

What Are the Factors that Influence A Wide Interest Rate Band in Micro-Finance Institutions in Kenya?

Mary Bosire¹, Robert Mugo^{2*}, Dr. George Owuor³, Wycliffe Oluoch⁴, and Grace Kakiya⁵

1. Department of Accounting Finance And Management Science, Egerton University

2. School of Business, Kabarak University

3. Department of Agribusiness Management, Egerton University

4. Chair of Accounting, Finance and Management Science Department, Egerton university

5. Finance department, Karatina university

* E-mail of the corresponding author: mugorobert@gmail.com

Abstract

Interest rates play a significant role of intermediation between savers and potential borrowers. High deposit rates acts as incentives to attract savings while high lending rates discourage credit demand from potential borrowers. The margin between deposit rate and lending rate at a given time period forms an interest rate band which has implications on borrowing and deposit mobilization in the economy. In Kenya, the interest rate band has persistently remained wide despite the efforts to narrow it down. Several factors have been established that influence this wide interest rate band. However, this was before the financial reform period when commercial banks dominated the financial sector. This study was designed to evaluate the factors that influence a wide interest rate band in Micro Finance Institutions (MFIs) is new developments in the financial sector due to financial reforms in the year 2004. MFI sub sector has contributed to the competitive environment in the credit market. Factors that influence interest rate bands for these Institutions have not been documented. Purposive sampling was used to select a sample of 27 MFIs that are registered members of Association of Micro Finance Institutions (AMFI) Kenya and carry out retail Micro Finance activities. A cause effect research design was applied. Secondary data was extracted from financial statements using a data collection sheet and a questionnaire used to collect primary data. Data was collected for a four year period (2005 - 2008) and was analyzed using descriptive statistics. A censored linear tobit model (Tobit) was used to test the hypothesis. The results indicated significant differentials between deposit rates and lending rates. From the findings, four factors; Growth, Financial costs, Profitability and Operating/Administrative costs significantly influenced a wide interest rate band depending on the time period. Findings from this study are expected to provide information to policy makers for decision making and policy formulation. The findings are also expected to be beneficial to the Donor community and support groups in their endeavor to promote Micro — Finance activities in Kenya

Keywords: interest rate band, Micro Finance Institution, and Interest rates

1.0 INTRODUCTION

Interest rate is a percentage charged for use of borrowed money. It is an amount received in relation to an amount loaned expressed as a ratio. Lending institutions give out money in terms of loans on which they charge a percentage rate as interest payment. On the other hand savers lend to the institutions in terms of deposits from which they expect to receive a percentage payment as interest. Therefore, Interest rates include the rates paid for deposits (deposit rate) and the rates charged on loans (lending rate) for a given time period. Deposit rates include savings, call and time deposit rates while lending rates include rates charged on overdrafts and term loans (Ngugi & Wambua, 2004). Interest rates play a significant role in the financial system through the allocation of resources in the economy. The rates have the ability to intermediate between potential savers and borrowers (Kinyua, 1997). For savers, a high interest rate on deposits acts as an incentive to deposit their money in depository institutions instead of putting the money in other alternative forms of investments. For borrowers, a high interest rate on lending translates to high costs of borrowing which discourages potential borrowers since this leads to high production costs which have a negative effect on returns (Kinyua, 1997). This means, a balance has to be maintained for purposes of economic development in terms of investment. The deposit rate has to be high to attract deposits which form part of the resources for lending while the lending rate has to be favorably low to attract borrowing for investment (Kinyua, 1997).

The differential or margin between the average maximum lending rate and the average minimum deposit rate in a given period is referred to as the interest rate band or spread which signifies the gap between the two rates. A high margin creates a wider interest rate band while a lower margin creates a narrow interest band. High margins are experienced when the lending rates are high and deposit rates low in any given period while narrow margins experienced when lending rates are low and deposit rates high in any given period. The size of the interest rate band influences expansion and development of financial intermediation in the economy. Wide bands constrain expansion and development of financial intermediation (Njuguna & Ngugi, 2000). Financial intermediation involves mobilizing deposits and disbursing them as loans to clients. In any financially

sustainable organization, the interest rates should cover operating costs, the opportunity cost of holding liquid cash and the cost of provision for loans (Ngugi & Wambua, 2004). In Kenya, lending rates have persistently remained high for potential borrowers compared to the 91-day Treasury bill benchmark while deposit rates have remained low for depositors. This has created a wide interest rate band that has persistently been experienced over time (Ngugi, 2004). A number of factors have been established that determine and influence the interest rate band in Kenya. These factors range from Micro economic factors, institutional factors, market fundamentals, financial instability, capital market developments, legal reforms and monetary policy (Njuguna & Ngugi, 2000).

The government, in an effort to narrow the interest rate band came up with initiatives to improve the financial sector and more specifically to improve financial intermediation for the poor. One of these initiatives was the development of the Micro Finance Institutions (MFIs), through the enactment of the Micro Finance bill. Since majority of Kenyans are low income earners, low deposit rates discourages them from investing their savings in commercial banks and other financial institutions (FSD Kenya, 2007). On the other hand, high lending rates make borrowing beyond their reach. Therefore, to provide financial intermediation to these low income earners, small and micro-enterprises, the government came up with a policy through the Micro Finance Act to allow Micro-Finance institutions to provide financial services to this group. These institutions are meant to improve access of the low and middle income groups to savings and credit at a lower cost. These institutions are savings and credit associations that offer deposit and lending facilities to the low income category and the general public such that people can access opportunities to invest and contribute to National development (Republic of Kenya, 2006). This was part of the financial sector reforms to create a competitive credit market in the country. One of the objectives of establishing these institutions was to offer favorable interest rates that can attract both depositors and borrowers so that a positive contribution could be made to narrowing down the interest rate band in the country (Republic of Kenya, 2004). Despite the government's effort, lending rates have remained high in both commercial banks and MFIs sub sectors making the cost of accessing finance still high. Deposit rates have persistently remained low at a single digit and lending rates at a double digit. This has created a persistent wide interest rate band that is experienced in Kenya (World Bank data, 2008).

