INTEREST RATE REGULATION AND SUSTAINABILITY OF MICROFINANCE INSTITUTIONS IN NAIROBI COUNTY, KENYA

Ann Kathomi
Master of Business Administration Student, University of Embu, Kenya

Kimani E. Maina
Lecturer, Department of Business and Economics, University of Embu, Kenya

Samuel Kariuki
Lecturer, Department of Business and Economics, University of Embu, Kenya

International Academic Journal of Human Resource and Business Administration (IAJHRBA) | ISSN 2518-2374

Received: 30th April 2017

Accepted: 9th May 2017

Full Length Research

Available Online at:

http://www.iajournals.org/articles/iajhrba_v2_i3_150_165.pdf

Citation: Kathomi, A., Kimani, E. M. & Kariuki, S. (2017). Interest rate regulation and sustainability of microfinance institutions in Nairobi County, Kenya. *International Academic Journal of Human Resource and Business Administration, 2*(3), 150-165

ABSTRACT

Microfinance Institutions services have continued to play an important role in Kenyan economy. It is viewed as the provision of financial services to the poor and low income group. Microfinance Institutions in Kenya have gained wide recognition since 1990's for the role they play in providing financial services to the low-income households, and their contribution to poverty alleviation. Despite this vital role, the interest rates charged by the MFIs in Kenya have been relatively high ranging between 20% - 30%. This has raised concerns with policy makers on how MFIs can fulfill their social obligations while charging their clients interest rates that are higher than those offered by non-microfinance institutions such as traditional commercial banks and SACCOs. The objective of the study was to determine the effects of interest rate regulation and sustainability of microfinance institutions in Nairobi County, Kenya. The study was guided by liquidity preference theory. The study employed a cross - sectional descriptive survey research design. The target was 49 microfinance institutions operating in Nairobi County, Kenya. A census was conducted on all the 49 microfinance institutions in Nairobi County. The primary data was collected by use of questionnaires whereas secondary data was collected by use of a record survey sheet. Pretesting was done to determine the reliability and validity of the questionnaire. The data collected was analyzed using Statistical Package for Social Sciences (SPSS). The study established that changes in interest rates by the government affected sustainability of MFIs. The Pearson correlation and ANOVA results showed that the relationship of lending rate and sustainability of MFIs is negative and statistically significant. This means that increasing the interest rate reduces the return thus rendering the MFIs unsustainable. The government and other policymakers should come up with better interest rates policies that will make MFIs more sustainable.

Key Words: *interest rate, regulation, sustainability*

INTRODUCTION

A Microfinance Institution is an institution that offers financial services such as credit, savings, insurance, foreign exchange transactions and money transfer services to the poor, low income households and Small and Micro Enterprises (CBK, 2014). Microfinance proliferated in countries with a paucity of bank infrastructures, such as most of Asia, Latin America and Eastern Europe. Sub-Saharan Africa microfinance institutions emerged in mid 1960s. In these countries credit risk for microfinance institutes was very high, because customers needed to improve their livelihood and face many challenges during this time (Webster, 2006).

The Kenyan microfinance sector began in the late 1960s with a few NGOs that set up pilot programs providing donor funded credit services. Some of these organizations have evolved over time to become commercialized, self-sustaining and hugely profitable institutions. Microfinance is also recently becoming Kenya's most accessible and affordable financial service. In Kenya the Central Bank has broadly categorized microfinance institutions into deposit taking and credit

only. Interest rate is an important tool of monetary policy when dealing with microfinance institutions. The central bank of Kenya generally reduces interest rates when there is need to increase investment and consumption in the country's economy which adversely affects the MFIs activities.

Recently, Kenya government enacted a law to cap bank lending rates at four percent points above the central bank benchmark rate. However, the amendment might push the financial institutions to avoid lending to organizations or individuals which reduces their income thus hurting economic activities. The problem with MFIs is that they are normally not self-sustainable, but they rely on direct subsidies as well as subsidies on interest rates (Doyle, 2008). However, the issue of sustainability of MFIs has attracted more attention to the policymakers at the expense of the client/borrower. MFIs face an apparent tension between achieving sustainability and contribution to poverty reduction.

Interest Rate

Interest rate is the penalty a borrower suffers for the use of money or assets they borrow from a lender or a financial institution (Crowley 2007). MFIs were founded with an aim of assisting the low income earners access credit facilities which they certainly do owing to their availability and vast network as compared to commercial banks. However, MFIs are known to charge high interest rates over the years. Kadri (2012) argued that though the microfinance institutions charge high interest rates meeting their monthly or annual operation cost would be impossible if the rate was to be reduced below a certain threshold.

