

## **THE IMPACT OF LOW-INTEREST CREDIT ON THE FINANCIAL PERFORMANCE OF MICROFINANCE INSTITUTIONS IN KENYA**

**Sarah Kagiri<sup>1</sup>**

**Kabarak University**

**School of Business**

**Kibet Kirui<sup>2</sup>**

**Kabarak University**

**School of Business**

**Symon Kiprop<sup>3</sup>, PhD**

**Egerton University**

**School of Business and Economics**

### **ABSTRACT**

The purpose of this study was to address the research gap of how the provision of low-interest credit affects the financial performance of Microfinance Institutions in Kenya. The study was guided by the credit channeling and credit rationing theories all which look into the effect of credit provision on the wellbeing of firms and microfinance institutions in the economy. The study adopted a descriptive survey design that consisted on secondary data collected from the 13 licensed MFIs according to the CBK listing of 2016. Data analysis focused on the measures of central tendency due to their ability to describe the characteristics of the variables in question using a single number. Study findings show that the profitability of microfinance institutions is strongly influenced by interest rate spread followed by loan size, and loan design. The probability or significance values shows the significance of the relationship between independent and dependent variables. The probability values show that the profitability of MFBs is significantly influenced by interest rate spread, loan size, and loan design. Both correlation and regression analyses revealed the presence of a substantial relationship between MFB profitability and the study variables which are; interest rate spread, loan size and loan design.

**Keywords:** Interest Credit, Financial Performance, Microfinance Institutions

### **INTRODUCTION**

A microfinance institution (MFI) is an organization that provides financial services to the poor which includes a wide range of providers that vary in their legal structure, mission, and methodology which all share the common characteristic of providing financial services to clients who are more vulnerable than traditional bank clients. Specialized microfinance institutions have proven that the poor are “bankable”. Microfinance is the provision of financial services to low-income clients or solidarity lending groups including consumers and the self-employed, who traditionally lack access to banking and related services. Lending to low-income individuals was however viewed as a high and unnecessary risk by most of the institutions in the banking sector since these individuals lacked any form of security that could be tied against the loans offered (Ledgerwood, 1998). Some of the most used ratios in the Kenyan MFI context are EBIT, ROE, and ROI. Earnings before Interest and Tax (EBIT), indicates a firm's profitability, computed as a difference between revenues and expenses excluding tax and interest. Since it measures the profit arising from the company's operations, it is also referred to as "operating profit". This measure is essential when one wants to know how well an institution profits from its operations ignoring other extraneous factors such as tax structure (Robinson, 2001). Return on Assets (ROA) measures profitability against total assets. It is most useful when a manager desires to know how well the company assets are used in generating earnings. It is a quotient of net income and total assets. Return on Investment (ROI), is best suited for measuring the efficiency of investment in relation to the investment cost. It is computed by dividing the benefit of investment with its cost. Return on equity (ROE) is the amount of net income returned as a proportion of shareholders equity. Return on equity measures a company's profitability by revealing how much profit a company generates with the money shareholders have invested. The microfinance industry in Kenya has shown significant growth over the last few decades due to an

increasing need for alternative financial services. A general definition of profit is the difference between an organization's revenues and its expenses. The cost of competition has greatly reduced the profits of MFIs, and this has led some institutions to increase their interest rates to match the formal banks (Addisalem, 2015). The situation has been further worsened by the entry of mobile money platforms such as Mpesa and Airtel Money. The study sought to determine the impact of interest rate spread on the profitability of microfinance institutions in Kenya, to investigate the effect of amount of loan size on the profitability of microfinance institutions in Kenya and to determine how loan design impacts on the profitability of microfinance institutions in Kenya. Several studies have been done on the factors that determine MFI profitability. Bashir (2000) conducted a study on Islamic MFIs and established that capital and loan ratios determine the level of profits. Ndung'u (2003) revealed that sound asset and liability management were determinants of financial performance. Kilonzo (2003) laid more emphasis on changes in interest rates. None of these studies looked into interest rate spread, amount of loans and loan design. A study is therefore necessary to determine how the above-mentioned factors affect the financial performance of MFIs in Kenya.