1.2 Statement of the problem

A wide interest rate band has negative implications on investment and mobilization of savings in the economy. High lending rates are undesirable for borrowers and low deposit rates discourage savers (Njuguna and Ngugi, 2000). In Kenya, a wide interest rate band has often been experienced with minimum savings rates continuously declining and maximum lending rates increasing. Various remedial actions have been applied over time to address the wide interest band issue with a view to narrow it down. Such remedies include interest rate liberalization in July 1991, benchmarking interest rates to the Treasury bill rate in 2000 and the financial sector reforms of 2004. However such efforts have not realized much gain since the wide band still remains persistent (Ngugi, 2001 and Ngugi, 2004). One of the objectives of the financial sector reforms was to promote savings and lending through better interest rates. The sector was liberalized to attract and promote new entrants to create competition (Republic of Kenya, 2004). One strategy was the improvement of Micro Finance sub sector that has become a significant player in creating the competitive market. This was expected to address the wide interest rate band through lower lending rates and accessing savings and credit to the majority low and middle income groups who had been locked out of commercial banks due to high lending rates (Republic of Kenya, 2004). However, lending rates are still high at a double digit even in the MFIs. For the past four years, interest rate bands in the formal sector indicate an increasing trend from 7.8% in 2005, 8.5% in 2006, 9% in 2007 and 9.05% in 2008 (World Bank data, 2008). It is not clear why or what has caused the wide interest rate band to persist despite the government's efforts mentioned above. This is an indication that there are underlying factors that sustain a wide interest rate band. This study intends to fill the information gap by identifying factors that influence the wide interest band persistent among MFIs which were established to help mitigate the problem.

1.3 Objectives of the study

Specifically, the study sought to address the following objectives:

- 1) To determine deposit and lending rates and their differentials in MFIs in Kenya
- 2) To determine the size of the interest rate differentials in MFIs in Kenya.
- 3) To establish factors that influence deposit and lending rates in MFIs in Kenya.
- 4) To determine the factors that influences a wide interest rate band in MFIs in Kenya.

1.4 Hypotheses of the study

The study tested the following Hypotheses:

- H_0_1 There is no significant differentials in deposit and lending rates in MFIs in Kenya.
 H_0_2 The difference between lending rates and deposit rates in MFIs in Kenya is narrow.
 H_0_3 There are no significant factors that influence deposit and lending rates in MFIs in Kenya
 H_0_4 There are no significant factors that influence a wide interest rate band in MFIs in Kenya

1.5 The scope of the study

There are many factors that determine or influence interest rate bands in depository institutions. However, this study was limited to the factors that influence a wide interest rate band in MFIs. The study was confined to a search of interest rates and interest rate bands in MFIs in Kenya for the years 2005 -2008 (these are the years after the financial reforms). It targeted the twenty seven MFIs that are registered members of the umbrella body of the Association of Micro -Finance Institutions (AMFI) and who offer retail Micro Finance services. These institutions were easily accessible since they are located in major towns

2.0 LITERATURE REVIEW

This research was based on classical theory of interest rates was developed by Irving Fisher in 1930. According to this theory, interest rates should be determined by the supply and demand forces in the market. Interest rates influence choices between consumption and savings and also demand for investment capital (Fisher, 1930). However this theory ignores other factors that influence interest rates like the levels of income, inflation rates, market imperfections, fiscal and monetary policies, organizational factors and the market power of financial institutions. This leads to the theory of financial repression that was developed by MacKinnon and Edward Shaw in 1970. This theory which is a liberalization theory contends that repression in the financial sector creates negative real interest rates due to interest rate controls. Negative real interest rates discourage savers from holding domestic financial assets that include savings in favor of other forms of assets like foreign assets and real estate. In this theory, controls are removed and positive real interest rates attained that increase resource mobilization and eliminate excess demand and allocation of loanable funds.

2.1 The concept of Interest rates

The role and functions of interest rates in any economy is to facilitate the flow of savings into investment to promote economic growth. They act as important tools of policy in the financial system to influence upon savings and investment (Rose, 1989). Interest rates have always been a concern to any one with interest on a country's economic structure. It is the price a borrower must pay to secure loanable funds from a lender for a given period of time (Rose, 1989). In the theory of interest rates, Fisher (1930) noted that interest rates are determined by the supply of savings and the demand for investment capital. International forces determine interest rates through foreign investments. When foreign investors are willing to lend money to the domestic economy to supplement domestic sources - this can drive interest rates down. With time, these factors have come to be associated with influencing interest rates globally (Federal Reserve Bank 1980). Kimura (1997) analyzed interest rates in Kenya from a historical perspective. The findings explained an interest rate as a function of a number of factors:

$$R_n = R_r + R_f + P_r + P_u + d$$

Where the variables of the equation indicate R_n as the interest rate charged for using borrowed money, R_r as the real interest rate to cover the cost of using borrowed money, R_f as the expected rate of inflation in a subsequent future period, P_r as the premium for the risks associated with a given investment, P_u as the additional premium to cover general economic uncertainty in the country and as any disturbance factor that can be explained by the above variables. From the study, the above interest structure had not changed much for the past thirty years and had no indications of changing in the near future. The variables in the equation determine an interest rate be it deposit or lending since either way there is a lender or a borrower. Kimura concluded that high interest rates generate higher interest rates in near future periods due to inflationary tendencies where prices adjust upwards to reflect the high cost of borrowing. The interest rate band is the differential or margin between lending rates and deposit rates in a given time period (Klein, 1992). This margin is determined as the difference between the average maximum lending rate and the average minimum deposit rate within a given time period. The band covers costs and profit margins in order to sustain growth for the institutions (Ngugi & Wambua, 2004). Interest rate bands determine financial performance and efficiency of the intermediation process in the financial sector. Wide bands discourage potential savers due to low returns on deposits and limit financing to potential borrowers. In developing countries, interest rate bands are wide. Njuguna & Ngugi (2000), attributed these wide bands to high credit risks in the financial market that are associated with high operating costs, financial taxation, lack of competition in the financial market and Macro economic instability. The study recommended financial reforms for these countries to achieve narrow interest rate bands.

2.2 Lending and Deposit rates in Kenya

Interest rates have important implications on the socio-economic welfare of Kenyans since high interest rates affect everyone in the economy (Mbaru, 1997). In June 1991, the theory of interest rate liberalization was introduced and interest rates were liberalized. This theory propagated for the removal of controls so that positive interest rates are attained that would drive increased resource mobilization and eliminate excess demand and supply of loanable funds (Wagacha & Ngugi, 2001). The expected benefits included a competitive economic system, lower intermediation costs and an efficient intermediation process. This was to eventually narrow the interest rate bands. However, the post liberalization period experienced escalating wide interest rate bands due

to declining financial intermediation. Fiscal and monetary policies determined interest rates instead of market forces. The government through its monetary policy kept on sending signals that it is more profitable to invest in government paper than in productive commercial and industrial activity (Mbaru, 1997). Other financial reforms and regulations such as the liberalization of the financial industry were introduced as efforts to improve the interest rates and narrow the interest rate band through efficiency in the intermediation process (Njuguna & Ngugi, 2000).