This shows that different interest rates charged by MFIs are caused by a combination of elements. In Kenya, Interest rate is regulated by the Central bank of Kenya and decisions on it administered through the Monetary Policy Committee (CBK, 2014). MFIs calculate their interest either according to the flat interest rate or the declining balance methodology. Apart from that, there are a number of fees charged to the loan applicants which end up exaggerating the final lending rate. For the MFIs to balance their main objectives of lending and sustainability, lending interest rates must be handled effectively and the MFIs must behave in a way that there potential customers are attracted and retained (Kadri, 2012).

Lending Interest Rate

Banking interest rate controls are generally codified into banking and central bank laws, which grant the central bank of a country the legal authority to fix the maximum lending interest rate for regulated financial institutions (Koch &Macdonald, 2015). This type of control does not necessarily protect poor customers and can, in fact, hurt them by reducing their access to financial services. When faced with an interest rate ceiling, MFIs will often retreat from the market, grow more slowly and reduce their work because they cannot cover their operating costs (Mwirigi, 2006).This largely affects the MFI’s sustainability. Usually central bank interest rates are lower than commercial banks interest rates since MFIs borrow money from the central bank

then lend the money at a higher rate to generate most of their income. By altering interest rates, the government institution is able to affect the interest rates faced by everyone who wants to borrow money for economic investment. Investment can change rapidly in response to changes in interest rates and the total output (King, 2009). The interest rates charged on microcredit is one of the most discussed issues in microfinance, capturing the attention of both the media and industry analysts alike. At the heart of this discussion is the question of how MFIs can fulfill their social missions while charging their clients interest rates that are higher than those offered by non-microfinance financial institutions, such as traditional commercial banks and SACCOs.

Sustainability of Microfinance Institutions

Sustainability is the ability of a microfinance institution to cover all of its costs through interest and other income paid by its clients (Ayay & Sene, 2010). Financially sustainable MFIs can become a permanent part of the financial system, they can continue to operate even after grants or soft loans are no longer available. Donors have nowhere near enough funds to meet the global demand for microfinance. But when an MFI becomes sustainable, it is no longer limited to donor funding. It can draw on commercial funding sources to finance massive expansion of its outreach to poor people. Experience proves that microfinance can be done sustainably, even with very poor clients.

It is generally believed that small loans are too costly to provide, and the resulting income is insufficient to ensure profitable operations (Dondo, 2010). The argument is that unlike financial institutions in the formal sector; most MFIs are not sustainable (Kanga, 2008). They add that many MFIs could not function without the subsidies that they receive from governments and other funders. However with the high cost of providing microfinance products and services, most MFIs are not sustainable and are thus reliant on donor subsidies (Peil, 2005).

Interest Rate Regulation and Sustainability of Microfinance

Regulations on financial institutions are meant to preserve their stability and protect clients or borrowers. The public is vulnerable to MFIs engagement in risky high-profit operations that threaten the security of their deposits/borrowing and therefore the government imposes regulations to counterbalance this vulnerability. The regulation in Kenya is done by the Banking Act (Cap 488), the Central Bank of Kenya Act (2015) and other appointed authorities. The regulatory bodies either impose constraints on the MFIs to deter them from engaging in excessively risky activities, or provide a set of incentives to align their private objectives with their social goals (Microfinance bulletin, 2015).

The high interest rates charged by many MFIs have attracted the attention of concerned policymakers throughout the world. Governments have used mandatory interest rate ceilings to protect clients from the ill effects of predatory lending. Interest rate ceilings often hurt rather than protect the most vulnerable by shrinking poor people's access to financial services. Ceilings can also lead to less transparency about the costs of credit, as lenders cope with interest rate caps

by adding other fees to their services (Esipisu, 2006). Governments play an active role in microfinance by setting policy for the industry, most frequently by use of interest rates policy, providing lump sum grants to microfinance institutions (MFIs), or lending directly to the poor. Challenges of regulating MFIs is costly because the institutions are pressed to offer better customer services and thus are forced to increase their services so as to remain sustainable. However, MFIs face an apparent tension between achieving sustainability and contribution to poverty reduction.

