

**DETERMINANTS OF LENDING INTEREST RATES IN DEPOSIT TAKING
MICROFINANCE INSTITUTIONS IN KENYA**

BY

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DECLARATION

This research project is my original work and has not been submitted for a degree in any other university.

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DEDICATION

This research study is dedicated to my wife Sophie Wanjiru, my daughter Tiffany Nyakio Kinuthia and my dad Simon Ngigi for their moral support throughout the entire MBA program and especially during this research project.

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The completion of this project was not easy. It was not created by the author alone, but relied on the cooperative assistance of many unseen hands.

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May God bless the work of their hands!

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ABSTRACT

The high interest rates charged by many deposit taking microfinance institutions have attracted the attention of policy makers throughout the world. The DTMFIs lending rate is a key indicator of the marginal cost of short-term external funding in an economy and provides useful information about developments in the average cost of borrowing. This study investigates the determinants of lending interest rates in Deposit Taking Microfinance Institution in Kenya.

This study used a descriptive survey. Descriptive research design was chosen because it enabled the researcher to establish a relation between variables. The population of this study consisted of all 12 Deposit Taking Microfinance Institutions in Kenya and therefore carried out a census survey. The study used both primary and secondary data sources in gathering data for analysis. The primary data was collected using semi-structured questionnaire which had both open and close-ended questions and was administered through drop and pick to managers, financial managers and credit officers from the DTMFIs comprising 36 respondents. The pre test was conducted to enhance clarity of the questionnaires. The collected data was thoroughly examined, summarized and tabulated. Data was coded and entered into the Statistical Package for Social Sciences (SPSS 21) for analysis. The inferential statistic regression and correlation was done.

Correlation analysis was used to establish the strength of association between market structure, cost of funds and economic conditions and the lending rates in DTMFIs. The correlation was statistically significant since it had a P-Value of 0.01, 0.03 and 0.02 which is less than 0.05 and a confidence level of 95%. A linear regression model of determinants of lending rate versus DTMFIs lending rates was applied. The study established that there existed a significant positive relationship between market structure, cost of funds and economic conditions and lending rates in DTMFIs. The study concluded that market conditions factors such as competition leading to interbank rate and credit risk premium due to various risks, interest risk, credit risk, foreign exchange risk and legal risk influence lending rate in DTMFIs. Costs factors such as taxes, transactions, cost of capital, statutory reserve requirement, management fees, staff costs and that weighted average deposit rate, reserve and liquidity requirements, mandatory investment influence the lending rates in DTMFIs. The study recommended that Deposit Taking MFIs should be keen of market factors such as competitions and risks, cost of fund such as salary of the staff and management fees and inflation due to economic changes in the country when determining lending rates as there existed a positive relationship between lending rate and factor determining lending rate for the Deposit Taking MFIs.

ABBREVIATIONS

BFI's -Banks and financial institutions

CBK - Central bank of Kenya

DTMFIs-Deposit taking Microfinance Finance Institutions

FNGOs - Financial Non-Governmental Organization

GDP – Gross Domestic Products

GNP – Gross Net Products

NPLs. - Non Performing Loans

SCP –Structure Conduct Performance'

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Extension of credit facilities is one of the major activities of all Microfinance institutions including Savings and Loans Companies, Rural banks, Financial Non Governmental Organization (FNGOs) and credit Unions. This is usually evidenced by the large proportion that loans constitute in the overall operating assets of these lending institutions. Healthy loan portfolios are therefore vital for lending institutions in view of their impact on Liquidity, lending capacity, earnings and profitability of the MFIs (Obuobi and Polio, 2010).

MFIs activities greatly rely on their intermediation services, filling the gap between suppliers and demanders of funds. Their profitability is partly due to the difference in interest rates charged on loans and what is paid to suppliers of funds that is the interest rate spread. Pyle (1971) argues that the larger the spread between loan and deposit rates, the more likely the necessary condition for intermediation to occur can be met. Earlier explanations that allow positive spread to be maintained rest on the ability of MFIs to minimize transaction costs in loans originating through their intermediation services (Boucher, 1996). Benston and Smith (1976) suggest that transaction costs are central to the theory of financial intermediation and the ability of the financial intermediary to exploit the returns to scale implicit in the structure of the transaction costs by purchasing large blocks of securities, repackaging, and reselling them at a lower cost supports the

existence of intermediaries to informational asymmetries prevailing in the economy (Ramakrishnan and Thakor, 1984).

The factors that determine the level of MFIs lending rates are important concerns to policy makers, the banking industry and the public at large. From a policy perspective, lower lending rates are desirable, as they tend to have a positive influence on new and existing investments, improve the competitiveness of Kenyans businesses and contribute to growth and development. These welfare effects would lead to generally higher living standards and financial surpluses. On the other hand, developed country markets have shown that profits in the commercial banks tend to rise as interest rates increase (Ramakrishnan and Thakor, 2000). The rapid expansion in the local industry since 1990 would also lend itself to the perception that such a relationship would also hold in the Kenyan context. There is little wonder therefore that the commercial interest rates charged by local MFIs have been a sensitive and recurring policy issue in Kenya and one which requires an objective examination of all the factors behind the structure of MFIs lending rates (Jayaraman, and Sharma, Rajesh ,2003). The market for commercial loans from commercial banks is competitive and rates on these loans have tended to respond to reductions in deposits rates and other costs. Tennant, (2006), indicated that compensation for the direct cost incurred in loan administration and the risk profile of the borrower also plays a great role on determining commercial bank lending rates. The stance of the competition, the overall risk profile of the portfolio and the liquidity of the commercial banks would determine the final cost to the borrower. Investors negotiate with banks for

the best terms available and, where possible, shift their business to take advantage of the best financing package (Njoka, 2003).

The impact of variations in commercial lending rates on banks' profitability is largely depends on the degree of responses of asset and liability rates. In general, since both sides of banks' balance sheets are affected by commercial bank lending rates in a parallel fashion, the net impact on banks' profitability can be deduced by tracing the responses of both assets and liabilities as market interest rates change (Gemmill and Thomas 2004). The impulse response functions show that low and lagged response of lending rates contribute to the decline in banking spread following an increase in money market rates, thus, adversely affecting banking activities. Microfinance institutions lending policy determine who the target customer is. It is widely believed that fluctuations of lending rates exert significant influence on the activities of Microfinance institutions in Kenya (Chirwa and Mlachila (2004). .

If potential borrowers lack formal documentation to certify their incomes and expenditure flows, it is likely financial institutions may need to develop special techniques to assess the risk profile of potential borrowers. In this scenario, an entrance threat is not necessarily sustainable and calls into question the issue of market contestability and its effects on lending rates. Taking into account all these factors, the interaction between competition and the lending interest rate charged to small entrepreneurs appears complex. Whether the correlation between market structure and lending rate is positive, negative, or null is a question to be determined (Ramakrishnan and Thakor, 2000). Lending rates

are determined not only by real or potential competition, but also, by the characteristics of borrowers and lenders. For the microfinance sector, Gonzalez (2010) suggested small loans with low default increase profitability rates and incur high administrative expenses that may not be offset by economies of scale.

The market for commercial loans from Microfinance institutions is competitive and rates on these loans have tended to respond to reductions in deposits rates and other costs. Tennant (2006), indicated that compensation for the direct cost incurred in loan administration and the risk profile of the borrower also plays a great role on determining commercial bank lending rates. The stance of the competition, the overall risk profile of the portfolio and the liquidity of the microfinance institutions would determine the final cost to the borrower. Investors negotiate with banks for the best terms available and, where possible, shift their business to take advantage of the best financing package (Njoka, 2003).

The impact of variations in commercial lending rates on MFIs' profitability is largely depends on the degree of responses of asset and liability rates. In general, since both sides of Deposit' Taking Microfinance balance sheets are affected by lending rates in a parallel fashion, the net impact on institution' profitability can be deduced by tracing the responses of both assets and liabilities as market interest rates change (Akiny2009). The impulse response functions show that low and lagged response of lending rates contribute to the decline in banking spread following an increase in money market rates, thus, adversely affecting banking activities. Microfinance institutions lending policy determine

who the target customer and that fluctuations of lending rates exert significant influence on the activities of Deposit Taking Microfinance Institution in Kenya (Chirwa and Mlachila (2004). Over the last five years, the country has witnessed a tremendous transformation of Microfinance Institutions to Deposit Taking Microfinance Institutions. Although this institutions were established to assist low income by providing cheaper credit, it has however not been the case as lending rates increasing cost of funds demanded by the DTMs .(AMFIs, 2013)

1.1.1 Determinant of Lending Interest Rates

Financial institutions offering financial institution lending primarily service the needs of corporations and larger businesses. Also known as business banking, Deposit Taking MFIs are intermediate business between customers and other financial institutions. These high-end institutions fund corporations, sole proprietorships and partnerships on many levels - from large businesses to overseas companies in a variety of nations - and include many different services from mortgage lending to supplying international capital to low and middle-income countries (Gemmill and Thomas 2004)

Financial institutions need capital to achieve their vision and financial goals. Commercial bank lending is there to help. Representing over 18 percent of all financial assets, commercial lending provides these companies with the funds they need to grow their business. Commercial loans, often called business or industrial loans, can be used for land, to purchase buildings, or purchase capital and equipment to use for manufacturing, distribution, wholesale, transportation, communication and much more. Although still a

form of debt, these loans are not available for items such as investments or personal expenses (Tennant, 2006). Companies often choose a revolving line of credit to purchase materials or merchandise and repay the debt as merchandise sells. Credit is extended as it is paid off, much like a credit card, and can be used for replacing equipment or restructuring buildings. Farmers can also take advantage of commercial bank lending to expand their agricultural farms and purchase much-needed equipment (Ramakrishnan and Thakor, 2000).