Ngugi & Wambua (2004) described the structure of interest rates in the country. There were notable efforts to create uniformity on interest rates in banking institutions. The study analysis included money market interest rates, Treasury bill rates and commercial bank interest rates. The study conclusions were that lending and deposit rates respond to monetary policy actions, liquidity management and interest rate risk factors in the market. In Kenya, interest rates are controlled by the Central Bank through benchmarking on the Treasury bill rate. A comparison of Kenya with other developing economies, confirms that interest rate bands in the country are wide. Interest on borrowing is high while savings rate quite low especially for small depositors who usually contribute most savings (Kimura, 1997). Considering interest bands for other economies for the same period (1999 to 2008), the highest band for Botswana was 6.1%, Nigeria was 9.58%, South Africa 5.76%, Chile 5.7% and Malaysia was 4.44% (World Bank data, 2008). From table 1 below, which indicates trends for interest rate spreads for the years 1999 - 2008, it is evident that in Kenya, when lending rates decrease, the deposit rates decrease with a relatively similar margin or higher sustaining the wide interest rate bands or even widening it. The deposit rates have persistently indicated a single digit while the lending rates a double digit (World Bank data, 2008)

Table 2. Trends in interest rates bands in Kenya for years 1999-2008

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Lending rates (%)	22.38	22.34	19.67	18.45	16.57	12.53	12.88	13.67	13.32	13.66
Deposit rates (%)	9.55	8.10	6.64	5.49	4.13	2.43	5.08	5.14	4.32	4.65
Interest band (%)	12.83	14.24	13.03	12.7	12.44	10.10	7.80	8.50	9	9.05

Source: World Bank Country profile data 2008

For a narrow interest rate band to be achieved, credit risks have to be reduced. Banks can increase deposit rates through creating competitiveness in the Treasury bill market and promoting diversification of financial assets for investors. This will create competition for public funds and hence reduce interest rate spreads through the increasing deposit rate (Ngugi, 2003). Treasury bill rates are the main underlying determinants of commercial banks base rates. Banks quote their lending rates based on the base rate (Johnson, 2004). However lending rates are much higher than the deposit rates. A positive relationship exists between lending and deposit rates in commercial banks and the money market interest rates which implies that interest rates respond to monetary policy actions (Ngugi & Wambua, 2004)

2.3. Factors that influence lending and deposit rates in commercial institutions

Kinyua (2004), in conjunction with KIPPRA did a survey in commercial banks to determine what was responsible for the continued wide interest rate spreads in Kenya. The study findings revealed the following factors as responsible for the wide spread: High implicit taxes in the form of high cash reserves and contributions to the Deposit Protection fund, high risk premiums on lending due to uncertainty created by lack of policy and consistency, high transaction costs due to institutional weaknesses, poor and unreliable infrastructure which forces banks to invest heavily on support systems, low level business volumes and poor intermediation due to bank concentration on financing government securities. Ngugi, (2001) in her empirical analysis of interest rate spread in Kenya, concluded that interest rate spread between deposit rates and lending rates widened in the post liberalization period (period after June 1991) in Kenya. The wide band was attributed to high implicit costs, Micro Economic factors, financial instability, high Treasury bill rates, lack of appropriate reforms, a sluggish capital market and tight monetary policies through increased reserve and cash ratios. The sample was drawn from commercial banks in the period of study that covered July 1991 to December 1999. During this period, commercial banks dominated much of the financial industry. Therefore, the study based the definition of interest rate spread on the Micro structure of characteristics of the banking sector which are managed and regulated under the banking act which is different from the Micro Finance act. Kinyua, (1997), presented a governments view on the factors that keep interest rates high in Kenya. These factors include excess demand for loans, inadequate competition in the banking sector, inflationary expectations, Inefficiency and high operating costs, high portfolio of Non - performing loans, underdeveloped capital markets and lack of access into the international money markets. The banking industry was faulted for failing to bring lending rates down when Treasury bill rates decrease. Borrowers were also faulted for creating high demand for loans even when the

lending rates are quite high. The study recommendations for a low interest band included maintaining low inflation, promoting public and private domestic savings, encouraging external borrowing by the private sector, development of the capital markets, reduction of cash and liquidity to reduce money for lending by CBK and long term borrowing for both public and private sector.

Wagacha (2001) analyzed interest rates under the Treasury bill rate. A proposed Central bank amendment Act (2000) popularly known as the Donde Bill was to introduce such regulatory interest rates by benchmarking interest rates to the Treasury bill rate (Central Bank,2000). The Treasury bill rate was perceived as an indirect instrument of monetary policy that could influence liquidity through open market operations. The Treasury bill rate as a benchmark was not regulated. Wagacha (2001), argued that fiscal pressure, public debt lack of banking competition, access to external borrowing, profitability in the financial sector and poor growth performances were the key factors creating high interest rate spreads that had depressed both savings and investment in the country. The study concluded that the above factors should be addressed with more emphasis put on controlling public debt for meaningful achievements in narrowing interest rate spread. From his economic view of determinants of interest rates in Kenya, Njuguna (1997) tried to establish why interest rates were high in Kenya. There was no indication of them coming down in any near future. The observation was that interest rates in the post liberalization period (period after 1991) were supposed to be determined by the market forces of demand and supply. However this was not the case. Other factors seemed to be determining interest rates even after financial reforms had been implemented.

Wanderi (2003), in his evaluation of factors that influence bank lending rates, established that the most significant factors are Micro economic factors that include cash ratios, inflation, market share, foreign currency exchange rates, level of economic activity and government borrowing. Bank efficiency and non performing loans were insignificant even though they significantly contribute to the collapse of banks. The study recommendations included reduction of cash ratios, bank performance improvements, externalizing domestic debt to manage borrowing, long term borrowing, strengthening bank supervision and controlling inflation in order to reduce lending rates.

2.4 The Concept of Micro Finance in Kenya

The main objective of the financial sector reforms in 2004 was to promote private savings and investment and lower interest rate levels and spreads through competition and the intermediation efficiency (Republic of Kenya, 2004). CBK was to uphold a financial system with market determined deposit and lending rates. One of the main aims of the financial reforms was the improvement of Micro Finance activities to access savings, credit and other financial services to majority low income Kenyans. They were developed in Kenya as a tool for fighting poverty through the Micro Finance act 19 of 2006 that empowered CBK to license, regulate and supervise MFIs (Boke, 2007). There are a number of institutions that provide Microfinance in Kenya. They include commercial banks, Savings and Credit Co operatives, pure MFIs, Accumulating and Rotating Savings and credit associations and other money lenders. These institutions register with their umbrella body of the Association of Micro Finance Institutions (AMFI) that is funded through grants from USAID (United States Agency of International Development) and which represents MFIs internationally