Microfinance Institutions in Kenya

Microfinance is not a recent phenomenon in Kenya. This is due to the fact that some of the current informal sector practices such as money lending, Rotating Savings and Credit Associations (ROSCAS), date back to ancient societies in Kenya and elsewhere (Aryeetey & Gockel, 2004). The Kenyan microfinance sector began in the late 1960s with a few NGOs that set up pilot programs providing donor funded credit services. Some of these organizations have evolved over time to become commercialized, self-sustaining and hugely profitable institutions. Microfinance is also recently becoming Kenya's most accessible and affordable financial service. According to Association of Micro Finance Institutions (AMFIs) the general accepted categories of segmenting the sector is Formal banks and Deposit Taking MFIs, which are regulated and supervised by the Central bank of Kenya, Semi-formal MFIs, which are non-deposit taking supervised by the Ministry of Cooperative and Marketing and Credit Only which are supervised by Ministry of Finance. The regulation is done by CBK and a variety of industry stakeholders.

By December 2015, AMFIs had 49 registered institutions in Nairobi County namely; commercial banks under taking micro finance services, microfinance banks, wholesale MFIs, retail MFIs, SACCOs and development institutions. Most of these micro finance institutions operate in Nairobi and have over 750 outlets and a loan portfolio of US$ 63.64 billion, 1.1 million institution savers and 350,000 borrowers. Association of microfinance institutions (AMFIs) is a member based institution registered under the Societies Act by the leading MFIs in Kenya. It is serving more than 6.5m poor and middle class families with financial services (Microfinance Bulletin 2015). A wide range of financial services are provided by the micro finances institutions ranging from savings and credit facilities, money transfer and micro insurance to the economically active poor low income households and small scale enterprises in both rural and urban areas.

STATEMENT OF THE PROBLEM

Micro Finance Institution's in Kenya have gained wide recognition since 1990's for the role they play in providing financial services to the low-income households and their contribution to poverty alleviation. Despite this vital role, the interest rates charged by the MFIs in Kenya have been relatively high ranging between 20% - 30%. This has raised concerns with policy makers on how MFIs can fulfill their social obligations while charging their clients interest rates that are

higher than those offered by non-microfinance institutions such as traditional commercial banks and SACCOs.

With the expansion of microfinance in developing countries, many legislators and the general public have found it difficult to accept that small loans to poor people generally cost more than normal commercial bank rates. One of the principal challenges of microfinance is providing small loans to the poor clients at affordable cost and still remains sustainable. Recently, the Kenya government enacted a law to cap the interest rates charged by the banks. This further makes the loans from banks relatively more affordable than those offered by MFIs. Microfinance institutions are important tools in the world for global poverty reduction and by enabling poor households to access loans. It was therefore important to do this study to shed more light on the effect of interest rates regulation and sustainability of microfinance institutions in Nairobi County, Kenya.

OBJECTIVE OF THE STUDY

The objective of the study was to assess the effect of interest rate regulation on sustainability of microfinance institutions in Nairobi County, Kenya.

THEORETICAL REVIEW

The study was guided by liquidity preference theory.

Liquidity Preference Theory

The concept was first developed by Keynes in 1936. Keynes stated that the demand for money is expressed as a function of level of income and interest rate. MD = (Y, r) where: MD = money demanded: Y = Level of income r = interest rate. This framework holds that the interest rate is determined by the interaction of supply and demand of money stock. The liquidity preference approach views interest rates from the supply and demand of the stock of money in the financial system. According to Keynes (1936) money is demanded mainly for the following motives; transaction, precautionary and speculative motive. Keynes further stated that investors will always prefer short term securities to long term securities. To encourage them hold long term bonds, long term securities should yield higher interests than short term bonds. Therefore, the yield curve will always be upward sloping. It is based on the observation that, all else being equal, people prefer to hold on to cash (liquidity) and that they will demand a premium for investing in non-liquid assets such as bonds, stocks, and real estate. The theory suggests that the premium demanded for parting with cash increases as the term for getting the cash back increases. The study seeks to identify the rationale of the liquidity preference theory on the relationship between the money supply in form of loans by MFIs in times of rising and or falling lending rate, and the sustainability of the lender. However, the borrowers will only invest where the returns on their investment profile exceed the borrowing rates. In addition, if there is no savings then there is no liquidity.

Conceptual Framework

Conceptual framework is a concise description of the phenomenon under study accompanied by a graphical or visual depiction of the major variables of the study (Mugenda, 2008). The dependent variable in this study was the lending interest rates while the independent sustainability of MFIs in Kenya as shown in Figure 1.