Tobin (1965), on the other hand, argues that the real interest rate decreases with inflation. In other words, the interest rate increases less than the increase in inflation. As iterated in later studies for the Tobin effect, Stulz (1986) assume that the real wealth is kept constant in the form of financial assets: money and capital stock. As the inflation rate increases, the opportunity cost of holding money will increase and money demand will decrease. At a given level of the real financial wealth, this increases the capital stock. If the production function exhibits decreasing returns to scale, then the marginal productivity of the capital stock decreases with higher capital stock and lowers interest rates. Firstly, as the financial market is expected to be the transmission channel for the framework, a policy rate that is linked to the interbank rate or overnight rate may not have the desired effects on interest rates in the economy, as it will have no bearing on the banks' cost of funds.

1.1.2 Lending Interest Rates

Lending rate is the financial institution rate that usually meets the short- and medium-term financing needs of the private sector. This rate is normally differentiated according

to creditworthiness of borrowers and objectives of financing. The terms and conditions attached to these rates differ by country, however, limiting their comparability. Traditionally, lending institutions determined operating efficiency by using measures of lending institutions profitability, such as return on equity, return on assets, and return on investment; also, banks used operational ratios, such as monetary output per staff member, and total operating expenses per unit of output.

Interest rate as a price of money reflects market information regarding expected change in the purchasing power of money or future inflation. As Crowder and Hoffman (1996) noted, the expected decline in the purchasing power of money is captured by the expected inflation plus the conditional variance of inflation. More specifically, under the Fisher hypothesis, expected nominal rates of return on assets move one-to-one with ex ante inflation. This is often formulated as ex ante real rates being statistically uncorrelated with expected inflation.

It is widely believed that fluctuations of market interest rates exert significant influence on the activities of microfinance institutions. Later investigation by Hancock (1985) confirms the conjecture that a higher level of market interest rates improves microfinance institutions profitability. In addition, the effect of interest rate spread changes on microfinance institutions' profitability is shown to be asymmetric with the effect originating from lending rates being greater than those of deposit rates. The stochastic behavior of market rates is also argued to be a significant factor that determines the mode microfinance adopt in delivering their services (Kashyap and Stein (2000)).

The impact of variations in market interest rates on banking institutions' profitability is ambiguous; it largely depends on the degree of responses of asset and liability rates. In general, since both sides of commercial bank's balance sheets are affected by market interest rates in a parallel fashion, the net impact on microfinance institutions' profitability can be deduced by tracing the responses of both assets and liabilities as market interest rates change. MFIs activities greatly rely on their intermediation services, filling the gap between suppliers and demanders of funds. Their profitability is partly due to the difference in interest rates charged on loans and what is paid to suppliers of funds.

1.1.3 Deposit Taking Microfinance Institutions in Kenya

The enactment or endorsement of Microfinance deposit taking institutions Act (MDI ACT) by the parliament of Microfinance Act 2006 gave birth to Microfinance Deposit Taking Institutions (MDIs) which are allowed to mobilize and intermediate savings from the depositors (Mutua 2003). Microfinance institutions (MFIs) world over have been identified as critical institutions to nations quest for solutions to the development challenge (CGAP, 2002). An effort to modernize and uplift operations of microfinance institutions gives rise to Microfinance Deposit Taking Institutions (MDIs) which are regulated under MDI Act 2006 by Central Bank of Kenya (CBK, 2006). According to ADB (2000) and Otero and Maria (2002), the implementation of the policy was deemed important for savings mobilization and proper management of public deposits by implementing basic minimum level of prudential regulations. Mutua,(2003) argues that

prudential requirements enable MDIs to manage resources properly which ultimately improves the efficiency and loan costs.

The Microfinance Act 2006 of Kenya, seeking to streamline the operation of the MFIs in Kenya, addresses licensing provisions, minimum capital requirements and minimum liquid assets, submission of accounts to the Central Bank, supervision by the Central Bank, and limits on loan and credit facilities. The licensed MFIs called the deposit taking MFIs are licensed MFIs to accept public funds and Contributes to poverty alleviation and at the same time comply with the requirements of financial sector safety and soundness. The Deposit taking MFIs are regulated under the Bill to provide savings, credit, and other financial services to MSEs and to low-income households in both rural and urban areas. The MFIs which are generally funded through concessionary loans from international development institutions have been spared the high cost of funds that banks have suffered following successive interest rate increases by the Central Bank of Kenya.

Banks are generally free to determine the interest rate they will pay for deposits and charge for loans, but they must take the competition into account, as well as the market levels for numerous interest rates and Fed policies. There are various factors that financial institutions take into consideration when determining the base lending rates. They include the money supply, the rate of inflation, the length of time the funds are borrowed and the monetary policy. Rate of Inflation influences the rate of interest, if inflation is high then government increases the interest rates for borrowing in order to contain the inflation.

1.2 Research Problem

One of the problems that have raised the interest of economists is to know the determinants of lending interest rates. Attracting and retaining profitable customers, and increasing revenue from those customers, is a priority of the managers of all banks in today's globalised marketplace. It is particularly important in the highly competitive retail financial services market, where the core business of banking continues to be "the profitable management of risk (Hogan *et al.*, 2001). As Coleman et al (1992) stated, the interest rates structure depends on reasons that are both internal and external to financial markets. Different types of interest rate are linked and influence each others, so that the functioning of the financial markets and their international relationships explain a good deal of interest rate fluctuations. Johnson and Johnson (1985) observe that the economic performance, perspective and expectations of potential loan receivers as well as in the overall economy play an important role. Central bank policy is one of the most powerful factors impacting on these agreements, for example through the instrument of direct determination of official discount rate or the rate for refinancing operations.

In Kenya, the lending rate in Microfinance industry is at an average of 19.5 per cent relatively low compared to that of commercial banks which is about an average of 27 per cent taking as Central Bank's benchmark rate increases (CBK, 2014). MFIs like banks do screen loan clients. Under inadequate supervision, adverse selection of borrowers may occur because the probability of repayment of the loan is negatively related to the interest rates charged by the MFIs. A financial institution can be assumed to be maximizing expected profits, which will depend on the lending rates as well as the probability of

repayment, the bank's expected profit could peak at non market clearing interest (Diaz-Alejando, 1985).

Deposit Taking MFIs lenders short-term, small-loans who have made use of social and market sanctions to avoid borrowers from defaulting and charge an interest rate that is well below the cost of informal loans and/or if the loan size offered is sufficiently large to solve indivisibility problems. Rosenberg, Gonzalez, & Narain, (2009) observe that the economic performance, perspective and expectations of potential loan receivers as well as in the overall economy play an important role in determine the lending rates for Microfinance Institutions. Even though no worldwide cross section-time series data on lending rates charged by individual moneylenders is available, rates charged by Deposit taking MFIs are perceived to be well below those charged by commercial banks. Although lending rates affect financing and profitability of the microfinance institution, empirical studies on determinants of relationship between lending rates and level of nonperforming loans in the MFIs remain scarce.

Prior studies have been done locally on the field on interest rates in microfinance industry in Kenya. Mwindi (2002) carried out a study on the relationship between interest rates charged by MFIS and performance of micro and small enterprises in Nairobi, and found out that the higher the interest rates hinders financial performance of the Microfinance institutions., Gatwiri (2011) conducted determinant of interest rates in commercial banks and found that inflation and intermediation costs influence interest rates in bank to a great extent while Kimutai, (2003) carried out a study between lending interest rate and

financial performance of micro finance institutions in Kenya. Mucugu (2012) carried out a study to establish the determinants of interest rates in the Microfinance Institutions in Kenya. The study established that according to respondents administrative cost, profitability, cost of funds and loan loss determined the interest rates charged by the microfinance institutions in Kenya. There has been no study that has determined lending interest rates in Deposit Taking MFIs in Kenya. This study therefore sought to fill existing knowledge gap investigating determinants of lending rates in Deposit Taking MFIs in Kenya by answering the questions, what are the determinants of lending rates in Deposit Taking MFIs in Kenya?

1.3 Objectives of the Study

The objective of the study was to establish determinants of lending interest rates in Deposit Taking Microfinance Institution in Kenya.

1.4 Value of the Study

This study will be of significance to several parties in the financial sector. It will be significant to Deposit taking Microfinance Institution managers to understand lending interest rates level of nonperforming loan and devise measures to manage lending rates. Investors who will seeks for funds from Deposit taking Microfinance Institution will benefit from knowing criteria that determines lending rates and make appropriate decisions when seeking for funds.

The policy makers in the financial sector will benefit from this study as they will be able to gain insight on determinants of lending interest rate and formulate policies that will

enable Deposit taking Microfinance Institution determine effective lending rates. The determinants of the level of Deposit Taking micro financial institutions lending rates are important concerns to policy makers, the banking industry and the public at large. From a policy perspective, lower lending rates are desirable, as they tend to have a positive influence on new and existing investments, improve the competitiveness of Kenyans businesses and contribute to growth and development and lower level of nonperforming loans.