MFIs are an initiative of the government developments and effort to promote and improve credit access to low and middle class. By definition, Micro Finance is the provision of convenient financial services and products to the poor, low income households, Micro and Small enterprises (Republic of Kenya, 2004). Micro Finance evolved from Micro credit, where Micro Finance now includes savings, payment services and Insurance. They offer Micro credit schemes and attract savings to meet the demand for loans (Central Bank of Kenya, 2007). The MFIs avail credit to clients who previously found it extremely difficult to access credit from commercial banks and other formal financial institutions due to high lending rates (Republic of Kenya, 2004). However, for these institutions to achieve and increase sustainability, they generate revenue through charging interest on loans. In Kenya, MFIs are given the mandate to formulate credit policy and procedure that deal with lending and the lending rates to be charged (Central Bank of Kenya, 2004). The Micro Finance Act categorizes MFIs into two tiers: the deposit taking MFIs and Credit only MFIs. This study focused on MFIs that take compulsory and voluntary deposits and give loans where lending rates are charged and deposit rates paid creating interest rate bands. MFIs that accept deposits are further categorized into two: Nationwide MFIs which operate nationally and have a minimum capital requirement of Kshs. 60 million and Community based MFIs which operate within specific regulations with a minimum capital requirement of Kshs. 20 million. (Republic of Kenya, 2006). The deposit taking MFIs are permitted to carry out the following activities: Mobilizing savings from the general public, Providing credit or lending facilities, Domestic money transfers and providing save custody, Collecting money or proceeds of banking instruments on behalf of their customers, Provision of payment services such as salaries, gratuity, pension for government agencies, Micro leasing facility operations, higher purchase and credit schemes that are Micro Finance related and Mobilize clients, offer professional, financial, technical assistance, training and administration and marketing advice. (Republic of Kenya, 2006)

2.5 Lending and Deposit rates in Micro Finance Institutions

MFIs worldwide share a commitment to serve those that have been excluded from the formal banking sector due to high lending rates. In Uganda, the MFIs perspective on lending rates is based on self sufficiency through revenues that cover costs. Therefore, a sustainable interest rate is necessary to cover both operational and financial costs and also support a sustainable growth in the MFIs industry. Despite the liberalization of the financial sector to narrow the interest rate spread, Kenya experiences interest rate spread that is among the highest in the world (Institute of Economic affairs, 2000). These spreads can be attributed to wide interest bands in all the sub sectors of the financial sector. The role of MFIs in the growth and development of Small and Medium enterprises in Kenya cannot be overemphasized. However the interest rates charged on credit is high (Tarus et al, 2006). A review of interest rate bands in MFIs in Kenya indicated that not much has been researched on this area since most of the research concentrated on MFIs evaluation and impact aspects. Hence, the need for this research to add to the existing body of literature on interest rate bands in the financial sector

3.0 RESEARCH METHODOLOGY

3.1 Research Design

This study used a survey method to collect data. A cause effect research design was adopted in investigating and analyzing the research problem. This is because the study involved investigating the possible causes after the effect to establish the relationships. The assumed cause/effect is examined retrospectively to establish the causes or associations behind the effect (Cohen and Manion, 1989.). This design was relevant in the study because the independent variables (factors that influence interest rate band) had already influenced the dependent variable (interest rate band). Data was collected after the presumed effect (interest rate band) and examined retrospectively to determine the possible causes.

The target population for the study was all the MFIs who are registered members of the umbrella Association (AMFI). A list obtained from AMFI indicated that as December 2008, there were thirty six MFIs registered members distributed in various provinces. These 36 registered members formed the sampling frame from which units of observation were drawn.

Purposive sampling technique was used to select a sample of all MFIs that are registered members of AMFI Kenya and specifically involved in retail Micro Finance activities. Retail Micro Finance activities involve providing direct savings and credit to the poor and low income groups. This was necessary because some MFIs offer insurance services while others are support groups and agencies that promote Micro Finance activity without offering direct retail services. From the list obtained from AMFI office, only 27 out of the 36 registered members were involved in retail Micro Finance activities. Therefore, all the 27 formed the sample for the study. Purposive sampling technique was used because it allowed the researcher to handpick all the cases that possess the required study characteristics. Consequently, all the 27 MFIs involved in Retail activities were purposively selected to participate in the study. This formed a proportion of 75% of the population with the requisite characteristics. Table 2 indicates the distribution of AMFI registered members in various provinces.

Table 3: Distributions of AMFI Members in Kenya

Region	Number of MFIs	Number of retail activity
Nairobi	29	20
Kisumu	2	2
Mombasa	2	2
Nakuru	1	1
Embu	1	1
Kiserian	1	1
Total	36	27

Source: AMFI Data, 2008

The research was carried out using two instruments, a data capture sheet and a questionnaire. The data capture sheet was used to extract secondary data from the consolidated balance sheets and income statements of the MFIs. The extracted data involved measures of performance and other relevant data which was used to compute proportions that acted as proxies for the explanatory factors (independent variables). The data capture sheet was used to directly extract data from MFIs annual reports or financial statements posted in their websites by the researcher. The questionnaire was used to collect primary data from the programme officers of MFIs. For instrumentation validity, appropriate and relevant items were constructed in the data collection tools to ensure that relevant and reliable secondary data was obtained to construct proxies that acted as independent variables. The research objectives were cross checked against corresponding items in the data collection tools to ensure that the data collected measured what it was supposed to measure and accurate results produced. In addition, opinion was sought from experts in the Faculty of Commerce on the suitability of the items in the instruments. Data was processed, coded and analyzed to address the research objectives. Interest rate band was a dependent

quantitative measure of the difference between lending rates and deposit rates. Factors that influence interest rate bands in MFIs were determined. Descriptive statistics was used to analyze data. Test statistics, Frequencies, tables and Means were computed to determine distribution and association between variables. The factor analysis principal component method was used to evaluate the factors to determine their influence and impact in determining interest rates. The interest rate band was modeled as a function of the independent variables whose quantitative measures were extracted from the annual financial reports of the MFIs. The contribution of the independent variables on interest rate band was analyzed through a linear regression censored model (TOBIT). The censored regression value estimates were used to identify the most significant variables that influence wide interest rate bands. Interest rate band was defined and expressed as an implicit function of the determinant factors. The model followed a functional notation expressed as follows:

IRB = / (profitability, growth, operating/administration costs, financial costs and default risk).

This was specified into a linear regression model of the form;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_5 X_5 + \epsilon$$

Where Y represents the dependent variable (interest rate band) which is the regressed, while the independent variables are represented as follows: Profitability - X_1 , Growth - X_2 , Operating/Administrative costs - X_3 Financial cost - X_4 , and Default Risk - X_5 represent the independent variables, profitability, growth, operating/Administration costs, financial costs and default risk which were the regressors, (β_0) is the intercept or the

Regression constant and $\beta_1, \beta_2, \beta_3, \dots, \beta_5$ represented the regression coefficients for each of the independent variables whose values were determined. The coefficients indicated the relationship between interest rate band as a depended variable and the independent variables. The term ϵ represented the random term representing any errors that could arise out of random behaviors or measurement errors. The Tobit regression Model was used because it is a maximum likelihood model used when data is censored. The model was concerned with using many predictor variables to predict a criterion variable (Amin, 2005). There were data value limits between 0 and 1 since all the data was in proportions (derived from percents). The Regression Model made it possible to describe or evaluate the relationship between the dependent variable (Interest Rate Band) and other explanatory or independent variables. The statistical behavior of the dependent variable was related to the values of the independent variables. It was possible to analyze the impact of each explanatory factor on the dependent variable. The model provided for the study to examine whether any of the independent variables had any significant effect on the dependent variable. The model assumptions were that there are no linear dependencies among the independent variables.