### **LITERATURE REVIEW**

According to the Central Bank of Kenya, MFIs in the country saw an opportunity when banks began rationing credit services. For instance, Maisha Microfinance Bank, which was licensed by the CBK in July 2016, entirely focused its activities on Small and Medium-sized enterprises, tailoring the interest rates to be more competitive than that of banks. Most MFIs have followed suit resulting in a huge boost in their lending activities. The interest rate spread has continued to be the target of their pricing strategy. The world average interest spread in the world is 6.6

percent, while that of Kenyan banks are 11.4 percent. This has led many people to shun bank credit and turn to MFIs. Even though some Microfinance organizations charge a higher interest than banks, they still remain preferable. Affordability cannot, therefore, be considered as a function of interest rates only. MFIs in Kenya continue to give better interest returns on fixed deposits than banks, are much more acceptable in the customer's perception due to lower requirements and some are situated in places that banks do not have entry. This allows them to make more profits by taking advantage of the interest spreads.

According to Gilchris (2013) macroeconomic instability places a heavy burden on Microfinance Banks leading to reduced profitability. Unstable interest rates are a problem to Microfinance Banks in Kenya due to three major reasons. Firstly, interest rate volatility increases the risks of projects due to uncertainty about their ability to recoup the invested amount. For this reason, many people opt for other sources of financing which have a lower interest risk to hedge their investments from future changes in interest rates. Secondly, the market pressures have placed a burden on Microfinance Banks to comply with the CBK bank rate. For instance, in 2011 the CBK raised the lending bank rate from 5 percent to 11 percentage then to 16.5 percent by December (Okoth, 2011). Although this move was aimed at curbing inflation, the rate increased from 4.51 percent to 19.7 percent by November since banks have a self-driven inflation which highly affects consumer and investor savings and borrowings (Parliamentary Service Commission, 2011). Therefore the general theoretical framework suggests that interest rate volatility is distortional and disruptive to economic activity. However, even though the trend of interest rate changes in Kenya is well documented by several reports including the July 2017 Monetary Policy Committee Reports of the Central Bank of Kenya, many scholars still agree that the specific impact that these changes have on the profitability of Microfinance Banks are still

unknown. For instance Otuori (2013) opines that although interest rates in Kenya have been fluctuating over the last few years, their net effects are yet to be established. The Central Bank of Kenya has maintained the Base Lending Rate at 10 percent since 18<sup>th</sup> of September 2017 down from 10.6 percent. This in theory should have trickled down to changes in commercial bank interest rates therefore affecting their profit levels. However, these changes cannot be assumed due to three major reasons. First, it always takes time for the effects of monetary policy to be felt at a market level and secondly there is no guarantee that Microfinance Banks would respond to these changes at all and third, a high base rate may not necessarily mean low profitability for Microfinance Banks since it can be easily adjusted in a manner that banks recover additional costs at the expense of the commercial bank borrower. This opens up a gap of study to establish the specific effects of interest rate changes on the profitability of Microfinance Banks in Kenya rather than depend on the general perception presented by economic theory.

Loan size is critical to the profitability of the firm. Mwongera (2014) posits that MFIs that are larger enjoy economies of scale. They have the advantage of attracting more customers through low priced offers and thereby impact on their profits positively. According to Collins (2009), the number of global MFI borrowers rose by 17 percent in 2006. A sample of 340 microfinance institutions revealed that the average loans portfolio also increased by 34 percent in the same period. This case shows that MFI loan size was on the increase and with it the profits, because in the period 2004 to 2006, capital investment in microfinance grew to \$4 billion. Therefore as loan sizes grew so did the profitability.

Loan size increase in MFIs can also be attributed to the fact that there is virtually no regulation as to how many loans one individual could hold at one time. A study in India revealed that due to

lack of coordination among MFIs, individuals could hold as much as three loans from different institutions simultaneously (Hudson, 2015). This is not necessarily bad news for the MFIs since they keep expanding their profits as they circulate deposits and payments to create more credit. However, the government had to intervene to stop what it termed as “operational overheating” of MFIs. The World Bank Report 2016 forecasted that by the end of 2017, total outstanding loans held by the public will have totaled to approximately \$46 million, where 62 percent of the amount was owed to MFIs leaving only 28% to banks. This prompted the government to circulate an ordinance to rectify this anomaly, and stop MFIs from flouting market rules to make abnormal profits.

Kimanjara (2013) conducted a study that sought to find out why there was a low profitability of MFIs in Kenya despite the size of loans it offered. Among other things, the study found out that credit risk had a negative impact on profitability. Even though the average loans size is small in a MFI, the collective effect of all loans takes at one time is huge. This is one of the reasons why loan size is still a tool for profit making in an organization. Simply put, MFIs play the game of numbers where small loans have a huge net effect on their loan portfolio (Robinson, 2001). Banks on the other hand seem to have a more conservative view of loan amounts. By restricting credit, they focus on a few able customers who have the ability to borrow huge amounts and pay premium interests. Therefore the banking credit policy focuses on fewer customers and high interest. This is the profit motivation behind banks. Microfinances, therefore, are in a better position to attract newer members and thereby increase their profitability.

