led to the conclusion that off balance sheet financing lacks an important impact in financing sustainability for Kenyan MFB. This study however recommends that the management of microfinance banks can use off balance sheet financing to protect its own long period resources which are financial in nature on the OBS as well as adding to the benefits and retaining details of earnings away from the balancing sheet in MFB.

These results of impact of the company size for microfinance banks financing sustainability led to conclusion that that firm size significantly influences the financing sustainability of MFB locally. This research therefore proposes that the administration of microfinance banks ought to put more effort in fixed resources to improve the size of their organization while enjoying the benefits of economies of scale normally associated with large sized firms.

The findings of liquidity and its effects on microfinance banks financial sustainability led to the conclusion that liquidity lacks an important influence in financing sustainability for local MFB. The study however recommends that the management of microfinance banks must see to it that they have sufficient liquidity so as to satisfy demands for funds.

The results on how capital adequacy affects microfinance banks financial sustainability led to the conclusion that capital adequacy significantly influence the financial sustainability of local MFB. This research therefore proposes that the administration of MFB ought to ensure they have adequate capital levels such that in case resources get lost, those institutions would possess enough of its own money to cover the loss or availability of enough capital to recover from the losses incurred.

5.5 Limitations of the Study

The research depended upon secondary data to measure the study objectives. Secondary data is however historical in nature and does not consider the qualitative aspects, which influence financial sustainability of microfinance banks. Secondary data may also do not explain the current financial sustainability in an organization and does entail the views of the organizations management.

The study only considered the nine microfinance banks, which had been existence for the considered study period from 2013 to 2017. The findings are therefore generalized to the nine microfinance banks considered by the study exclusive of other financing institutions such as commercial banks as well as savings & credit cooperative societies that carry out similar activities to those of microfinance banks. The findings are limited to the consider research period.

5.6 Suggestion for Further Research

The context of this research was microfinance banks in Kenya. However, financial institutions like banks which are commercial invest in OBS actions and they did not form part of the research. The study therefore recommends an additional research on the relationship between of balance sheet financing with financial operation or profitability of Kenyan commercial banks.

This research model summary established that capital adequacy, off balance sheet financing, liquidity, firm size accounted for 28.6% of the changes of financing sustainability in MFB locally. The study therefore recommends an additional study on the other determinants of both financial as well as non-financial which impact the financial sustainability in microfinance banks in Kenya.

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APPENDICES

Appendix I: List of Microfinance Banks

1. Uwezo Deposit Taking Micro Finance
2. U&I Deposit Taking Micro Finance
3. Sumac deposit Taking Micro Finance
4. SMEP Deposit Taking Micro Finance
5. Remu Deposit Taking Micro Finance
6. Rafiki Deposit Taking Micro Finance
7. Maisha Micro Finance
8. Kenya Women Finance Trust
9. Faulu Deposit Taking Micro Finance
10. Daraja Micro Finance
11. Choice Micro Finance
12. Century Deposit Taking Micro Finance
13. Caritas Micro Finance