4.0 RESULTS AND DISCUSSIONS

4.1 Summary statistics on Lending rates, Deposit rates and their differentials.

The study sought to establish interest rates paid to savers for their deposits and lending rates charged on loans. The study also sought to establish if there were differentials between deposit rates and lending rates for the four year period of study. An analysis of the factors that are considered when determining the rates and the factors that influence differentials between the rates was done. The first objective was to determine deposit and lending rates and their differentials in MFIs in Kenya. Annual lending rates and savings rates for the respondents for a four year period 2005 - 2008 were obtained. The averages for both rates were determined per period. Results obtained are summarized in Tables 4.1

Tables 4.1: Annual lending rates and deposit rates for the period 2005-2008

Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std Deviation	Variance
Lending rate 2005	18	14.00	36.00	369.50	20.5278	5.01900	25.190
Lending rate 2006	18	14.00	36.00	391.90	21.7722	4.61759	21.322
Lending rate 2007	18	15.00	32.00	385.70	21.4278	3.84705	14.800
Lending rate 2008	18	17.00	36.00	409.70	22.7611	4.35527	18.968
Deposit rate 2005	18	.50	4.00	30.50	1.6944	1.15222	1.328
Deposit rate 2006	18	.50	4.50	32.00	1.7778	1.21537	1.477
Deposit rate 2007	18	.50	2.50	23.00	1.2778	.71171	.507
Deposit rate 2008	18	.50	4.00	27.00	1.5000	1.00000	1.000
Valid N (list wise)	18						

Source: Research data

From the results in Table 4.1 above, the average deposit rates indicates a persistent mean of below 2% each year for the four year period while the average lending rates indicates a double digit that is above 20%. Minimum average lending rates charged were between 14% and 17% while the maximum average lending rates ranged from 32% to 36%. The minimum savings rates for the four years remained at 0.5% while the maximum was 4%.

This reveals that the average lending rates are much higher than the average deposit rates. While some MFIs charged a flat annual lending rate, others charged a specified rate per specified period. For Example, 0.5% per week which translates to 26% annually or 3% - 4% per month which translates to annual lending rates that ranges from 36% to 48% per annum. This implies that, as much as all MFIs insist on compulsory savings for clients to qualify for loans, the amount of return paid to savers for their savings is relatively low. Some of the respondents do not pay interest on the compulsory savings at all but give an annual bonus for deposits held. The results reveal that the average lending rates per year indicate an upward trend while the deposit rates were stagnated at below 2%.

4.2 Differentials between deposit rate and lending rate for the period 2005 to 2008

Annual averages for lending rates and deposit rates for the four year period were extracted and their differentials determined. The difference between the averages lending rate and the average deposit rate forms the interest rate margin which is defined as the interest rate band in the study. Table 4.2 shows a summary of computed differentials.

Table 4.2: Trends for average annual deposit rates, lending rates, and interest rates bands for period 2005-2008

Year	2005	2006	2007	2008
Average lending rates (%)	20.53	21.77	21.42	22.76
Average deposit rates (%)	1.69	1.78	1.28	1.50
Interest rates band (%)	18.84	19.90	20.14	21.26

Source: Computations from research data

The results in Table 4.2 indicate that the interest rate margin in the year 2005 was 18.84% and indicates an upward trend with the year 2008 registering a high margin of 21.26%. From the table, it is notable that there is a persistent margin that is above 18% between the lending rates and deposit rates in all the four years. The average lending rates are much higher compared to the average deposit rates. This is a double digit margin between the two rates which can be interpreted as a wide interest rate band. This interpretation is on the basis of the study definition of a wide interest rate band. The study defines a wide interest rate band as a band that is above 6% based on the government's policy of pegging lending and deposit rates on the 91 - day Treasury bill rates. Data in the table indicates that as much as average lending rates declined from 21.77% in the year 2006 to 21.42% in the year 2007 (a decline of 0.35%), average deposit rates declined at a higher margin from 1.78% to 1.28% (a decline of 0.5%). This widened the interest rate band instead of narrowing it.

Trends in deposit rates, lending rates & interest rate band

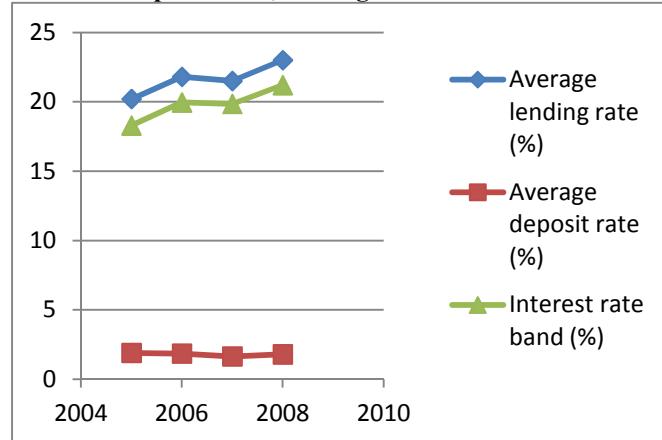


Figure 1. A Bar graph showing trends for average annual deposit rates, lending rates and interest rate bands for the period 2005 - 2008

From the graph, average lending rates indicate an increasing trend that is above 20%. Even though there was a slight decline between 2006 and 2007, the trend shows an increase after 2007. However, deposit rates indicate a stagnated trend that is far below 5%. The interest rate band indicates a similar trend like lending rates which is increasing. This is an indication that interest rate bands and lending rates are positively related which means that lending rates influence interest rate bands more than deposit rates.

4.3 Statistical Testing for the significance of difference between lending and deposit rates

At- test analysis was done to determine the significance of the differential between lending rate and the deposit rate. This was to test the first hypothesis that there is no significant difference between lending rate and deposit rate. The means for lending rates for the four years and the mean for deposit rates for each respondent were

determined. The two means were then compared based a paired sample t - test to determine if there were any significant differences. Paired sample t — test was used since the compared mean observations were determined from the same subjects. Table 4.3a and 4.3b below are summaries of the t - test results.