Researchers will benefit from documented information into determinants of lending rates in Deposit taking Microfinance Institution. Academicians will benefit from the findings of this study as it will add to the body of existing knowledge in finance. The results will establish the factors that determinate lending rate a in the Deposit Taking Microfinance Institutions. It may also form a basis of further research in this particular field.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents critical reviews concerning the study on issues of determinants of lending rates of deposit taking micro financial institutions in Kenya. This is done through discussing lending Rates, the relevant theories, empirical studies and relationship between lending rates and level of non-performing loans.

2.2 Theories of Lending Interest Rate

An increasing body of analytical work has attempted to explain the functioning of credit markets using new theoretical developments. Challenging the paradigm of competitive equilibrium, they have explored the implications of incomplete markets and imperfect information for the functioning of credit markets in developing countries.

2.2.1 Expectations Theory

This theory is based on the expectations that people will have in regard to future conditions. If investors expect future interest rates to be high, they will prefer to hold long term securities and if the vice versa is true, they will prefer short term securities. Other expectations that will influence securities demand will include expectations on political conditions, expected inflation levels. Also known as an expectancy theory, an expectation theory is a strategy that is used by investors to make predictions about the future performance of interest rates (Peek and Rosengren, 1995). Essentially, the expectations theory states that by evaluating current long-term interest rates, it is possible

to determine the course of short-term interest rates. While there are a number of supporters for this theory, many investors and financial experts also believe the logic behind a theory of expectations is flawed and does not serve as an accurate indicator of future short-term rates in and of itself (Jayaraman and Sharma, 2003).

For those that believe the concept of the expectation theory has merit, it is often noted that many investment strategies rely on evaluating past movements in order to predict future performance. Since this approach has proven successful in helping to choose wise investments such as stocks and commodities, the same approach can also be used in predicting the movement of short term interest rates. Often, proponents of the theory will also point to anecdotal evidence that seems to support this approach (Ramakrishnan and Thakor, 2000).

The logic underlying the theory, that expectations of future short interest rates shape the term structure of longer interest rates, is intuitive, appealing, and a common assumption in macroeconomic modeling. However, the predictability of excess returns shown by Fama and Bliss (1987), Campbell and Shiller (1991) and more recently by Cochrane and Piazzesi (2005) undermines the premise that long interest rates are rational expectations of future short rates up to a constant term premium. Rather, such evidence points strongly toward time-varying risk premia. Indeed, Dai and Singleton (2002) demonstrate that interest rates adjusted for time-varying risk premia estimated from dynamic term structure models meet the predictions of the expectations hypothesis in traditional excess-return regressions.

One of the inherent dangers with the expectation theory is that it can be very simple to overstate the estimate on the future short-term rates. Since the theory relies only on analyzing past performance of long-term interest rates, this approach can easily omit data that would possibly temper the amount of change in short term interest rates. Factors such as political shifts, disaster situations, or sudden changes in consumer tastes and demands can easily impact the direction of interest rates and throw the projections developed through the use of this theory out of line (Njoka, 2003).

The expectation theory also does not take into account the element of risk that may also influence the level of interest rates in general. For example, the theory does not recognize the fact that forward rates don't always provide a clear picture of future rates, a situation that makes the risk of investing in short term bonds rather than long-term bond issues somewhat higher. The theory also does not include the possibility of reinvestment taking place and therefore introducing a new factor that can have a dramatic impact on interest rates.

2.2.2 Liquidity Preference Theory

The general idea of the liquidity preference theory was developed by J.M Keynes's within a simplified model in which there is only two types of financial assets money, the liquid and the bonds with no maturity, the illiquid assets .According to him ,an increased preference for liquidity in the model is equivalent to increased demand for money and therefore demand for money increases wherever more people think interest rates are likely to rise than believes they are likely to fall (Howel and Bain,2008).

According to this theory, investors will always prefer short term securities to long term securities. To encourage them hold long term bonds, long term securities should yield higher interests than short term bonds. Therefore, the yield curve will always be upward sloping. A hypothesis about the term structure of interest rates (the relationship between interest rates and term to maturity) holding that investors demand a premium for bearing interest rate risk. The extent of the premium increases with term to maturity but at a decreasing rate. The two reasons behind the decreasing rate of increase are that duration, a measure of a bond's price sensitivity to interest rate changes, increases at a decreasing rate with term to maturity and that long term interest rates are typically less volatile than short term interest rates. (Tennant, 2006).

Lending institutions determine the interest rate in the credit market by marking up the central bank's base rate, and then supply credit at this rate to those borrowers whom they consider to be creditworthy. Micro financial institutions are therefore price makers and quantity takers, within the limits given by creditworthiness. Again, the willingness of firms and households to pay the rate of interest set by banks in the credit market is a necessary, but not a sufficient condition to obtain credit, and there will always be some sort of 'credit rationing' for those who are unable to provide required collateral (Wolfson 1996). The commercial banks' mark-up on the base rate is determined by their risk and liquidity considerations, and also by the degree of competition in the commercial banking sector. In this approach, liquidity preference determines the structure of interest rates, and not the level of interest rates. The commercial banks' liquidity preference is a determinant of the mark-up and hence the spread between the base rate and the market

rate of interest. If liquidity preference and risk considerations of private banks and, hence, their markups remain constant, the central bank's interest rate setting in the base money market also determines the market rate of interest in the credit market (Smithin 2003).

Under these conditions, changes in the base rate and in the credit market rate of interest are due to changes in the monetary policy stance. Changes in the central bank's base rate will therefore also shift the credit supply curve and affect credit demand and hence real economic activity financed by credit. However, if MFIs liquidity and risk considerations or the degree of competition, and hence their mark-ups, change in the face of a changing base rate of interest, monetary policy may not be able to determine the credit market rate of interest directly. Here an asymmetry may arise as an increasing base rate of interest will always trigger an increasing credit market rate, because MFIs have to recover costs of refinancing and have to gain (minimum) profits. But a decreasing base rate may not be followed immediately by a falling credit market rate, if MFIs liquidity and risk premia increase due to rising uncertainty. Note finally, that the horizontals' view does not imply that monetary policy is free to set the rate of interest at whatever level, irrespective of economic conditions. The importance of the liquidity preference theory on the relationship between lending in form of loans by MFIs in times of rising lending rate, and the response in loan facility repayments from the lenders view point as critical.

2.2.3 Transaction Cost Theory

Transaction cost theory has proven an essential framework for decisions on the vertical boundaries of a firm. In that context, this research paper analyses under what conditions

workout of distressed real estate debt should be done as an internal service of the bank or rather externally by an external loan servicer. Transaction costs are the costs associated to the division of work. Williamson (2000), indicated that transaction occurs when a good or service is transferred across a technologically separable interfaces. One stage of activity terminates and another one begins. Variables that describe a transaction are, among others, the specificity, the uncertainty, and the frequency of the transaction, whether an asset or a service is only or much more valuable in the context of a specific transaction. In the following, human capital specificity (the workout managers), the asset specificity (on loan and real estate level) and the site specificity (the location of the collateral) are taken into account, Reddy (2002).

Goods and services are of a high specificity, if the supply is limited and unique and if there is no comparability. A threat to breach the contract can be seen as untrustworthy, since there is no alternative. A lock-in of one transaction party leads to a hold up. Low specificity exists, if there is a range of homogeneous services or goods and supply is secured. Since goods or services are comparable and competition exists, there is no pricing problem. Furthermore, high competition may imply motivation and quality (Yousaiken 2001).

2.3 Empirical Review

Prior research suggests that MFIs strongly influence economic development and the efficient corporate lending in a lower cost of capital to firms, a boost in capital formations, and an increase in productivity of the firms (Fama, 1985).

Basel, 2004 indicated that formulation of effective lending procedure and policies heightened the importance of internal regulatory mechanisms of banks such as corporate governance leading to better improve bank profitability due to reduction of nonperforming loans. In particular, the use of Six Cs in commercial banks is expected to lower the level of nonperforming loans, improve banks' valuation, cost of capital, performance, and risk-taking behavior. Notwithstanding, the economic relevance of banks and corporate lending framework within banks which has increase market credibility and subsequently enables bank to collect loans at lower cost and lower risks (Basel ,2004). Stafford (2001) studied bank's performance from 27 developing countries. They find evidence that there is higher valuation of firms in countries with better corporate lending practices.

Karabulut and Bilgin (2007) carried out a study with the purpose of examining the impact of the unlimited deposit insurance on Non-performing Loans (NPLs) and market discipline. They argued that deposit insurance program play a crucial role in achieving financial stability. Governments in many advanced and developing economies established deposit insurance schemes for reducing the risk of systemic failure of banks. The report shows that deposit insurance has a beneficial effect of reducing the probability of a bank run. However deposit insurance systems have their own set of problems. Deposit insurance systems create moral hazard incentives that encourage banks to take excessive risk. In conclusion, the study shows that unlimited deposit insurance caused a remarkable increase at Non-performing Loans (NPLs) for the commercial banks. What this means is

that deposit insurance institutions established by monetary authorities must re-examine the current policy of blanket guarantee of deposits in the banking sector.

De Graeve (2004) estimates the determinants of the interest rate-pass through on Belgian banks and find that banks with more market power pursue a less competitive pricing policy. In a microeconomic analysis of Spanish banks, Lago and Salas (2005) provide evidence that a mixture of price adjustment costs and bank market power causes price rigidity and asymmetric pass-through. In a cross-country study, Kok Sørensen and Werner (2006) show that differences in the pass-through process across the euro area countries may to some extent be explained by national differences in bank competition. Finally, in another euro area based study, Gropp et al. (2007) provide evidence that the level of banking competition has a positive impact on the degree of bank interest rate pass-through.