Regulation in the microfinance sector is aimed at reducing imprudent actions of MFBs with regards to charging high interest rates, insider lending and reducing loan defaults. The central

MFBs have achieved this through interest rate ceilings and other monetary policies. Acemoglu et al. (2005) found that better contract enforcement, efficiency of the legal system and lack of corruption are associated with lower realized interest margins and loan non-performance. This is because they reduce the default risk attached to the bank lending rate. However, it is noted that in developing countries regulations tend to be on paper but in practice are not enforced consistently and effectively. Thus, leading to default on loans lent to clients.

According to Omunjalu and Fondo (2014), when well-tailored and managed, loans have a positive effect on the Return on Assets (ROA). However, 'loans' is a general word used to describe a variety of products at the disposal of the borrower, and nowhere else can this variety be observed better than in MFIs. Microfinance is a concept based on the principle of inclusivity. This has led to the re-design of its products in a manner that serves community interests at more points than one (Robinson, 2001). The uniqueness of microcredit, and the terms and conditions surrounding its operation, is one of the reasons why borrowers have been attracted to their services all over the world.

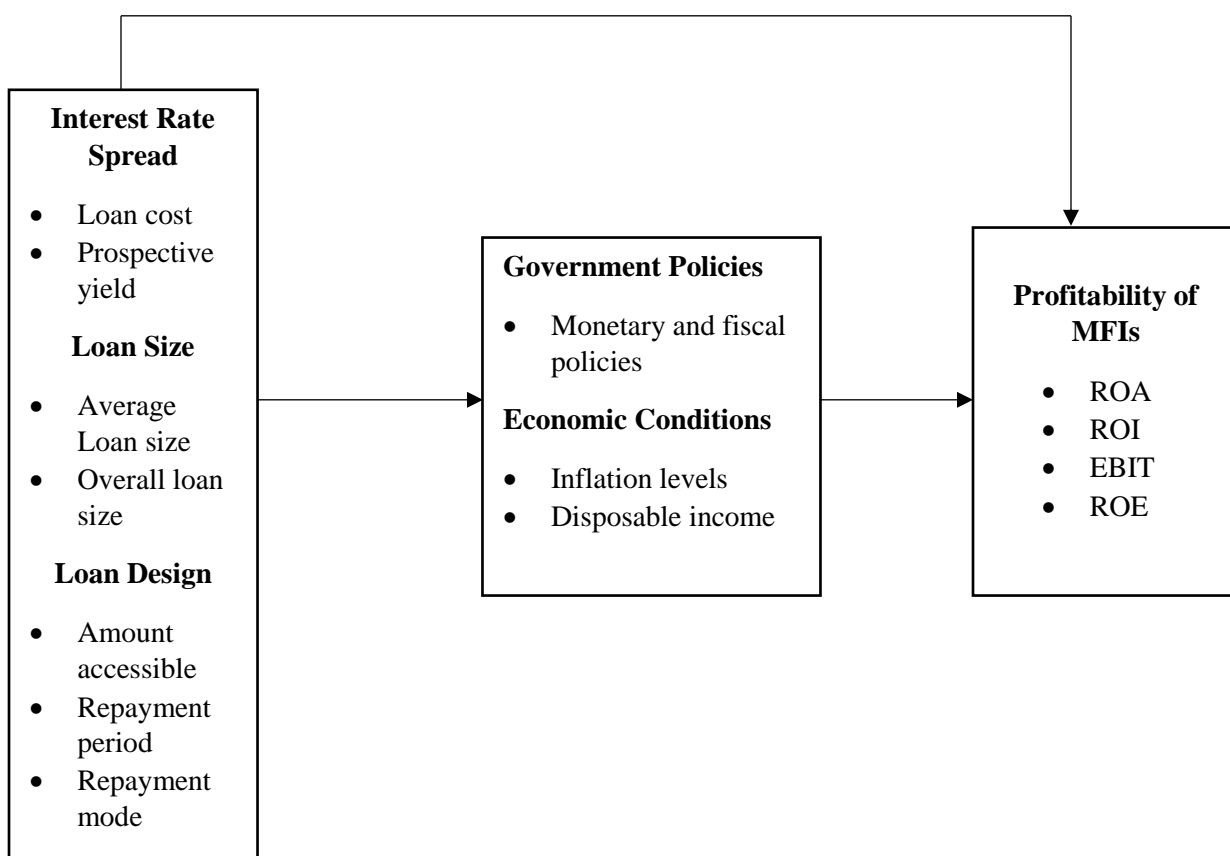
According to Girabi and Mwakaje (2013), no other organization has created a win-win situation better than MFIs. Some MFIs in Kenya have created a hybrid of group and individual lending, where loans are advanced to a group then group selects individuals among them based on their criteria, who are a low credit risk to the group. This in return decreases the default rate and hedges the MFI from losses. This concept has brought more registered groups into the fold and increased the returns for MFIs. Therefore, MFIs, by design, have unique products that cause the public to be drawn to them, thereby increasing their business. Microfinance institutions are also competing with banks by providing the convenience possessed by the mobile platform. Mobile