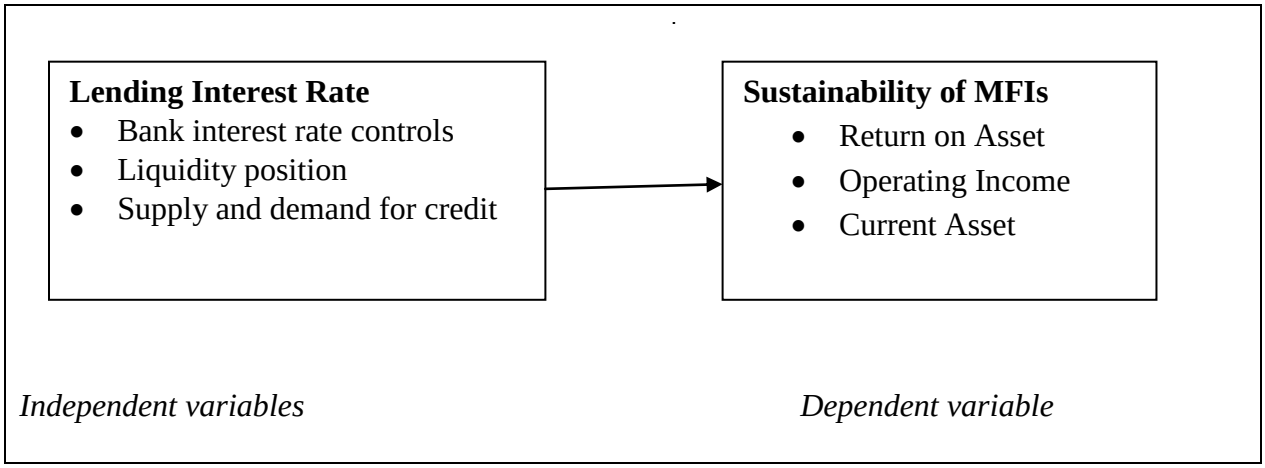

Figure 1: Conceptual Framework

EMPIRICAL REVIEW

The key dimensional factor in microfinance sustainability is financial sustainability. Financial sustainability is the ability to continue with the microfinance objectives without sustained donor aid (Dunford, 2009). Financial sustainability can also be explained by the ability of a Microfinance Institution in covering operational as well growth expenses from income derived from its own activities (Nyamsogoro, 2010). To assess the sustainability of MFIs the researcher will consider the operating income, current ratio, and return on asset.

Woller and Schreiner (2002) studied on the relationship between depth of outreach and financial self-sustainability in USA. In their study they found that depth of outreach has a positive relationship with financial self-sustainability. The study finding put evidence against a wide spread belief that small loans are highly risky and associated with lower financial sustainability. Ganka (2010) conducted a study to find out the impact of determinants of financial sustainability on sustainability of MFIs at their startup and take off stage in Nigeria. The study reports that microfinance institutions have negative and significant relationship between breadth of outreach and financial sustainability. The study concluded that increase in number of borrowers itself does not improve financial sustainability of microfinance institutions.

Gathuku (2010) carried out a study on responses of microfinance institution to regulation through Microfinance Act 2006. The study examined the potential sources of financial regulation in the inter-bank market and the effects on interest-rate spreads, loan/deposit flows and bank

equity and argued that while a considerable potential for contagion results from asymmetric information among contracting parties, due to imperfect information collection and monitoring costs in markets for uncollaterised loans, the actual settlement process itself creates an 'institutional' contagion potential. The study concluded that this does not just arise from the ability to spread credit risks of participating banks, but those relating to sovereign risk and liquidity risk.

Kimando, Kihoro and Njogu (2012) carried a study on the factors influencing the sustainability of micro finance institutions in Murang'a Municipality.The study found that financial regulations, number of clients served, financial coverage and volume of credit transacted were the factors that highly affected the sustainability of microfinance institutions. The study looked at financial regulation as regulatory bodies such as banking act, building act, and Association of microfinance institutions act. The study concluded that the geographical coverage and regulatory bodies influence sustainability of Micro-finance institutions.

Githinji (2009) studied on the factors influencing sustainability of microfinance institutions in Kenya. The study found that form of incorporation, level of subsidies, flexibility of repayment schedule, savings mobilized, per capital income, loans disbursed influenced the sustainability of microfinance institutions in Kenya. The study sought to establish the factors that influence sustainability of MFIs in Kenya and to establish the relationship between financial and institutional sustainability of MFIs. The results revealed that majority of MFIs in Kenya are below the market mean sustainability as measured by both the return on asset and return on equity.