Maudos and Fernandez de Guevara (2004) analyzed interest margins in the principal European banking countries over the period 1993–2000 by considering banks as utility maximizers bearing operating costs. They found that factors that explain interest margins are the competitive condition of the market, interest rate risk, credit risk, operating expenses, and Microfinance institutions risk aversion among others. Elsewhere Angbazo (1997) tested the hypothesis that Microfinance institutions with more risky loans and higher interest rate risk select lending and deposit rates so as to earn wider net interest margins. He used United States bank data from 1989–93 and found evidence in support of the hypothesis.

Bercoff, Giovanni and Grimard, (2002) examined the fragility of the Argentinean Banking system over the 1993-1996 period. They argue that NPLs are affected by both bank specific factors such as interest rate spread and macroeconomic factors. To separate the impact of bank specific and macroeconomic factors, the authors employ survival analysis. Using a dynamic model and a panel dataset covering the period 1985-1997 to investigate the determinants of problem loans of Spanish commercial and saving banks, Salas and Saurina (2002) reveal that real growth in GDP, rapid credit expansion, bank size, capital ratio and market power explain variation in NPLs.

Rajan and Dhal (2003) utilize panel regression analysis to report that favorable macroeconomic conditions (measured by GDP growth) and financial factors such as maturity, cost and terms of credit (interest margin), banks size, and credit orientation impact significantly on the NPLs of commercial banks in India. Using a pseudo panel-based model for several Sub-Saharan African countries, Fofack (2005) finds evidence that economic growth, real exchange rate appreciation, the interest rate, net interest margins, and inter-bank loans are significant determinants of NPLs in these countries. The author attributes the strong association between the macroeconomic factors and non-performing loans to the undiversified nature of lending rates by the commercial banks (Lago and Salas, 2005).

Peek and Rosengreen (1992) investigated the link between bank capital and bank lending. In a similar vein, Bernanke and Gertler (1987), and Holstrom and Triole (1997) make a point that in cases where there are credit constraints, bank capital will determine the

strength of lending. Finally, Furfine (1995), and Diamond and Rajans (1999) point out that a link between capital requirements and regulations affects loan growth, while Hellman, Murdock, and Stiglitz (1998) argue that capital requirements can have a perverse effect on lending.

Ngugi (2001) analyzed the interest rates spread in Kenya from 1970 to 1999 and found that interest rate spread increased because of yet-to-be gained efficiency and high intermediation costs. Increase in spread in the post-liberalization period was attributed to the failure to meet the prerequisites for successful financial reforms, the lag in adopting indirect monetary policy tools and reforming the legal system and banks' efforts to maintain threatened profit margins from increasing credit risk as the proportion of non-performing loans. She attributed the high non-performing loans to poor business environment and distress borrowing, owing to the lack of alternative sourcing for credit when banks increased the lending rate, and the weak legal system in enforcement of financial contracts. According to her findings, fiscal policy actions saw an increase in Treasury bill rates and high inflationary pressure that called for tightening of monetary policy. As a result, banks increased their lending rates but were reluctant to reduce the lending rate when the Treasury bill rate came down because of the declining income from loans. They responded by reducing the deposit rate, thus maintaining a wider margin as they left the lending rate at a higher level. Postulating an error correction model and using monthly data for the study period, Ngugi (2001) found that for Kenya, rising inflation resulting from expansionary fiscal policy, tightening of monetary policy, yet-to-be realized efficiency of banks and high intermediation costs explained interest rate spreads.

2.4 Determinants of Lending rates

Numerous demand and supply side factors affect bank lending. On the supply side, reduced bank lending may come about because MFIs have insufficient capital for lending due to tight monetary policy and more stringent regulations such as stricter requirements on capital adequacy ratios. The accumulation of NPLs in Asia may be a particularly important influence hindering the banking system from performing its intermediary functions. An important demand side factor is the weakened status of borrowers' balance sheets. In a number of countries, the corporate sector has been struggling to deal with high debt burdens and overcapacity. Falling asset prices have adversely affected their net worth.

2.4.1 Market structure

Market structure encompasses the degree of competition, which reflects the number of market players and the diversity of financial assets, the market share of individual participants, ownership structure and control, policy regime (controlled vs uncontrolled), and the adequacy of the legal and regulatory framework (Fry, 1995). In a market where the government sets interest rates and credit ceilings, allocation of resources is inefficient because of uneven credit rationing criteria and the lack of incentive by MFIs to compete for public deposits. In addition, the allocation of funds to poor performing sectors increases the credit risk for MFIs. With interest ceilings, however, MFIs are constrained in charging the appropriate interest rate on loans, and the only option is to offer the minimum possible interest rate on deposits. Further, the presence of government owned

and controlled MFIs create an uncompetitive environment and to some extent make it difficult to enforce the set regulatory framework, weakening the stability of the banking sector.

Financial reform emphasizes the abolition of interest rate and credit ceilings and the promotion of a competitive environment with reduced government control and ownership. Although achieving competitiveness does not imply nonexistence of an interest rate spread, Ho and Saunders (1981) note that the size of the spread is much higher in a non-competitive market, which also calls for strengthening the regulatory and legal framework to enhance the stability of the market. Caprio (1996) notes that a weak legal system, where the courts are not oriented toward prompt enforcement of contracts and property rights are ill defined, increases credit riskiness and MFIs have no incentive to charge lower rates.

Cho (1988), in addition, observes that the liberalization theory overlooks endogenous constraints to efficient allocation of resources by the banking sector, where, in the absence of a well functioning equities market, efficient allocation of capital is not realized even with financial liberalization. Fry (1995) explains that in the absence of direct financial markets and an equity and bonds market, financial institutions absorb too much risk, as business enterprises rely excessively on debt finance. Thus, conclude Demirguc-Kunt and Huizinga (1997), the interest spread fluctuates, reflecting the substitution between debt and equity financing. As the equity market expands, offering competitive returns, MFIs increase their deposit rates to compete for funds from the

public. The expanded market also reduces the risk absorbed by the banking sector and banks charge competitive lower lending rates, reducing the interest rate margin. Thus, remarks Fry (1995), even in an oligopolistic banking system, there is need for competition from the direct financial market. Empirical results show that market imperfections widen the MFIs lending rate. Ho and Saunders (1981), approximating market power with bank size, found a significant difference in spread between large and small banks, where MFIs had higher spreads than the large banks.

Competition in the banking sector has been analysed by, amongst other methods, measuring market power (*i.e.* a reduction in competitive pressure) and efficiency. A well-known approach to measuring market power is suggested by Bresnahan (1982) and Lau (1982), recently used by Bikker (2003) and Uchida and Tsutsui (2005). They analyze bank behaviour on an aggregate level and estimate the average conjectural variation of banks. A strong conjectural variation implies that a bank is highly aware of its interdependence (via the demand equation) with other banks in terms of output and prices.

According to the seminal papers by Klein (1971) and Monti (1972) on MFIs' interest rate setting behaviour, MFIs can exert a degree of market pricing power in determining loan and deposit rates. The Monti-Klein model demonstrates that interest rates on MFI products with smaller demand elasticities are priced less competitively. Hence, both the levels of bank interest rates and their changes over time are expected to depend on the degree of competition. With respect to the level of MFI interest rates, Maudos and

Fernández de Guevara (2004) show that an increase in banks' market power (a reduction in competitive pressure) results in higher net interest margins. In addition, Corvoisier and Gropp (2002) explain the difference between bank retail interest rates and money market rates by bank's product-specific concentration indices. They find that in concentrated markets, retail lending rates are substantially higher, while deposits rates are lower.

Regarding the effect of competition on the way lending institutions adjust their lending rates, Hannan and Berger (1991) find that lending rates are significantly more rigid in concentrated markets. Especially in periods of rising monetary policy rates, MFIs in more consolidated markets tend not to raise their lending rates, which may be indicative of (tacit) collusive behaviour among banks. In a cross-country analysis, both Cottarelli and Kourelis (1994) and Borio and Fritz (1995) find a significant effect of constrained competition on the monetary transmission mechanism. Thus, lending rates tend to be stickier when MFIs operate in a less competitive environment, due to, *inter alia*, the existence of barriers to entry.

2.4.2 Cost of funds

There are a number of loan cost factors that influence the way financial institutions set lending rates. Among these, the costs of debt and equity funding and the losses that MFIs expect to incur on their lending activities are particularly important. Previous Reserve Bank research has noted that the increase in the cost of debt funding primarily due to higher costs of deposits and long-term wholesale debt has been a key driver of the increase in Deposits' lending rates relative to the cash rate in recent years. This assumes

banks' return on equity targets have not changed over recent years. As such, changes in the contribution of equity costs in funding loans are determined solely by changes in the share of equity in funding. Operational costs, especially staff costs, for most micro financial institutions are high and this has a bearing on the determination of base lending rates. In particular, staff loans had, on one occasion, been explicitly included in the calculation of the base lending rate. This, it can be inferred that these loan costs were being passed directly onto clients. The high staff costs may be due to the fact that new MFIs entering the market has to poach staff from existing MFIs, therefore resulting in higher salaries which become sticky downwards.