banking (m-banking) is defined by Laukkanen & Kiviniemi (2010) as “... an interaction in which a customer is connected to a bank via a mobile device such as cell phone, Smartphone or personal digital assistant (PDA).” Services include bill payments, purchase of phone credit, money transfer, account information and virtual bank account. M-banking may be classified into a self-service technology; a technological interface that allows consumers to do an action without direct employee involvement (Reinders, 2010). According to Laukkanen and Lauronen (2005), one of mobile banking’s perceived value which encourages adoption lies in its ubiquitous nature which enables consumers to save time, have immediate access to financial information and having a feeling of control over their financial matters. Based on previous studies, value barrier is discovered to be the least influential in being a barrier to mobile banking adoption

**Independent Variables**

**Intervening Variables**

**Dependent Variable**





## **Conceptual framework**

### **METHODOLOGY**

The researcher used descriptive design. Descriptive research is used when the objective is to obtain information that describes the current condition of the variables under study (Mubaiwa, 2014). It describes the phenomena in its current state, and mainly focuses on finding answers to how and why this phenomena exists as it is currently. The study employed a census method which that targeted the Head offices of all licensed MFIs in Kenya. According to the Central Bank of Kenya (2016), there are thirteen (13) licensed deposit-taking MFIs in Kenya under the Microfinance regulations 2008. Since the study focused on the link between affordable credit and profitability, the researcher collected secondary data such as financial records, profit statements, and audited accounts that shows the relationship between the two variables. The study was a desktop research where the researcher used secondary data consisting of financial statements, annual reports and accounts for the year 2016-2017. This helped in studying the link between credit and profitability over that period of time. Once secondary data was gathered from the head offices, the researcher used descriptive statistics to analyze quantitative data. With regard to qualitative data, the researcher employed inferential statistics and descriptive narratives to analyze data. Pearson regression model was used to measure the strength of the relationship between affordable credit and profitability. The researcher used a multivariate regression analysis to determine the relationship between the dependent and independent variables. The study adopted the following multivariate regression model:

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

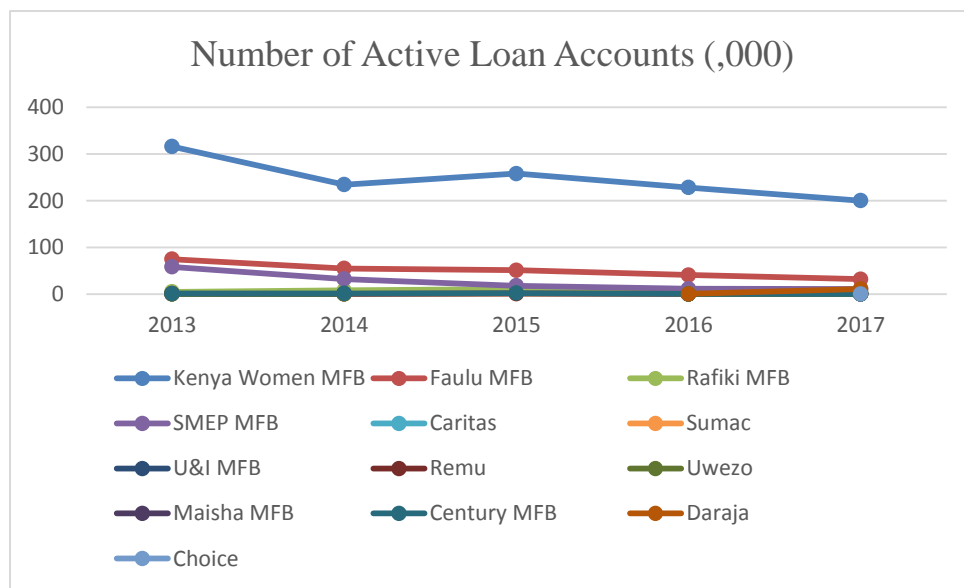
Where,

- Y –Profitability of MFBs.
- $\beta_0$  - Constant
- $X_1$  – Interest Rate Spread
- $X_2$  – Loan Size
- $X_3$  – Loan Design
- $\beta_1 - \beta_4$ = Coefficients of regression
- $\varepsilon$ = Error term

## FINDINGS AND DISCUSSIONS

### Findings

The researcher inquired into the number of active loan account per MFI institution over the last 5 years.

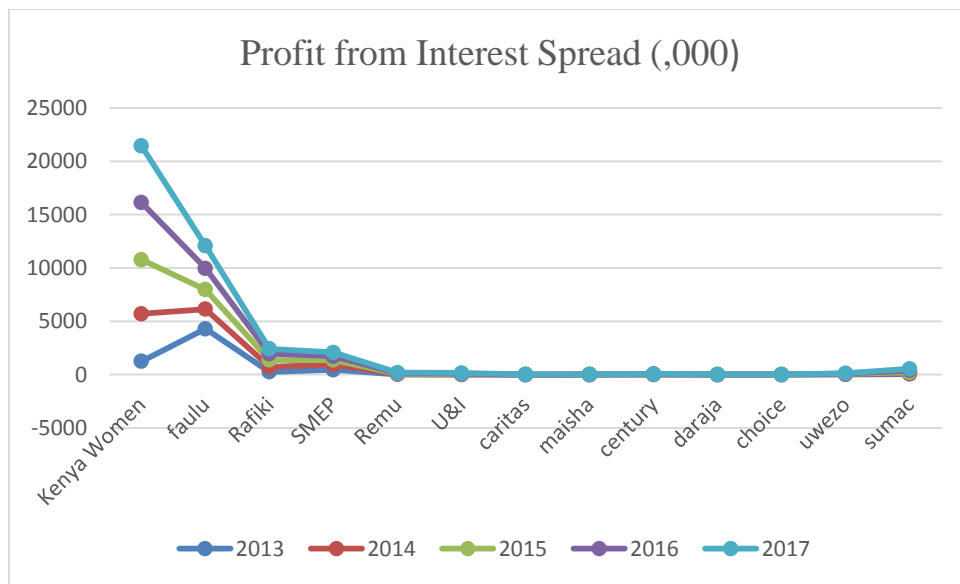


### Number of Active Loans

Source: CBK (2017)

The table above reveals that Kenya Women MFB has the highest number of active loan accounts through the number has significantly fell in the last 5 years. The rest of the MFBs have been experiencing a less erratic trend over the years with a majority showing a steady decline in the number of active loans accounts in the last 5 years. The Figure above reveals that as at 2017, Women MFB is still leading with 200,000 total active loan accounts followed by Faulu which has 32,000 active loans. Maisha and SMEP are tied at 11,000 accounts each followed by Rafiki MFB with 6,000 accounts. Century and Sumac have 2,000 and 1,000 loans accounts respectively. Caritas has 500 accounts, Uwezo 86 and Remu 45. U&I has the lowest number of active accounts at 23.

The researcher also accessed data in the difference between the interests earned by the deposit-taking MFIs against the interest expenses paid to account holders of the institutions. In order to determine the interest Rate Spread and Effect on Profitability.