Table 4.3a. Paired Samples t-test Statistics for mean scores for Lending rates and deposit rates

	Mean	N	Std. Deviation	Std Error mean
Pair I Average lending rates	21.6222	18	4.36528	1.02891
Average deposit rate	1.5694	18	.99190	.23379

Table 4.3b. Paired Sample t - test for mean differential between deposit rates and lending rates

	Paired Differences					T	df		
	Mean	Std Deviation	Std Error Mean	95% Confidence interval of the difference					
				Lower	Upper				
Pair I Average lending rate	20.0528	4.20401	.99089	17.9622	22.1434	20.237	17		
Average deposit rates									

Source: Research data

The t - test was to test the hypothesis that there is no significant difference between mean lending rates and mean deposit rates. Table 4.3 a presents the mean scores together with the standard deviations and standard errors for lending rates and deposit rates. Table 4.3 b shows that these means are significantly different. The t value ($t = 20.237$) from the sample data is very significant at $p < 0.05$. This means that lending rates and deposit rates significantly differ. Therefore the Null hypothesis which stated that there is no significant difference between average lending rates and average deposit rates was rejected. Hence the research hypothesis was accepted that there is a significant difference between average lending rates and average deposit rates.

4.4 Statistical Testing of Hypothesis for interest rate band and the expected margin

Further statistical testing was done to test the relationship between the sample mean interest rate differential and the expected mean. The interest band of 6% was taken as the hypothesized population mean. This was used to test the Null Hypothesis that the sample mean is less or equal to the population mean. $H_0: \mu_1 \leq \mu_0$ Where μ_1 is the sample mean (average interest rate band) and μ_0 is the population mean (the expected interest rate band). The population means μ_0 was a differential of 6% ($\mu_0 = 6$). This is because 6% is the maximum margin expected between average lending rates and deposit rates as stipulated based on the 91 - day Treasury bill rate. The Hypothesis was tested at 5% significant level. The mean differential between lending rates and deposit rates for the respondents for the four years was determined and formed the observations X which was used to compute the sample mean and the standard error used to determine t - tabulated. The summation of the observations was - $\Sigma X = 362.95$ and the summation of $X^2 = 7623.48$. Then the sample mean was determined - $\bar{\mu}_1 = 20.16$ ($362.95/18$). The computed standard error was 17. The decision rule was to reject H_0 at 5% significant level if t - Tabulated $> t$ -Critical (from the student t - test tables)

$$\text{Where } t \text{ tabulated} = \frac{\bar{\mu}_1 - \mu_0}{\sigma / \sqrt{n}}$$

Sample mean $\bar{\mu}_1 = 20.16$, Population mean $\mu_0 = 6$, Number of observations (n) = 18, And Standard error $5=17$ Therefore t tabulated was 3.53. The decision was to reject the Null hypothesis that the sample mean is $< 6\%$ since t - tabulated value is 3.53 which is greater than t - critical value 1.74 at for 17 df and 5% level of significance. Therefore, the research hypothesis is accepted that the interest rate band is greater than 6%. Accepting the research hypothesis was an interpretation that interest rate band was wide.

4.4 Factors that influence interest rates in MFIs in Kenya

Having described the trends in interest rates and interest rate bands, the study further sought to establish if there were factors that influenced interest rates and evaluated such factors to determine their relationship with interest rate bands. From the study's conceptual framework, there were five market based factors and four firm based factors that were perceived to be determinants of interest rates in MFIs. Primary data was collected using a questionnaire sent to Programme Officers. From a list of conceptualized factors, the respondents ticked those factors that they considered when determining lending and deposit rates. The questionnaire had an open ended option that allowed respondents to include any other factors they considered and may have not been included in the list of selection. From the data collected, frequency distribution tables on responses were constructed to determine how many times a factor occurred in the data presentation. From the data collected the following factors were considered when determining lending and deposit rates by MFIs: Operational costs, Profitability, growth, financial costs and Default Risk. Table 4.4 indicates the distribution of responses

Table 4.4. A Summary of the distribution of responses on factors considered when determining lending and deposit rates for the period 2005-2008

Lending Rates Deposit Rates

Factors	Yes	No	Yes	No
Operating/Administrative costs	94%	6%	89%	11%
Cost of funds	83%	17%	61%	39%
Profitability	78%	22%	67%	33%
Growth	55%	45%	44%	56%
Default Risk	44%	56%	39%	61%

Source: computations from research data

Results from table 4.4 show the distribution of percent scores for responses for factors considered when determining lending rates and deposit rates. The scores were based on the "YES" and "NO" responses from total respondents for each factor. From the table, it is notable that Operating and Administrative cost factor has the highest score in both deposit rates (89%) and lending rates (94%) and default risk factor has the lowest score in both lending rates (44%) and deposit rates (39%). Cost of funds has the second highest score for lending rates while profitability is the second for deposit rates. Therefore, based on the "Yes" responses, factors that are considered when determining lending rates were ranked according to the percentage scores. At the top was Operating/Administrative costs (94%), followed by Cost of Funds (83%), Profitability (78%), Growth (55%) and least was Default Risk (44%). For deposit rates, the factor ranking based on the percentage score was Operating/Administrative costs (89%), followed by Profitability (67%), Cost of Funds (61%), Growth (44%) and least Default Risk (39%).

4.4.1 Determining Variables Impact on determination of interest rates

The factor analysis model was used to establish how the variables relate to factors or components that act as underlying constructs for "YES" and "NO" responses. The factor analysis tested the third hypothesis that there are no significant factors that influence deposit and lending rates. Tables 4.5 and 4.6 indicate the variables principal component factor analysis loadings for deposit rates and lending rates. The factor loading Matrix indicates the weight of each independent variable on the underlying components representing specified constructs Factor loadings from table 4.5 were then used to indicate how much weight is assigned to each factor or component. Factor loadings are values that explain how closely the variables are related to each component. The loadings were variable correlations with the components that represent the factor dimensions of "Yes" and "No" influence. From table 4.5, there were two factors or components 1 and 2. Component 1 represents the dimension of "Yes influence" and component 2 represents the dimension of "No influence". The guiding principle was that factors loadings of 0.33 or below are generally considered too weak to represent a factor and it's the absolute size not the sign (- or +) that is important (Nachmias, 2005). From the results of the factor loading matrix, there are four variables that have a factor loading of more than 0.3 on component 1- Yes influence.

Therefore, there are four variables growth (0.654), profitability (0.740), operating/Administration cost (0.497) and Default risk (0.835) that have a factor loading of significant magnitude on component 1- the Yes influence dimension. This means the four variables assign significant weight to the dimension of "Yes influences". This is an indication that the four variables are good indicators in influencing deposit rates. The cost of funds variable (0.878) loads more on component 2 "No influence" dimension hence is not a good indicator of influencing deposit rates. Even though growth and profitability have significant loadings on component 2, the loadings of these variables on component 1 are higher than in component 2. This means they have more weight to "Yes influence" compared to the "No influence". Hence the hypothesis that there are no significant factors that influence deposit rates is rejected.