Although increased debt funding costs have been the most important determinant of the increase in lending rates relative to the cash rate, our estimates suggest that there has been a material effect from increases in equity capital and expected losses. This is particularly the case for lending to businesses, as both the share of equity capital used to fund business loans and banks' perceptions of the risks associated with this form of lending have increased noticeably. Increases in equity capital and expected losses are estimated to have had a smaller effect on residential mortgage lending rates. A consequence of higher equity funding costs and higher expected losses is that the major banks' average lending rates have risen relative to their debt funding costs over the past couple of years. This has contributed to the increase of around 15 basis points in their average net interest margin from historical lows in 2008. The pricing of loan amount theoretically depends on the cost of funds, transaction cost, investment income, and mark-up. However, there are two issues which make a distinct difference in microfinance.

2.4.3 Macroeconomic Environment

The economic conditions affects the performance of the banking sector by influencing the ability to repay borrowed loans; the demand for loans with the unpredictable returns from investment and the quality of collateral determine the amount of premium charged and therefore the cost of borrowed funds to the investors. With an unstable macroeconomic environment and poor economic growth, investors face uncertainty about investment return and these raise the lending rates as the level of nonperforming loans goes up, squeezing the MFIs margin. For example, poor output prices reduce firm profitability while reduced asset prices reduce the value of assets for collateral and therefore the credit-worthiness of the borrowers. As a result, return on investment declines, increasing the level of non-performing loans, and MFIs charge high-risk premiums to cover their default risk.

Cukierman and Hercowitz (1990) attempt to explain the relationship between anticipated inflation and the degree of market power measured as the spread between the debit and credit rates. They find that when the number of banking firms is finite, an increase in anticipated inflation leads to an increase in interest spread. When banking firms approach infinity (competitive case), there is no correlation between interest spread and inflation because the spread tends towards marginal cost of intermediation as the number of banks increases.

2.4.4 Risk factors

MFIs are exposed to various risks, including interest risk, credit risk, foreign exchange risk and legal risk, as a result of uncertainty, information asymmetry and the policy environment. For example, when MFIs hold unmatched maturities of loans they are exposed to interest rate risk. This is especially so when banks raise funds through short-term deposits to finance long-term loans or purchase security with longer maturity. Interest rate risk is also defined by variability of the market interest rate.

MFIs are exposed to credit risk due to information asymmetry. MFIs do not know *ex ante* the proportion of loans that will perform and even when they carry out appraisals, credit losses are not fully eliminated. To cover credit risk, banks charge a premium whose size depends on the MFIs credit policy, interest on alternative assets, amount borrowed, and type of client and size of collateral. This increase the effective rate paid by borrowers and reduces the demand for loans.

Foreign exchange risk arises especially when MFIs fund themselves abroad, while legal risk is faced when the legal framework for collateral and bankruptcy is not clear. Liquidity risk arises if depositors demand to withdraw their funds and leave the MFIs with insufficient reserves (for example during a bank run customers withdraw their deposits in response to their loss of confidence with the bank).

2.5 Summary of literature review

From the review of literature, studies done have focused mainly on the relationship between interest rates and nonperforming loans in the commercial banking sector as

indicated by Kamore (2012) and Kiragu (2011). Siddigui, Malik and Shah (2012) carried out a study on the impact of interest rates volatility on Nonperforming loans in Pakistan. Others like Wanyonyi (2008) on the study on the relationship between the use of the Cs of credit and the Non-performing loans of MFIs in Kenya. However, the evidence has been contrasting as the effect has not been conflicting. The banking system as a whole is immeasurably helped rather than hindered by an increase in interest rates. A more accurate measurement of how fluctuations in market interest rates affect banking firms largely depends on the sensitivity of Microfinance institutions' assets and liabilities toward variations in open market rates. Therefore, a need to determine the determinants of lending interest rates in deposit taking MFIs in Kenya.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research design, sampling methods, and techniques used in data collection and analysis. This chapter presents the methodology that was used to carry out the study. This includes the study design, target population, data collection tools to be used and data collection technique, and data analysis method and presentation.

3.2 Research Design

This study used a descriptive survey. A descriptive study attempts to describe or define a subject, often by creating a profile of a group of problems, people, or events, through the collection of data and tabulation of the frequencies on research variables or their interaction, (Cooper and Schindler, 2006). Descriptive Research is the investigation in which quantity data will be collected and analyzed in order to describe the specific phenomenon in its current trends, current events and linkages between different factors at the current time. Descriptive research design was chosen because it enabled the researcher to establish a relation between variables. A descriptive research should define questions, people surveyed, and the method of analysis prior to beginning data collection.

3.3 Population of Study

Target population in statistics is the specific population about which information is desired. According to Ngechu (2004), a population is a well defined or set of people, services, elements, events, group of things or households that are being investigated. The

population of this study consisted of all 12 Deposit Taking Microfinance Institutions in Kenya and therefore carried out a census survey (CBK, 2013).

3.4 Data collection

The study used both primary and secondary data sources in gathering data for analysis. The primary data was collected using semi-structured questionnaires. Questionnaires was considered to collect qualitative data because they are cheap, respondents are given time to fill-in the questionnaires, do not require as much effort from the questioner as verbal or telephone surveys, and often have standardized answers that make it simple to compile data. The questionnaire had both open and close-ended questions and was administered through drop and pick to managers, financial managers and credit officers from the DTMFIs comprising 36 respondents. The study also used secondary data sources in gathering data for analysis. Data on determinants of lending rates trends and monthly averages was obtained from the DTMs. Secondary data was collected from journals and annual report from DTMFIs and Central Bank of Kenya on financial statements and lending interest rate of DTMFIs in Kenya for the last five years from 2010 -2013 (CBK, 2013)

3.4.1 Validity

According to Rousson, Gasser and Seifer (2002), validity is the degree by which the sample of test items represents the content the test is designed to measure. Content validity which is employed by this study and is a measure of the degree to which data to be collected using a particular instrument represents a specific domain or content of a

particular concept (Gillham, 2008). To establish the validity of the research instrument the research sought the opinions of experts in the field of the study especially the researcher's supervisor.

According to Rousson, Gasser and Seifer (2002), reliability refers to the consistency of measurement and is frequently assessed using the test-retest reliability method. The questionnaire was piloted from 10 credit officers from DTMFIs which was not included in the study sample. This helped in correcting any ambiguity in the questionnaire and enabled the study to collect the relevant information to answer the research questions. The pre test was conducted to enhance clarity of the questionnaires.

3.4.2 Reliability

Reliability was obtained by correlating the scores of each questionnaire for each variable. Pearson product moment correlation coefficient (r) was used to test reliability of the questionnaire. The correlation coefficient of the halves was correlated by Spearman Brown Prophecy formula. The pre-test was conducted to enhance clarity of the questionnaires. The following formula was used to get the coefficient that is the reliability estimate.

$$R_{xx1} = \frac{S_1^2}{S_x^2}$$

Where x = Performance on the First Measurement

X1 Performance on 2nd measurement

R_{xx1} = Correlation coefficient between x and x1

S_1^2 = Estimate variance of the true Score

S_x^2 = Calculated variance of the observations

$R_{xx}^1 = ?$

The questionnaires was considered reliable if the value for Re is closer to 1.0 getting consistent responses when the same question was posed to the same respondent more than once.

3.5 Data Analysis

The collected data was thoroughly examined, summarized and tabulated. Data was coded and entered into the Statistical Package for Social Sciences (SPSS 21) for analysis. SPSS was used to perform the analysis as it aids in organizing and summarizing the data by the use of descriptive statistics mean and standard deviation. Data presentation was done by the use of bar charts and graphs, percentages and frequency tables. The inferential statistic regression and correlation was done to establish the determinant of lending rates influence lending interest rates in DTMFIs in Kenya

A linear regression model of determinants of lending rate for the DTMFIs was applied to examine the relationship between the variables. The model treats lending rate for the DTMFIs as the dependent variable while the independent variables were determinants of lending rate which include Market structure, Cost of funds, risks and Economic Conditions.

The response on factor influencing lending rate was measured by computing indices based on the responses derived from the Likert-Scaled questions. The relationship equation was represented in the linear equation below.

$$Y (\text{DTMFIs Lending Rates}) = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where

Y= DTMFIs Lending Rates

α = Constant Term

β_1 = Beta coefficients

X_1 = Market structure

X_2 = Cost of funds

X_3 = Economic Conditions

ϵ = Error Term

CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

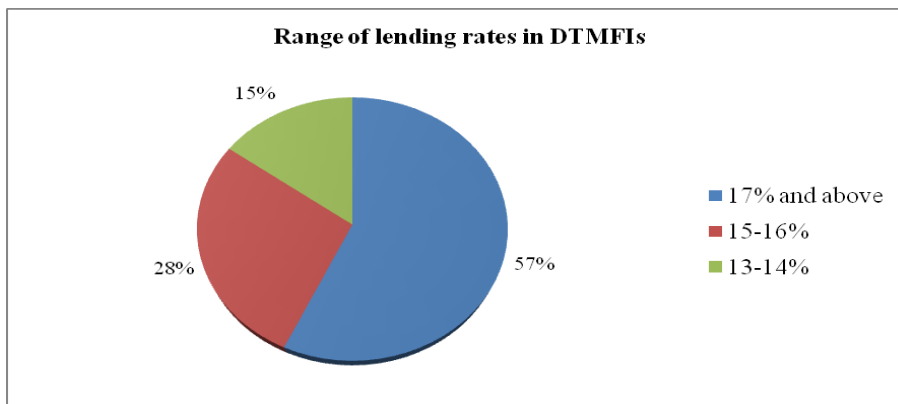
This chapter analyzes the findings to understand the determinants of lending interest rates based on the objective of this study which was to establish determinants of lending interest rates in Deposit Taking Microfinance Institution in Kenya. This chapter focused on data analysis, interpretation and presentation and presents the discussion and conclusion of the findings.