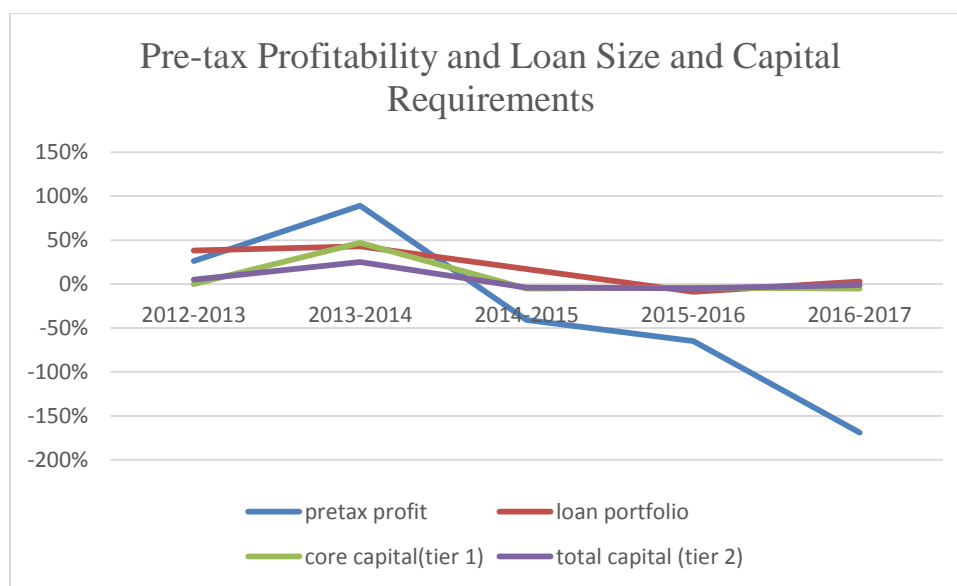
**Profit from Interest rate Spread per MFI for the Period 2013-2017**

**Source: CBK Statistics 2013-2017**

After examining the differences between the interests earned on loan portfolio and the interest payments made to depositors, the researcher discovered that all the MFBs revealed a stable increase in profitability by widening the gap between interests earned and those paid out. However, the top-tier MFBs which include Kenya Women, Faulu, Rafiki and SMEP revealed higher rates of profitability due to the bigger scale of their operations. The lowest interest spread

was identified in Remu, U&I, caritas, Maisha, century, Daraja, choice, Uwezo and Sumac. By the end of financial year 2017, it earned an interest of Kshs. 6121 million from loans and an additional 4 million from government securities while paying Kshs. 810 million to depositors, thus, earning a profit of Kshs. 5315 million from the spread. Faulu earned Kshs. 3566 million plus Kshs. 321 million from government securities and paid out Kshs. 1457 and, therefore earned Kshs. 2430 million from the spread. Rafiki earned Kshs. 455 million while SMEP, Caritas, Sumac and U&I earned Kshs. 357 million, 17 million, 196 million and 57 million respectively. Remu, Uwezo and Maisha earned profits of 44 million, 24 million and 17 million respectively. Pre-tax loss of MFIs further increased from Kshs. 377 million in 2016, to Kshs. 622 million in 2017.

The researcher also inquired into the impact of the loan portfolio size on the profitability of the MFIs. The analysis of the longitudinal data from 2013 to 2017 revealed a positive relationship between the two as shown below.



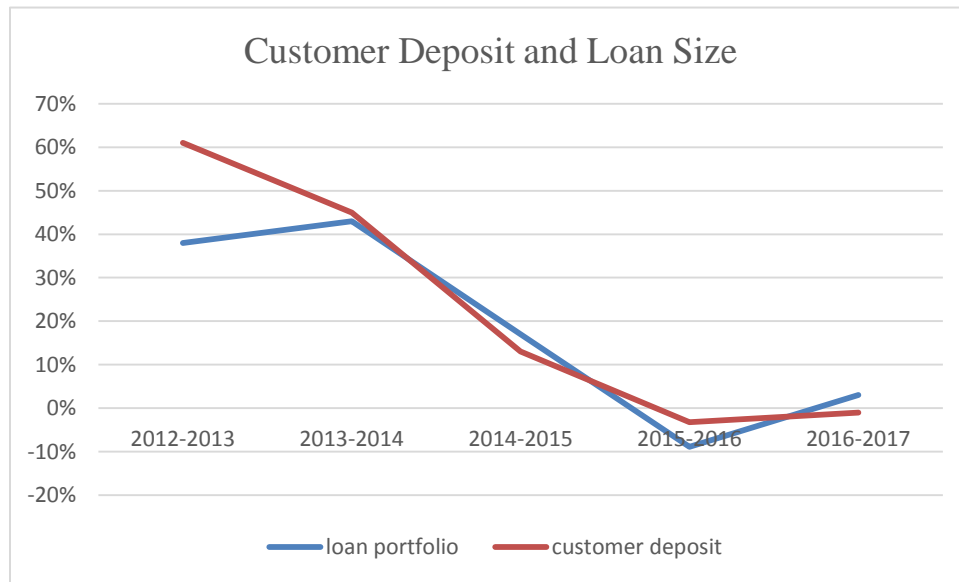
### **Pre-Tax Profitability, Loan Size and Capital Requirements**