Table 4.5 : Factor analysis estimates for factors that influence determination of deposit rates

(principal component factors; 2 factors retained)				
Factor	Eigen value	Difference	Proportion	Cumulative
1	1.92637	0.48323	0.3853	0.3853
2	1.44314	0.61831	0.2886	0.6739
3	0.82483	0.40022	0.1650	0.8389
4	0.42462	0.04357	0.0849	0.9238
5	0.38104		0.0762	1.0000

Factor Loadings				
Variable	1	2	Uniqueness	
Cost of funds	-0.05942		-0.87833	0.22501
Growth	0.65430		0.55094	0.26835
Profitability	-0.74098		0.46853	0.23143
Oprt/Admin cost	0.49780		0.29160	0.66716
Default Risk	0.83538		-0.25217	0.23854

Source: Research data

The principal component analysis results in table 4.6 indicates that three variables cost of funds (0.757), growth (0.794) and operation and administration costs (0.609) have a significant loading on component 1 which is the dimension of "Yes influence" on lending rates. Two other variables profitability (0.601) and default risk (0.806) have a significant loading on component 2 which is the dimension of "No influence". This means cost of funds, growth and operation/administration costs assign significant weight on the "Yes influence" dimension and are thus good indicators in influencing lending rates. The Null hypothesis is hence rejected for three variables cost of funds, growth and operation/Administrative costs since they significantly influence lending rates.

Table 4.6. Factor analysis estimates for factors that influence determining lending rate rates

Principal component factors; 2 factors retained)				
Factor	Eigenvalue	Difference	Proportion	Cumulative
1	1.72645	0.31619	0.3453	0.3453
2	1.41026	0.55550	0.2821	0.6273
3	0.85476	0.22328	0.1710	0.7983
4	0.63148	0.25443	0.1263	0.9246
5	0.37705		0.0754	1.0000

Factor Loadings				
Variable	1	2	Uniqueness	
Cost of Funds	0.75754		0.25439	0.36142
Growth	0.79484		-0.00389	0.36821
Profitability	-0.18606		0.60157	0.60350
Oprt/Admin cost	-0.60904		0.57716	0.29595
Default Risk	-0.33950		-0.80655	0.23422

4.5 Evaluation of the factors that influence a wide interest rate band in MFIs.

The main objective of the study was to evaluate the factors that influence a wide interest rate band in MFIs in Kenya. The variables from objective 2 above (growth, cost of funds, profitability, financial costs and default risk) were used as the explanatory or independent variables and interest rate band from objective one as the dependent variable. A censored linear regression model (Tobit) was used to determine the statistical relationships between the dependent variable and the independent variables. The regression coefficients for each of the five independent variables were determined and p values were used to test the hypothesis that there are no factors that influence a wide interest rate band in MFIs in Kenya. The Regression variables measurements were determined from quantitative secondary data collected from financial reports of the respondents.

Two files were run using the Tobit regression model.

- 1) Regression estimates for the average proportions for the four years
- 2) Regression estimates for the proportions for one year (2008)

4.5.1 The Regression Estimates for the Four Year Period (2005-2008)

The model entered the five independent variables and one dependent variable interest rate band. The independent variables were profitability, growth, operation/administrative costs, financial costs and default risk..

Table 4.7. Tobit Maximum Likelihood Estimates for the factors that influenced interest rate bands - averages for period 2005 - 2008

Interest rate band	Coeff.	Std. Err.	T	P>t	[95% Conf. Interval]
Profitability	.1654296	.0646503	2.56	0.024	.0257612 .305098
Growth	.1074498	.0324669	3.31	0.006	.0373094 .1775902
Opert/Admin cost	.0518439	.0591357	0.88	0.397	-.075911 .1795988
Financial cost	-.4956503	.2631888	-1.88	0.082	-1.064235 .0729345
Default Risk	.0107401	.0925714	0.12	0.909	-.1892484 .2107285
_cons	.1520009	.0260266	5.84	0.000	.0957739 .2082278
_se	.0249445	.0041572			(Ancillary parameter)
Obs. summary:	18				uncensored observations

Source: Research data

From the table 4.7 the independent variable was the interest rate band. Four of the independent variables entered yielded positive coefficients except financial cost variable. This indicates a positive relationship between the four independent variables (profitability, growth, operation/administrative costs and default risk) and the depended variable interest rate band. However, based on P values, profitability and growth registered P values that are significant at 5% significant level. This suggests that profitability and growth are significant factors that influence interest rate bands in the long run. Hence the hypothesis is rejected for these two factors because they are significant. Even though operating and administration costs scored highly as factors that are considered when determining lending and deposit rates, and even though it indicates a positive correlation coefficient, this factor does not appear to significantly influence interest rate bands in the long run.

4.5.2 The Regression Estimates for a One Year Period (Year 2008).

It is evident that profitability and financial costs have positive coefficients with interest with the interest rate band variable. This means they are positively correlated. On the basis of the p values, two variables operation/administration costs and financial costs are significant. Profitability, growth and default risk are insignificant and hence do not influence interest rate band in the short run. Therefore, the fourth hypothesis is rejected for operation/administrative cost and financial cost factors.

Table 4.8. Tobit Maximum Likelihood Estimates for factors that influenced wide interest rate band for one period (2008)

Interest rate Band	Coeff.	Std. Err.	t	P>t	[95% Conf. Interval]
Profitability	.0241892	.0854967	0.28	0.782	-.1605153 .2088937
Growth	-.0757811	.0439109	-1.73	0.108	-.1706449 .0190828
Opert/Admin cost	-.1929689	.0860379	-2.24	0.043	-.3788425 -.0070952
Financial cost	.8019931	.3186958	2.52	0.026	.1134926 1.490493
Default Risk	.0361992	.0901255	0.40	0.694	-.1585052 .2309036
Cons	.2389762	.0298768	8.00	0.000	.1744312 .3035211
_se	.0374791	18	.0062465		(Ancillary parameter)
Obs. summary:					uncensored observations

Source: Research data

Table 4.8 indicates the regression estimates for a one year period (Year 2008). From the table it is evident that profitability and financial costs have positive coefficients with interest rate band variable. This means they are positively correlated. On the basis of the p values, two variables operation/administration costs and financial costs are significant. Profitability, growth and default risk are insignificant and hence do not influence interest rate band in the short run. Therefore the fourth hypothesis is rejected for operations/administrative costs and financial cost factors.

5.0 SUMMARY CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of the Findings

The development of the MFIs was done with the hope that interest rates especially lending rates could be low and affordable. Low lending rates could have a positive impact and narrow the wide interest rate band that has persistently been experienced in the Kenya. Further, the lending rates in the formal financial sector are persistently on a double digit while the deposit rates are a single digit. The Micro Finance was an initiative that is part of the efforts to promote and improve credit and savings access to the poor through better, affordable lending rates and an attractive deposit rate to mobilize savings. A cause effect research design was adopted for this study. Lending rates and savings rates for 18 MFIs were compared. Secondary data was extracted from the annual financial reports using a data sheet and a questionnaire was sent to the respondents to indicate the factors that they consider when determining interest rates.