4.2 Descriptive statistics

4.2.1 Background information

The study population was 36 where 33 respondents comprising of managers, financial managers and credit officers from the DTMFIs responded and returned the questionnaires constituting to 91 % response rate.

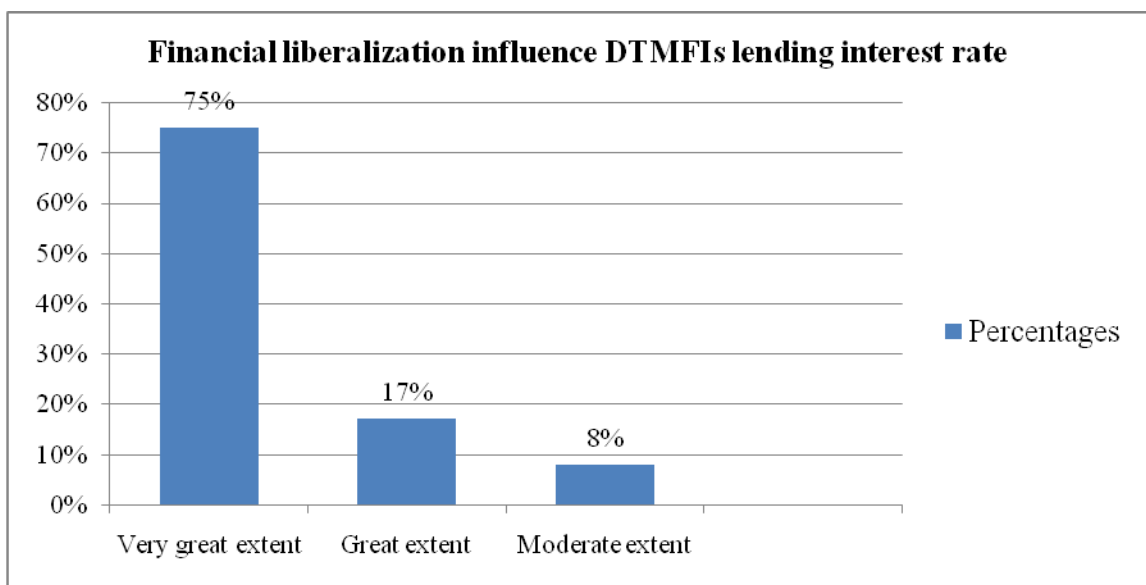
Figure 4.1: Range of lending rates adopted in DTMFI



The study sought the range of lending rates the DTMFIs had adopted. From the findings most DTMFIs lending rates range from 17% and above, 28% of the DTMFIs had lending rate ranging from 15-16% while 15% of DTMFIs had lending rates ranging from 13-14%. This clearly indicated that majority of the DTMFIs had 17% lending interest rate.

Financial liberalization influence DTMFIs lending interest rate

Figure 4.2 Financial liberalization



The study sought extent to which financial liberalization influenced DTMFIs lending interest rates. From the findings, 75% of the respondents indicated that financial liberalization influence DTMFIs lending interest rates to a very great extent, 17% of the respondents indicated that financial liberalization influence DTMFIs lending interest rates to a great extent while 8% of the respondents indicated that financial liberalization influenced DTMFIs lending interest rates to a moderately extent. The respondents explained that due to liberalization of the market, DTMFIs in Kenya enjoy autonomy

from the banking industry in the Ministry of Finance and their entry to the financial sector is free. This greatly influenced business operations and market conditions of the DTMFIs hence influence the setting of lending interest rates.

This is in line with Cho (1988), who observed that the liberalization certainly needs to be complemented by institutional development, such as to develop the corporate and government debt markets. Cho (1988) further stated that liberalization theory overlooks endogenous constraints to efficient allocation of resources by the banking sector, where, in the absence of a well functioning equities market, efficient allocation of capital is not realized even with financial liberalization.

4.2.2 Factors that influences Deposit Taking MFIs lending rates

Table 4.1 Factors that influences Deposit Taking MFIs lending rates

| | Frequency | | % of yes |
|--|-----------|----|----------|
| | Yes | No | |
| Better contract enforcement | 21 | 12 | 63 |
| Efficiency of the legal system | 25 | 8 | 77 |
| Lack of corruption | 23 | 10 | 69 |
| Deposit insurance scheme | 20 | 13 | 61 |
| Prudential regulation and bank supervision | 27 | 6 | 81 |

The study investigated the factor that mostly influenced Deposit Taking MFIs lending interest rates. From the findings, 81%, 77%, 69%, 63% and 61% of the respondents

indicated that prudential regulation and bank supervision, efficiency of the legal system, lack of corruption, better contract enforcement and deposit insurance scheme were the factors that mostly influenced Deposit Taking MFIs lending interest rates. This implied that factors such as better contract enforcement, efficiency of the legal system and prudential regulations do not prohibit independent actions by DTMFIs, rather they encourages it the DTMFIs to manage risks in a proper manner. This is in line with Caprio (1996) who notes that a weak legal system, where the courts are not oriented toward prompt enforcement of contracts and property rights are ill defined, increases credit riskiness and DTMFIs have no incentive to charge lower rates.

4.2.3 Cost factors that influence determination of lending rates in DTMFIs in Kenya

Table 4. 2 Cost factors that influence determination of lending rates

| Statement | Mean | St Dev |
|---|------|--------|
| Statutory reserve requirement | 4.40 | 0.43 |
| Core liquid asset requirement | 4.68 | 0.87 |
| Central Bank of Kenya supervisory fee | 4.54 | 0.98 |
| Taxation for the Deposit Taking MFIs withholding taxes, stamp duties, transaction taxes, and value added taxes, profit taxes and license fees | 4.77 | 0.64 |
| Weighted average deposit rate, reserve and liquidity requirements, mandatory investment levels | 4.00 | 0.46 |
| Management fees | 4.30 | 0.78 |
| Staff costs | 4.12 | 0.83 |
| Transaction costs | 4.55 | 0.69 |
| Communication costs | 3.67 | 0.44 |
| Costs of provisioning | 4.75 | 0.76 |
| Projected profit | 4.01 | 0.54 |
| Cost of capital (return on equity) | 4.50 | 0.71 |
| Internal cash reserves | 3.54 | 0.84 |

The Table 4.2 shows the respondent's response on the extent to which they agreed with the given cost factors that influence lending rates in Deposit Taking MFIs in Kenya. From the findings, majority of the respondents strongly agreed that taxation for the DTMFIs withholding taxes, stamp duties, transaction taxes, and value added taxes, profit taxes and license fees are determinants of lending rates in Deposit Taking MFIs in Kenya. Majority of the respondents strongly agreed that costs of provisioning, core liquid asset requirement, transaction costs, Central Bank of Kenya supervisory fee, cost of capital determines the lending rates in Deposit Taking MFIs in Kenya as indicated by a

mean of 4.77, 4.75, 4.68, 4.55, 4.54 and 4.50. The study found that respondents agreed that statutory reserve requirement, management fees, staff costs and that weighted average deposit rate, reserve and liquidity requirements and mandatory investment levels determines the lending rates in DTMFIs 4.40, 4.30, 4.12 and 4.00. The study further found that most of the respondents agreed that communication costs and internal cash reserves determines the lending rates in DTMFIs as indicated by a mean of 3.67 and 3.54. The implied that costs factors such as taxes, transactions, cost of capital, statutory reserve requirement, management fees, staff costs and that weighted average deposit rate, reserve and liquidity requirements, mandatory investment influenced the lending rates in DTMFIs. This is in line with Borio and Fritz (1995) who stated that the pricing of loan amount theoretically depends on the cost of funds, transaction cost, investment income, and mark-up.

4.2.4 Economic Conditions influence determination of lending rates

Table 4.3 Economic Conditions

| Economic Conditions | Mean | St |
|-----------------------|------|------|
| T-bill/GRZ bond rates | 3.79 | 0.32 |
| Inflation | 4.67 | 0.64 |
| Foreign Exchange rate | 4.61 | 0.59 |

The study investigated the influence of economic conditions in determining the lending rates in DTMFIs in Kenya. From the findings, majority of the respondents strongly agreed that inflation conditions and foreign exchange rates are the determining factors of the lending interest rates in DTMFIs as indicted by a mean of 4.76 and 4.61 with a

standard deviation of 0.64 and 0.59 respectively. Most of the respondents agreed to a moderate extent that T-bills /GRS bond rates determine the lending interest rates as indicated by a mean of 3.79 with a standard deviation of 0.32. This implied that economic status in the market is a determinant of lending rates in DTMFIs. This is in line with Cukierman and Hercowitz (1990) who explained the relationship between anticipated inflation and the degree of market power measured as the spread between the debit and credit rates.