Research Gaps

From the empirical review, it is evident that a number of studies have been done nationally and internationally in regard to interest rate. Rasheed (2010) carried a study using error correction model (ECM) to assess the interest rate determination in Nigeria. Okoye (2013) studied on the relationship between interest rates and financial performance of MFIs in Nigeria. Bergen (2010) carried a study on the countries with higher inflation rate in USA. Lardic and Mignon (2003) studied the relationship between interest rate and inflation rate in G-7 countries using Engel-Granger co integration method. Mwangi (2012) carried a study on high interest rates and the performance of small and medium size enterprises in Nakawa, Uganda. Mwanza (2007) studied on the effect of derivative activities on interest rate exposure on banks listed at Nairobi Exchange Nairobi, Kenya. Woller and Schreiner (2002) studied on the relationship between depth of outreach and financial self-sustainability in USA. Ganka (2010) conducted a study to find out the impact of determinants of financial sustainability on sustainability of MFIs at their startup and take off stage in Nigeria. Gathuku (2010) carried out a study on responses of microfinance institution to regulation through Microfinance Act 2006. Kimando, Kihoro and Njogu (2012) carried a study on the factors influencing the sustainability of micro finance institutions in Murang'a Municipality. Githinji (2009) studied on the factors influencing sustainability of

microfinance institutions in Kenya. From the review of relevant literature, most studies have not addressed interest rates on sustainability of MFIs. This leaves some major gaps that need to be filled by further research undertakings. This study was therefore conducted in order to fill pertinent gaps in literature by studying the variables of interest rate regulation on sustainability of MFIs in Nairobi County.

RESEARCH METHODOLOGY

Research Design

The study used a cross-sectional descriptive research design. This research design was used because it described a subject often by creating a profile of a group of problems, people or events through the collection of data and tabulation of the frequencies on research variable. This design was considered appropriate for the study because it enabled the researcher to describe the state of affairs as they exist without manipulation of variables which is the aim of the study.

Target Population

Target population for the study was all the 49 registered MFIs in Nairobi County.

Census and Sample Size

The study used a census where all the 49 MFIs operating in Nairobi County and registered by AMFIs were considered.

Data Collection Instruments

The study involved both primary and secondary data. Self-administered semi-structured questionnaire was used to collect the primary data. The secondary data was collected from the audited statement of financial positions of the MFIs, AMFI, CBK and World Bank websites.

RESEARCH RESULTS

Response rate

The study administered 49 questionnaires to the respondents who were managers in each of microfinance institution. A total of 33 questionnaires were filled and collected from the respondents which translated to 67% response rate. This indicates that the response rate was sufficient and falls within the recommended threshold.

Descriptive Statistics

The study sought to establish the extent to which the respondents agreed with a given aspects of interest rate regulation as affecting the sustainability of MFIs.

The study sought to find out the extent to which the respondents agreed with a given aspects of lending rate to impact on sustainability of MFIs. Respondents totaling to 82% indicated that

there is a policy in place against interest rate ceiling. It was also found that 18% of the stated that there is no policy in place against interest rate ceiling. The findings revealed that the opinions of the respondents varied as presented in Figure 2. This view is consistent with a study by Mwangi (2012) which concluded that high interest rates charged on borrowings negatively affected the financial performance as well as investment levels. Esipisu (2006) argues that ceilings can lead to less transparency about the costs of credit, as lenders cope with interest rate caps by adding other fees to their services.

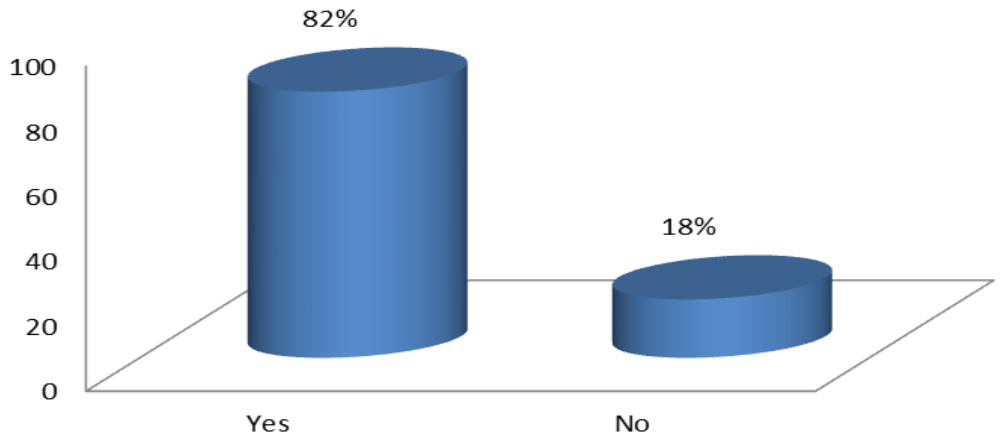

Figure 2: Effects of Lending rate and sustainability of MFIs

The respondents had the following opinions on lending rate and sustainability of MFIs. The results are presented in Table 1.