There were four hypotheses that were set for this study. All the four were rejected on the basis of statistical

evidence obtained from tests done and the P value estimates from the regression model. From the study there was evidence that statistically there were significant differentials in deposit and lending rates in MFIs. The average lending rates were high with a double digit that was above 20% and the average deposit rates were low at below 5%. The average margin between these two rates was wide at a double digit (above 18%). The findings revealed that the differential between deposit and lending rates was wide with a double digit. In addition, the findings revealed that there are four factors that significantly influence interest rate band depending on the time period. These factors include operational and administrative costs, financial costs, profitability and Growth. There was positive relationship between interest rate band and each of the four independent variables either in the short run or in the long run. From literature reviewed, a number of findings had identified factors that influence wide interest rate bands. These factors range from Micro Economic factors, institutional factors, market based factors and monetary policy factors, financial instability to capital market related factors. These related findings were based on samples from the formal sector. This study findings indicate that most of the factors that influence wide interest rate bands in commercial banks do not influence interest rate bands in MFIs except two - operational costs and profitability. MFIs have two other unique factors that influence interest rate band - that is growth and financial costs

A summary of other related and relevant findings highlight factors that influence interest rate bands. An analysis of interest rate spreads in the banking sector by Njuguna and Ngugi (2000) identified high operational costs, taxation, non competitive markets and risk as factors that influence wide interest rate spreads in Kenya. Findings of Awuondo (2001) narrowed down to risk factors that included balance sheet risks, management risk, business and security risks as factors that influence interest rates in Kenya. The risk factors determined base costs that was the basis of determining interest rates by commercial banks. Wagacha and Ngugi (2001) findings identified fiscal and monetary instruments, lack of efficiency and a poor financial intermediation process as factors that kept the interest rate bands high in Kenya. Ngugi (2004) identified imperfect credit markets, capital and operational costs, innovation costs, management risks, price instabilities and limited portfolio diversity as the major factors that sustained wide interest rate bands. The findings of Kinyua (1997) pointed out inflationary factors, high loan demand levels, non performing loans, undeveloped capital markets, high operating costs and inefficiency as the main factors that sustain wide interest rate spreads in the country.

5.2 Conclusions

This study aimed at evaluating the factors that influence interest rate bands for the Kenyan Micro Finance sector. The results show that interest rate bands in MFIs are wide. After the financial sector liberalization period (2004), lending rates for MFIs have ranged between 14% and 36%. Variations in the interest rate band reflect on costs, profitability and growth. This means the bands are increasing due to costs and the focus for consistent profits and growth.

a) Costs

Operational and Administrative costs: First, MFIs charge high lending rates to cover transactional and credit delivery costs which are higher for small transactions in terms of resources and personnel e.g. a two million loan and a five thousand loan Uses the same resources and personnel. However, smaller transactions increase per unit transaction cost. Most of the loans accessed from MFIs are small amounts that range between Kshs. 2,000 and Kshs. 20,000. This makes per unit cost very high in terms of processing and maintenance. MFIs respond to such costs by increasing lending rates in order to cover the cost.

Financial costs: Secondly, MFIs deposit savers money in commercial banks where they again borrow at a higher lending rate than the deposit rate they earn on these deposits for onward lending to the savers. When MFIs source for finance at a higher lending rate which normally is the commercial lending rate, the MFIs pass such cost to borrowers by charging a higher lending rate than commercial banks. Therefore, the interest rate charged for sourcing for funds increases the cost of borrowing. Due to the need for self sufficiency and sustainability, they pass such cost to borrowers and savers by charging a higher lending rate and paying minimal or no deposit rate for the compulsory savings.

b) Profitability and Growth

In a growing Micro Finance sector, interest rates must cover costs in order to promote sustainability, return and growth. There is need for growth in the sense that the sector has to reach out for increased numbers of the poor in order to achieve its objectives. Therefore, interest rates can not fall below the costs. Secondly, increased focus and pressure for returns (profitability) impacts negatively on affordable pricing in the Micro Finance sector. Such pressures increase lending rates and reduce or stagnate deposit rates.

5.3 Implications of the Findings

There are a number of implications that can be inferred from the findings of this study. There are significant factors that are considered when determining lending rates and deposit rates in the MFIs. These factors influence the margins between the lending rates and deposit rates creating a wide interest rate band. From the findings, it is evident that there is statistically a significant differential between lending rates and deposit rates. This means a wider interest rate band is persistent in the Micro finance sector despite the government's effort of

developing Micro Finance activity to mitigate the problem of wide interest rate bands in the financial industry. There is evidence from the findings that lending rates in MFIs are higher than commercial banks and deposit rates lower. Lending rates have a higher response to the determinant factors compared to deposit rates hence it is dominant or has a higher influence in determining a wider interest band that is experienced in the Micro Finance sector.

From the findings of this study, there is evidence that operational and financial costs as well as the need for sustainability, growth and pressure for return are determinant factors that influence wide interest rate bands in the Micro Finance sector. It means the sources of finance for MFIs are unaffordable to the sector who in turn pass it over to borrowers in terms of high lending rates and deny savers a better return through lower deposit rates. There is necessity to re examine the nature of financing the Micro Finance sector with an emphasis on affordable pricing through cheaper sources of financing. The findings also have an implication on the objective of the Micro Finance sector. Even though MFIs main objective was to provide financial services at a low cost in order to fight poverty, There is evidence that the sector is focusing on return and growth at the expense of its main mission and the issue of low cost has not been attained. Lending rates are quite high making the sector unaffordable for the poor. There is need to step up measures that would ensure financial services are offered at low cost.

5.4 Recommendations

In view of the conclusions and implications, the following recommendations were made: 1The establishment of a sound regulatory framework that facilitates the development of a robust and dynamic Micro Finance sector. There has to be regulation that controls increasing lending rates and improves deposit rates. Currently MFIs dealing with women groups and Youth are becoming more robust since the lending rates are controlled due to cheaper sources of finance - the government. The government, policy makers and the support groups should develop performance based capacity building strategies that will improve efficiency and lower costs. There is need to collaborate to build sustainable capacity within the MFI sector. Improved innovation, product refinement and strengthening the MFIs capacity will reduce cost, increase outreach and profitability. This will lower lending rate and improve deposit rates and hence narrow the interest rate band.

5.5 Suggestions for further research

Based on the findings and conclusions made in this study, certain issues came into light that warrant further research. From the findings, the interest rate band indicates a similar increasing trend like lending rates. This is an indication that interest rate bands and lending rates are positively related in the Micro Finance sub sector. Further research is necessary to evaluate this relationship and determine its implications on investment and deposit mobilization in the Micro Finance sector. In addition, the study findings indicate a wider interest rate band in MFIs compared to that of commercial banks. The development of MFIs has created competition in the credit market and a competitive loans market exists. Further research is necessary to shade light on this variation putting into consideration the existence of the competitive market. Lastly, further research is necessary to determine the implications of the wide interest rate band persistent in MFIs on investment and deposit mobilization in the Micro Finance sub sector.

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