4.2.5 Market factors that influence determination of lending rates in DTMFIs

Table 4.4 Market factors that influence determination of lending rates in DTMFIs

| Market Conditions | Mean | St dev |
|--|------|--------|
| Credit risk premium due to various risks, including interest risk, credit risk, foreign exchange risk and legal risk, as a result of uncertainty | 4.53 | 0.79 |
| Liquidity premium or Excess Liquidity in the Inter-Bank Market | 4.51 | 0.83 |
| Competition leading to Interbank rate | 4.56 | 0.53 |
| Overnight facility rate | 3.55 | 0.62 |
| Policy rate that is linked to the Open Market Operations | 3.89 | 0.85 |
| Demand and supply | 4.32 | 0.66 |
| Industry trend | 4.21 | 0.87 |
| Market expectations | 3.65 | 0.59 |
| Interbank rate | 4.58 | 0.98 |

The study sought to establish the market conditions influencing lending rate in DTMFIs. From the findings, majority of the respondents strongly agreed that interbank rate, competition leading to Interbank rate and credit risk premium due to various risks, including interest risk, credit risk, foreign exchange risk and legal risk, as a result of uncertainty 4.58, 4.56 and 4.53 influence the lending rate in DTMFIs. The respondents agreed that demand and supply, industry trend and policy rate that was linked to the open market operations determines the lending rate in DTMFIs as indicated by a mean of 4.32, 4.21 and 3.89. The study further found that respondents agreed that market expectations and overnight facility rate determined the lending rate of DTMFIs as indicated by a mean of 3.65 and 3.55. This implies that there were various markets determinants of lending rate in DTMFIs. This is in line with Cukierman and Hercowitz (1990) who stated that with an unstable macroeconomic environment and poor economic growth, investors face uncertainty about investment return and these raise the lending rates as the level of nonperforming loans goes up, squeezing the MFIs margin.

4.2.6 Lending rates in the Deposit Taking MFIs

Table 4.5 Lending rates in the Deposit Taking MFIs

| Lending rates issues | Mean | Std dev |
|---|------|---------|
| Deposit Taking MFIs Interest rate spread influence the lending rate to borrowers | 4.60 | 0.81 |
| Changes in the values of Deposit Taking MFIs interest rate contributes to changes on Deposit Taking MFIs lending rates | 4.57 | 0.63 |
| During periods of relatively high lending interest rates, loans advanced fall sharply | 4.71 | 0.74 |
| There is a relationship between the unexpected changes in the long-term interest rate and rate of inflation affecting lending rates | 4.47 | 0.80 |
| Interest rate ceilings affect borrowers who may be looking for higher amounts than the one offered by the Deposit Taking MFIs | 4.35 | 0.53 |

The study sought to know the respondents agreed on the given statements on determinant of lending rate in Deposit Taking MFIs. From the findings, majority of the respondents strongly agreed that during periods of relatively high lending interest rates, loans advanced fall sharply as indicated by a mean of 4.71 with standard deviation of 0.74. Most of the respondents agreed that Deposit Taking MFIs Interest rate spread and changes in the values of interest rate influence the lending rate to borrowers as indicated by a mean of 4.71, 4.60 and 4.57 with a standard deviation of 0.74, 0.81 and 0.63 respectively. The study also found that there was a relationship between the unexpected changes in the long-term interest rate and rate of inflation affecting lending rates and that interest rate ceilings affected borrowers who may be looking for higher amounts than the

one offered by the commercial banks as indicted by a mean of 4.47 and 4.35 with a standard deviation of 0.80 and 0.53 respectively. This implies those interest rates that are set too high for sustainable microfinance constrain poor people's access to financial services.

4.7.1 Effect of interest rate ceiling on the Lending rate of the Deposit Taking MFIs

On explaining the effect of interest rate ceiling on the financial performance of the Deposit Taking MFIs, the respondents indicated that people who want finance, but due to their circumstances does not qualify at the ceiling interest rate are denied access. Interest rate ceiling they cause charges to drift up to the ceiling and they also encourage illegal lending. Interest rate ceilings do not necessarily protect poor customers and can, in fact, hurt them by reducing their access to financial services. The respondents also indicted that interest ceilings prevent banks from negotiating terms of inter-bank loans and insufficient penalties for shortfalls in required reserves. This implies that MFIs are constrained in charging the appropriate interest rate on loans due to interest ceilings and the only option is to offer the minimum possible interest rate on deposits. This is in line with Fry, (1995) who stated that in a market where the government sets interest rates and credit ceilings, allocation of resources is inefficient because of uneven credit rationing criteria and the lack of incentive by MFIs to compete for public deposit.

Type of loan interest rate practice in the bank

Table 4.6 Type of loan interest rate practice in the bank

| Statement | Frequency | Percent |
|----------------------|-----------|---------|
| Float interest rates | 21 | 64 |
| Fixed interest rate | 19 | 58 |
| Both | 29 | 87 |

The study sought the type of loan interest rate practices in DTMFI. From the findings, majority 87% of the respondents indicated that DTMFI offers both float and fixed interest rate, 64% of the respondents indicated that DTMFI offers float interest while 58% of the respondents indicated that DTMFI offers fixed interest rates. This implied that DTMFIs offers float and fixed interest rates.

4.2.7 Lending Rate

Extent to which lending interest rates affect financial performance of Deposit Taking MFIs

Table 4.7 Lending interest rates affect financial performance

| | Mean | Std Dev |
|--|------|---------|
| Lending rate dictates the profitability of the Deposit Taking MFIs | 4.67 | 0.72 |
| Lending rate induces competition from other financial institutions | 4.50 | 0.56 |
| Lending rate affects feasible investment opportunities with future growth potential | 4.39 | 0,78 |
| Changes in loan supply is greatly influenced lending rates in by Deposit Taking MFIs | 4.58 | 0.98 |

The study sought to know the extent to which the given statement on the lending rates affects financial performance of the DTMFIs. From the findings, majority of the respondents indicated that lending rates dictates the profitability, influence changes in loan supply and induced competition from other financial institutions to a very great extent as indicted by a mean of 4.67, 4.58 and 4.50. The study also found that lending rate affects feasible investment opportunities with future growth potential as indicted by a mean of 4.39 with a standard deviation of 0.78. This implies that the impositions of interest rate used by several microfinance institutions leave operational costs higher and make them raise the lending rates.

4.3 Correlation analysis

Table 4.8 Correlations Analysis

| | | DTMFIs Lending Rates | Market structure | Cost of funds | Economic Conditions |
|----------------------|---------------------|----------------------|------------------|---------------|---------------------|
| DTMFIs Lending Rates | Pearson Correlation | 1 | | | |
| | Sig.(2-tailed) | 0.01 | | | |
| | N | 33 | | | |
| Market structure | Pearson Correlation | .547* | 1 | | |
| | Sig. (2-tailed) | .01 | | | |
| | N | 33 | 33 | | |
| Cost of funds | Pearson Correlation | .463* | .218 | 1 | |
| | Sig. (2-tailed) | .03 | .247 | | |
| | N | 33 | 33 | 33 | |
| Economic Conditions | Pearson Correlation | .657* | .471* | .463* | 1 |
| | Sig.(2-tailed) | .02 | .009 | .010 | |
| | N | 33 | 33 | 33 | 33 |

Correlation analysis was used to establish the strength of association between variables as shown on Table 4.8. A correlation analysis was conducted to establish the determinants of lending interest rates in Deposit Taking Microfinance Institution in Kenya.

From the findings, the strength of association between market structure and lending interest rates in Deposit Taking Microfinance Institution in Kenya was strong and positive having scored a correlation coefficient factor of $r= 0.547, P=0.01 < 0.05$ and a

95% precision level. The correlation was statistically significant since it had a P-Value of 0.01 which is less than 0.05 hence statistically significant.

The study found that there exist a strong and positive correlation between cost of funds and lending interest rates in Deposit Taking Microfinance Institution in Kenya. Correlation coefficient factor of $r=0.463$, $P=0.03<0.05$ and a 95% confidence level was statistically significant since it had a P- Value of 0.03 which is less than 0.05. The study found that there exist a strong and positive correlation between economic conditions and lending interest rates in Deposit Taking Microfinance Institution. Correlation coefficient factor of $r=0.657$, $P=0.03<0.05$ and a 95% precision level was statistically significant since it had a P- Value of 0.02 which is less than 0.05.

4.4 Regression analysis

The study sought to establish determinants of lending interest rates in Deposit Taking Microfinance Institution in Kenya. A linear regression model of determinants of lending rate versus DTMFIs lending rates was applied. The relationship equation was represented in the linear equation below.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where: Y= DTMFIs Lending Rates, α = Constant Term, β_1 = Beta coefficients, X_1 = Market structure, X_2 = Cost of funds, X_3 = Economic Conditions, e = Error Term

Model Summary

Table 4.9 Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|---------|----------|-------------------|----------------------------|-------------------|----------|------|-------|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .822(a) | .675 | .669 | 0.29 | 0.00665 | 5 | .342 | 2.351 | .01(a) |

a Predictors: (Constant) Market structure, Cost of funds and Economic Conditions

Dependent: DTMFIs Lending Rates

Table 4.9 shows the model summary. The model column of multiple models was reduced to a single regression by SPSS command and with a model indicating 1 implied that there was one linear model being used to determine the lending rate versus determinants of lending interest rates. R is the square root of R-Squared. R is the correlation between the observed and predicted values of dependent variable. This implies that there was association of 0.822 between DTMFIs lending rates and determinants of lending interest rates. R-Squared is the proportion of the variance in the dependent variable of DTMFIs lending rates that was explained by variations in the market structure, cost of funds and economic conditions. This implied that there was a variance of 67.5% between variables in general. Adjusted R^2 is called the coefficient of determination which indicates how DTMFIs lending rates varies with variation in influence of market structure, cost of funds and economic conditions. The study established that there existed a significance positive variation between DTMFIs lending rates and determinants of lending interest rates as $r=0.669$, $P=0.01 < 0.05$.