Table 1: Aspects of Lending Interest rate as affecting the Sustainability of MFIs

Lending Interest Rate Statement	N	Minimum	Maximum	Mean	Std. Deviation
Interest rate controlled by CBK adversely affect profitability of MFIs	33	2	5	4.39	.659
Liquidity position of an organization adversely affects its sustainability	33	2	5	3.73	.876
Interest rate determine supply and demand for credit	33	1	5	4.24	.867

The results on Table 1 revealed that interest rate controlled by CBK adversely affect profitability of MFIs (mean = 4.39; std 0.659). Similarly interest rate determines supply and demand for credit (mean = 4.24; std 0.867). It is evident that liquidity position of organization affects

sustainability (mean = 3.73, std 0.876). The study findings imply that bank controls installed by the central bank impact on the profitability which affects the sustainability. These controls are the ceilings fixed by the central bank on the lending rate. When the lending rate is brought to minimum the MFIs are not able to generate enough income to meet their operating expenses. Hence high lending rate result to low demand for credit. Likewise low lending rate results to low credit supply. The lending rate determines whether the organization is liquid enough to sustain its daily operations. Therefore the government should come up with moderate policies on lending rate to benefit the lender and the borrower. The study concurs with Keynes (1936) that interest rate is determined by the interaction of supply and demand of money. The study findings also agree with (King, 2009) that by altering interest rates, the government Institution is able to affect the interest rates faced by everyone who wants to lend and borrow for economic investment.

The study sought the opinions of the managers regarding sustainability of MFIs in Nairobi County. The results are analysis as shown in Table 2.

Table 2: Descriptive statistics for sustainability of MFIs

Sustainability Statement	N	Minimum	Maximum	Mean	Std. Deviation
High operating income sustains an organization	33	2	5	4.18	.769
Sustainable organization has the ability to pay off debts	33	2	5	4.24	.708
Funds from donors do not guarantee an organization's performance	33	2	5	3.76	.830

The study revealed that sustainable organization has the ability to pay off debts (mean = 4.24; std 0.708). It is evident that high operating income sustains an organization (mean = 4.18; std 0.769). The respondents also agreed that funds from donors do not guarantee the performance of an organization (mean = 3.76; std 0.830). The study findings show that for an organization to remain sustainable it should be able to meet all the operating expenses and pay off debts. In addition it should have enough cash flow from its current assets to avoid relying on donor funding. The study found that sustainability in MFIs is hindered by high operating cost, challenging regulations, lack of support from the government, competition from other institutions lending to customers among others. The study agrees with Nyamsogoro (2010) that financial sustainability can be explained by the ability of a Microfinance Institution in covering operational as well growth expenses from income derived from its own activities. This is in line with Dunford (2009) asserted that financial sustainability is the ability to continue with the microfinance objectives without sustained donor aid.

Correlation Analysis

The study used Pearson analysis to ascertain the relationship between the lending interest rate and sustainability of microfinance institutions in Nairobi County, Kenya.

Correlation between lending rate and sustainability of MFIs

Correlation between lending rate and sustainability of MFIs is presented in Table 3. The table reveals there is a negative but significant relationship between lending rates and sustainability of MFIs ($r = .570$, $P < 0.05$). This implies that a change in lending rates by the government directly affects sustainability of MFIs. The study findings agree with Kadri (2012) which found that for MFIs to balance their main objectives of lending and sustainability, lending interest rates must be handled effectively and the MFIs must behave in a way that their potential customers are attracted and retained.

Table 3: Correlation between Lending interest rate and sustainability

		ROA
Lending interest rate	Pearson Correlation	- .570**
	Sig. (2-tailed)	.001
	N	33

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

REGRESSION ANALYSIS

Regression analysis usually enables confirmation of relationships between the independent and dependent variables. R2 was used to measure the direction and strength of the relationship between independent and dependent variable. The results in Table 4 shows that the coefficient of determination R2 = 0.573. This implies that sustainability of MFIs can be explained by 57.3% of the interest rate scores.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.757[a]	.573	.529	.68685

a. Predictors: (Constant) Lending interest rate

Analysis of Variance (ANOVA)

ANOVA was used to test the significance of the relation of the study variables. The results of the Analysis of Variance (ANOVA) indicated in Table 5 shows that the relationship between the lending interest rate and sustainability of MFIs is significant ($F = 12.986$, P value = .000). This reveals that lending interest rate significantly affect the sustainability of MFIs. The lending rate,

was therefore statistically acceptable as useful variable in predicting the sustainability of MFIs in Nairobi County. This is supported by a P value of 0.000 which is less than the conventional value of 0.05.