**Source: CBK Statistics 2013-2017**

The figure above indicates a strong relationship between profitability before tax and loan size portfolio and capital requirements. The general pre-tax levels of the 13 licensed MFIs grew steadily from 0.5 percent in 2012-2013 period and peaked in 2013-2014 when it reached an estimated 98%. Both tier 1 and tier 2 capital requirements reveal a similar trend within the same period. However, the size of loans has been in a steady decline through the 5-year period since

2013. Therefore, profitability has been responding more to the capital requirements than the size of loans offered.

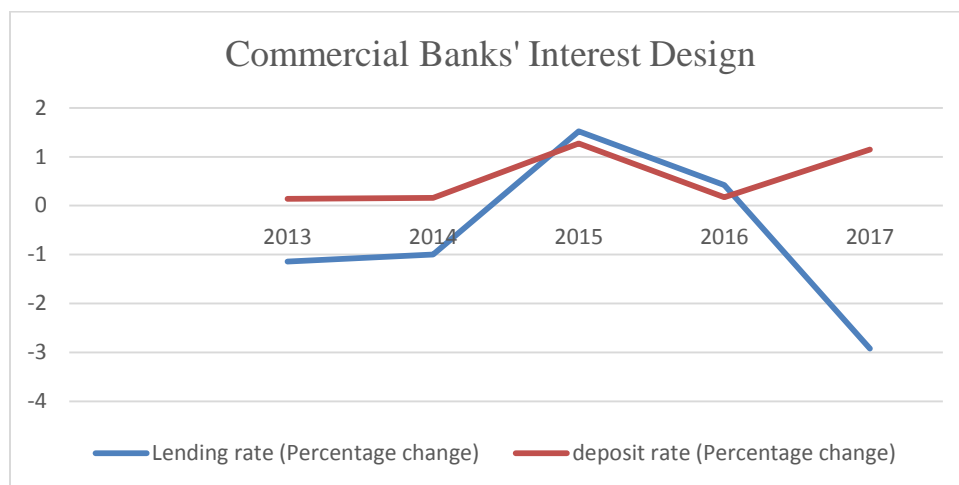
The researcher was also interested in mapping out the relationship between the size of deposits and the amount of loans provided by the MFIs over the last five years. The investigations revealed the following trend.



### **Relationship between Customer Deposits and Loan Size**

**Source: CBK Statistics 2013-2017**

The figure above indicates a wide gap between deposits and loans between 2012 to 2013 with the deposits increasing by an estimated 62 percent while loans just increased by 37 percent. Both deposits and loans increased at the same percentage of 42 between 2013 and 2014 and thereafter showed a joint downward fall from 2014 to the end of 2016. The MFI industry offered the least amount of loans in the 2015-2016 period after which there was a slight improvement in the 2016-2017 period.



### **Commercial Bank's Interest Design**

**Source: CBK Statistics 2013-2017**

The figure above indicates that the lending rates of commercial banks have always been below their deposits rates except for the period between 2015 and 2016. The greatest difference between the two rates was revealed at the end of 2016 going into 2017. The CBK assessed that during this period, most commercial banks took advantage of the interest capping to offer more competitive rates to the public and increase their turnover. This situation also implies that for a better part of 2013 to 2017, the interest rate spread has been low as banks had been paying more to the customers than they were receiving as interest.

### **Discussions**

#### **Interest Rate Spread**

Kenya Women MFB registered the highest market share of 53 percent in 2013; however, the market hare steadily fell through 2014 to 2016 and then showed a slight improvement in 2017. Kenya Women MFB also has the highest number of active loan accounts through the number has significantly fell in the last 5 years. The rest of the MFBs have been experiencing a less erratic trend over the years with a majority showing a steady decline in the number of active loans accounts in the last 5 years.

Sample variance of the subjects is 1430702. These statistics reveal a wide difference in how various MFBs earn from interest spread especially between the top-tier and lower-tier

institutions. The median has also risen constantly from 18 to 22 in 2013 and 2014 respectively, and 36, 42 and 44 in 2015, 2016 and 2017 respectively. Additionally, lower-tier institutions have a narrower gap between the interests which has a negative impact on profitability.