Table 5: ANOVA Results

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	18.379	3	6.126	12.986	.000[b]
	Residual	13.681	29	.472		
	Total	32.061	32			

a. Dependent Variable: Return on assets
b. Predictors: (Constant) Lending rate

The results in Table 6 provide the coefficients of the variable used in the study which was the lending rate.

Table 6: Coefficientsa for Overall Model

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	18.040	2.195		8.220	.000
	Lending rate	-.339	.217	-.240	-1.563	.009

The regression equation model in this study is as shown in equation 1.

$$\mathbf{Y = 18.040 - 0.339X_1} \text{ ……..…….Equation 1}$$

The findings indicates that the constant term is 18.040, implying that holding the variables under consideration to zero, could result to 18.040 units of returns to MFIs. This could be due to other factors not considered in this study. The regression coefficient for the lending rate was -.339, ($p<.05$).This indicates that an increase in lending rate by 1 unit results to a decrease of 0.339 units on sustainability of MFIs.

CONCLUSIONS

The study concluded that changes in interest rates by the government affects sustainability of MFIs, thus interest rates regulation impact on the level of sustainability among MFIs in Nairobi County. In addition, the study found that increasing the interest rate reduces the return thus the sustainability. This is because the borrowers shy away from high interest offered by the MFIs and run to other formal and informal institutions. Hence, the lower the interest rates the more the returns because it attracts more borrowers. Altering interest rates, the government institution is able to affect the interest rates faced by everyone who wants to borrow money for economic

investment. MFIs can change rapidly in response to changes in interest rates regulation and the total output. The study concluded that it is important for interest rate to be regulated for sustainable microfinance institutions.

RECOMMENDATIONS

The government and other policymakers should come up with better interest rates policies that will make MFIs more sustainable. Interest rates policies that are detrimental towards MFIs sustainability should be abolished. Interest rates policies in place should make the cost of borrowing loans from MFIs more affordable to most borrowers. The government should apply measures to control an inflation level which pushes the interest rate. In addition, the government should look for ways to strengthen the shilling against the other currencies. Microfinance institutions should be able to invest from equity capital and avoid unnecessary borrowing in order to remain sustainable. Microfinance should be an effective methodology for alleviation of poverty among the disadvantaged sections. The government should promote profitable MFIs which provide funds to the poor through lowering interest rates which should enable MFIs give loans to the poor population.

REFERENCES

Ames, B. (2009). Macro-Economic Issues, (1st Ed.). Nairobi: Salemi Publications.

Aryeetey,E. &Gockel, H., (2004). *Supply and Demand for Finance of Small Scale Enterprises in Ghana*.*Working Paper No.251*.Washington D.C.World Bank.

Ayayi, A. G., &Sene, M. (2010). What Drives Microfinance Institution's Financial Sustainability. *The Journal of Developing Areas. 44*(1), 303-324.

Bergen, J.V. (2010). Six Factors that Influence Exchange Rates. Investopedia.

Bhole, L.M. & Dash, P. (2002).Industrial Recession in India: Is Interest Rate the Cause? Productivity, Vol (43), 268-277.

Chirwa, E. &Mlachila, M. (2004).Financial Reforms and Interest Rate Spreads in the Commercial Banking System in Malawi, *IMF Staff Papers*, Vol (51), 96 –122.

Cooper, D. R.,& Schindler, P. S. (2011). *Business Research Methods.* New York: McGraw-Hill/Irwin.

Crowley, J. (2007). Interest Rate Spreads in English-Speaking Africa.IMF Working Paper.April 2007, 123-45.

Dondo, C. (2010). Survey and Analysis of Credit Programs for Small and Microenterprise in Kenya; Salemi Publications, Nairobi

Doyle, K. (2008). *Microfinance Sustainability in a Regulated Environment.*Challenges and Opportunities, 1st edition, Salemi Publications, Nairobi.

Dunford, C. (2009). *The Holy Grail of Microfinance*: *Helping the poor and sustainable: Microfinance Evolution, Achievements and Challenges*, ITDG: London Press.

Esipisu, E. (2006). *Micro Finance Institutions Sustainability and their Experience with Lending*, K-REP Research Paper 32, Nairobi.

Fielding, D. & Shorthand, A. (2005).Political Violence and Excess Liquidity in Egypt, *Journal of Development Studies*, vol.41, pp. 542-557.

Fisher, I. (1930).The Theory of Interest, Macmillan, New York

Flannery, M. (2011). Market Interest Rates and Commercial Bank Profitability, *Journal of Finance*, Dec, 1085-1101

Ganka, D. (2010). *Financial Sustainability of Rural Microfinance Institutions in Tanzania*, PhD thesis, University of Greenwich, Australia.

Gathuku A. G. (2010). *Responses of Microfinance Institution to Regulation through Microfinance Act 2006,* Nairobi*:* University of Nairobi.

Githinji B. W (2009). Factors Influencing Sustainability of Microfinance Institutions in Kenya, Nairobi: University of Nairobi.

Government of Kenya, (2014).*Microfinance attaining self- sustainability*.Government Press Kenya.

Government of Kenya, (2010).*Microfinance dropout.*Nairobi: Government Press Kenya.

Hakan B. &Kamuran M. (1999).Determinants of Interest Rates in Turkey.*International Journal of Business & Economics, 11, 22-45.*

Kadri,M.(2012).*Determinants of Bank Interest Spreading Estonia*, Tallinn EestiPankWorking Paper 1/2012.

Kanga, M. (2008).Financial Sustainability Measures.2nd edition; Dorsey press, London.

Keynes, J.M. (1933). *The General Theory of Employment, Interest Rate and Money*.Harcourt Publishers.

Kimando, L.N., Kihoro, J.M &Njogu, G.W. (2012).The factors Influencing the Sustainability of Microfinance Institutions. *International Journal of Business & Economics, 10, 12-45.*

King, K. (2009). Enterprise in Africa, 2nd edition; Dorsey press, London.

Koch, T.W., & Macdonald, S.S.(2015). *Bank Management on Controls*,(4thEd.). Orlando: Dryden Press.

Lardic, S. & Mignon, V. (2003). Fractional co-integration between nominal interest rate and Inflation: an examination of the Fisher relationship in G7 countries, *Economic Bulletin,* 3 (14), 1-10.

Moore, W. &Craigwell, R. (2000). *Market Power and Interest Rate Spreads in the Caribbean*, working paper, Central Bank of Barbados.

Mustafa, Z., &Ismailov, N. (2008).*Entrepreneurship and Microfinance-A tool forempowerment of poor*.Case of Akhuwat, Pakistan.

Mwangi.G. (2012).*High Interest Rates and the Performance of Small & Medium Size Enterprises*: A case study of Ntinda. Nakawa Division, Makerere University

Mwanza, J. (2007). *The Effect of Derivative Activities on Interest Rate Risk Exposure on Banks Listed at the Nairobi Stock Exchange*. Nairobi. University of Nairobi.

Mwirigi, P.K (2006). *An Assessment of Credit Risk Management Techniques Adopted by Microfinance Institutions in Kenya.* Nairobi: University of Nairobi.

Ndichu, W. J. (2014). *The effect of Interest Rate Spread on Financial Performance of Deposit Taking Microfinance Banks in Kenya*. Nairobi: University of Nairobi.

Nyamsogoro, G. D. (2010). *Financial Sustainability of Rural Microfinance Institutions (MFIs) in Tanzanian.*Greenwich*:* University of Greenwich.

Okeyo, K. O. (2013). *Government Size and Economic Growth in Kenya* (Doctoral dissertation, University of Nairobi).

Peil, M. (2005).Research Methods, Handbook for Africa; Nairobi, EAEP.Government of Kenya.

Rasheed, O.A., (2010). Interest Rate Determinants in Nigeria.*International Research Journal of Finance and Economics*, 2(3) 1-2.

Sargent, T. J. & Wallace N. (2001). Some Unpleasant Monetarist Arithmetic, Federal Reserve Bank of Minneapolis Quarterly Review, No.5, Fall, pp. 1-17.

Sekaran, U. (2009). *Research Methods for Business.A Skill-Building Approach*. New York: John Wiley & Sons, Inc.

Webster, L. (2006). *The Informal and Micro Finance Institutions Financial Sustainability*; 2nd edition; Longman Publishers, London.

Woller, G. and Schreiner, M. (2002).Poverty lending, Financial Self-sufficiency and thesis aspects of outreach.*Working Paper, Washington, DC, USA.*