### **Loan Size**

The general pre-tax profit levels of the 13 licenced MFIs grew steadily from 0.5 percent in 2012-2013 period and peaked in 2013-2014 when it reached an estimated 98%. Both tier 1 and tier 2 capital requirements reveal a similar trend within the same period. However, the size of loans has been in a steady decline through the 5-year period since 2013. Therefore, profitability has been responding more to the capital requirements than the size of loans offered. The lending rates of commercial banks have always been below their deposits rates except for the period between 2015 and 2016. The greatest difference between the two rates was revealed at the end of 2016 going into 2017. The CBK assessed that during this period, most commercial banks took advantage of the interest capping to offer more competitive rates to the public and increase their turnover. This situation also implies that for a better part of 2013 to 2017, the interest rate spread has been low as banks had been paying more to the customers than they were receiving as interest. Results reveal a similar but negative mean and mode for the first two years which indicates that the data values are symmetrical; however, the negative values outweigh the positive ones within the data set. This outcome is perfectly logical considering that the relationship between the lending and deposit rate is negative for three years and only seems to be positive between 2015 and 2016.

### **Loan Design**

On the area of loan design, that MFIs have also maintained their deposit rates higher than the lending rates. Unlike the Banks, MFI interest rates remain relatively higher and, therefore, have a bigger interest spread. This information is revealed by the fact that the changes in interest rates never become negative. The CBK assessed that the interest rates of MFIs have remained relatively higher than those of banks due to the inability of the former to capitalize on the interest capping. This situation has forced the MFIs to be more price oriented as opposed to banks that are more sales oriented. The highest standard deviation of 0.70711 was registered in 2014 when

the interest rate spread was the greatest. The standard deviation is zero in 2017 when the interest rates were set up in a manner that led to do significant interest rate spread.

## **CONCLUSIONS**

Kenya Women MFB is the largest deposit-taking MFI in Kenya by both market share and number, of active loans accounts. The top-tier MFIs which include Kenya Women, Faulu, Rafiki and SMEP have a wider interest rate spread. Kenya Women and Faulu specifically, have supplemented their interest incomes by investing in government securities. This strategy has increased their interest incomes and, thus, their profitability above other organizations in the sector.

There is a direct correlation between the size of the loan portfolio and the Pre-tax profitability of deposit-taking MFIs. A fall in loan advances led to a decrease in pre-tax profits in the entire sector. The CBK attributed the fall in loan portfolio to the uncertainty that characterized the electioneering period. Similarly, the capability of MFIs to create loans was also affected by the fall in customer deposits. CBK explained that some customers had moved from the MFIs to commercial banks due to the interest decrease caused by interest rate capping which was effected in September 2016. Similarly, a fall in both the tier 1 and tier 2 capital requirements did not increase the loan portfolio due to a fall in the value of assets caused by previous losses.

Commercial banks continue to enjoy a better loan design since they are more responsive to the interest capping. The significant fall in their interest rates has led to more deposits due to customer flight from MFIs that have maintained a higher interest rate due to inflation. Commercial banks were able to advance more loans than MFIs due to the price-sensitivity exhibited by the market in that period. As a result, MFIs earned an interest income that was way below that of commercial banks for the period 2016 to 2017.

## **RECOMMENDATIONS**

### **Interest Rate Spread**

The study recommends that low-tier MFIs such as Caritas, Sumac, U&I, Century, Remu, Uwezo and Maisha strategize on ways to increase their interest spread so as to increase their profitability. These MFIs also lack supplementary investments that have the potential for additional interest earnings such as investing in government securities. Similarly, these



institutions should also find innovative ways to increase their interest incomes such as the designing of short-term loans targeting low-income individuals so as to capitalize on the large market turnover. Finally, they should also consider marketing in order to increase their market presence and gain additional customers.

### **Loan Size**

The entire industry performed poorly in loan advancements for the period 2016 to 2017. To avoid future political impacts on profitability, the organizations should design contingency plans to ensure less disruption to their activities in case the market plunges into political uncertainty. For instance, it should capitalize on periods before the election to build a greater lending capacity for times when there is a market downturn. Secondly, the MFIs should also adjust their interest rates according to CBK capping in order to attract the interest-sensitive part of the market. The institutions should, therefore, adopt a more revenue-oriented approach that uses low interest rates to increase sales.

### **Loan Design**

According to the comparative analysis of loan designs, MFIs should match the strategy employed by commercial banks. Commercial banks still enjoy a huge profit margin with interest rates of approximately 14 percent. MFIs should consider reducing their interest rates to reflect a minor deviation from the base Lending Rate as stipulated by the CBK. This strategy will strengthen their image as welfare-oriented organizations as opposed to institutions driven by profit motive.

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