ANOVA (b)

Table 4. 10: ANOVA (b)

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|-------|---------|
| 1 | Regression | 12.543 | 8 | .537 | 4.871 | 0.01(a) |
| | Residual | 56.571 | 25 | .049 | | |
| | Total | 69.114 | 33 | | | |

a Predictors: (Constant) Market structure, Cost of funds and Economic Conditions

Dependent: DTMFIs Lending Rates

Table 4.10 shows the regression, residual and total variance. The study established that there existed a significant goodness of fit between variable as $F=4.871$, $P=0.01 < 0.05$. The strength of variation of the predictor values of market structure cost of funds and economic conditions had a significant influences on the DTMFIs of lending rates at 95% confidence level.

Coefficients (a)

Table 4.11: Coefficients (a)

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|---------------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 7.000 | .467 | | 4.120 | 0.01 |
| | Market structure | 2.749 | .426 | 1.712 | 4.313 | 0.01 |
| | Cost of funds | 1.678 | .322 | .645 | 2.906 | 0.03 |
| | Economic Conditions | 1.567 | .231 | .559 | 2.769 | 0.04 |

a Predictors: (Constant) Market structure, Cost of funds and Economic Conditions

Dependent: DTMFIs Lending Rates

$$Y = 7.000 + 2.749X_1 + 1.678X_2 + 1.567X_3$$

Table 4.11 shows the Coefficients (a) the study obtained. From the above regression model, it was found that DTMFIs lending rates would be at 7.000 holding, market structure, cost of funds and economic conditions constant at zero (0). The study established that there existed a significant positive relationship between market structure and DTMFIs lending rates as 2.749, t=4.313, P=0.03<0.05.

Researcher had investigated the influence of cost of funds on DTMFIs lending rates, the evidence provided by the coefficients table shows that increase in the cost of funds relatively increase lending rates in DTMFIs as r= 1.678, t=2.906, P= 0.03<0.05. The study found that economic conditions had significant positive impact on lending rates in

DTMFIs as $r=1.567$, $t=2.769$, $P= 0.04<0.05$. This clearly indicated that there existed a positive relationship between determinants of lending interest rates and the lending rates in Deposit Taking Microfinance Institution in Kenya.

It was evident that DTMFIs lending rates increased because of market structure, cost of funds and economic conditions. The findings were in line with Ramakrishnan and Thakor, (2000) who stated that lending rates are determined not only by real or potential competition, but also, by the characteristics of borrowers and lenders. Gonzalez (2010) suggested that for the microfinance sector, small loans with low default increase profitability rates and incur high administrative expenses. The market for commercial loans from Microfinance institutions is competitive and rates on these loans have tended to respond to reductions in deposits rates and other costs.

4.5 Summary and interpretation of findings

The study revealed that better contract enforcement, efficiency of the legal system and prudential regulations do not prohibit independent actions by DTMFIs, rather they encourages it the DTMFIs to manage risks in a proper manner. This is in line with Caprio (1996) who notes that a weak legal system, where the courts are not oriented toward prompt enforcement of contracts and property rights are ill defined, increases credit riskiness and DTMFIs have no incentive to charge lower rates. The study revealed that interbank rate, competition leading to Interbank rate and credit risk premium due to various risks, including interest risk, credit risk, foreign exchange risk and legal risk, as a result of uncertainty influence the lending rate in DTMFIs. The respondents agreed that

demand and supply, industry trend and policy rate that was linked to the open market operations and overnight facility rate determines the lending rate in DTMFIs.

The study further found that the effect of interest rate ceiling on the financial performance of the Deposit Taking MFIs, the respondents indicated that people who want finance, but due to their circumstances does not qualify at the ceiling interest rate are denied access. Interest rate ceiling cause charges to drift up to the ceiling and they also encourage illegal lending, they prevent banks from negotiating terms of inter-bank loans and insufficient penalties for shortfalls in required reserves. This is in line with Fry, (1995) who stated that in a market where the government sets interest rates and credit ceilings, allocation of resources is inefficient because of uneven credit rationing criteria and the lack of incentive by MFIs to compete for public deposit.

From the findings, lending rates dictates the profitability, influence changes in loan supply and induced competition from other financial institutions and affects feasible investment opportunities with future growth potential. The impositions of interest rate used by several microfinance institutions leave operational costs higher and make them raise the lending rates. A correlation analysis was conducted to establish the determinants of lending interest rates in Deposit Taking Microfinance Institution in Kenya. From the findings, the strength of association between market structure and lending interest rates in Deposit Taking Microfinance Institution in Kenya was strong and positive having scored a correlation coefficient factor of $r= 0.547, P=0.01 < 0.05$ and a 95% precision level. The

correlation was statistically significant since it had a P-Value of 0.01 which is less than 0.05 hence statistically significant.

The study found that there existed a strong and positive correlation between market structure, cost of funds and economic conditions and lending interest rates in Deposit Taking Microfinance Institution. There was association of 0.822 between DTMFIs lending rates and determinants of lending interest rates. There was a variance of 67.5% between variables in general. The study established that there existed a significance positive variation between DTMFIs lending rates and determinants of lending interest rates as $r = 0.669$, $P = 0.01 < 0.05$.

From the above regression model, it was found that DTMFIs lending rates would be at 7.000 holding, market structure, cost of funds and economic conditions constant at zero (0). The study clearly indicated that there existed a positive relationship between determinants of lending interest rates and the lending rates in Deposit Taking Microfinance Institution in Kenya.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

From the discussion of the research findings this objectives have been achieved. This research study hoped to achieve the objectives of establishing the determinants of lending interest rates in Deposit Taking Microfinance Institution in Kenya. This chapter draws the summary, conclusions and makes recommendations on the findings.

5.2 Summary

The study established that majority of the DTMFIs had 17% and above lending interest rate. Financial liberalization influence DTMFIs lending interest rates to a very great extent. The study revealed that due to liberalization of the market, DTMFIs in Kenya enjoy autonomy from the banking industry in the Ministry of Finance and their entry to the financial sector is free. This greatly influenced business operations and market conditions of the DTMFIs hence influence the setting of lending interest rates. The study found that prudential regulation and bank supervision, efficiency of the legal system, lack of corruption, better contract enforcement and deposit insurance scheme mostly influenced Deposit Taking MFIs lending interest rates. The study established that that costs factors such as taxes, transactions, cost of capital, statutory reserve requirement, management fees, staff costs and that weighted average deposit rate, reserve and liquidity requirements, mandatory investment influenced the lending rates in DTMFIs.

Inflation conditions and foreign exchange rates, T-bills /GRS bond rates are determinants of the lending interest rates in DTMFIs. The study established the market conditions factors that influence lending rate in DTMFIs. These are competition leading to interbank rate and credit risk premium due to various risks, including interest risk, credit risk, foreign exchange risk and legal risk. Demand and supply, industry trend and policy rate that was linked to the open market operations determines the lending rate in DTMFIs.

The study found that during periods of relatively high lending interest rates, loans advanced fall sharply while interest rate spread and changes in the values of interest rate influence the lending rate to borrowers. The study also found that there was a relationship between the unexpected changes in the long-term interest rate and rate of inflation affecting lending rates and that interest rate ceilings affected borrowers who may be looking for higher amounts than the one offered. Interest rate ceiling cause charges to drift up to the ceiling and they also encourage illegal lending. DTMFIs offers float and fixed interest rates. From the findings, lending rates dictates the profitability, influence changes in loan supply and induced competition from other financial institutions, lending rate affects feasible investment opportunities with future growth potential.

5.3 Conclusions

This study establishes determinants of lending interest rates in Deposit Taking Microfinance Institution in Kenya. It is concluded that there are various factors that DTMFIs take into consideration when determining the lending rates. Factors that determine lending rates in DTMFIs were usually analyzed in the study, through expert

opinions and by analyzing the dynamics of certain categories, which are usually considered to influence the lending interest rate policy of the DTMFIs. These factors included the cost factors, economic conditions and market factors. Low level of savings and consequently the low supply of loans, insufficient competition in the banking system, the inefficiency and low profitability of banks, uncertainty in the economic environment, the inherited low quality of loan portfolios and institutional limitations determines lending rates in DTMFIs. Inflation conditions, demand for loans, macroeconomic environment and poor economic growth, foreign exchange rates and T-bills /GRS bond rates influenced lending rates in DTMFIs.

The study concludes that factors such as better contract enforcement, efficiency of the legal system and prudential regulations do not prohibit independent actions by DTMFIs, rather they encourages it the DTMFIs to manage risks in a proper manner. Pricing of loan amount theoretically depends on the cost of funds, transaction cost, investment income, and mark-up. The study concludes that economic status in the market is a determinant of lending rates in DTMFIs. An unstable macroeconomic environment and poor economic growth raise the lending rates as the level of nonperforming loans goes up.

5.4 Limitations of the study

The main limitation of the study was inability to include more financial institutions and was limited to DTMFIs. The study would have covered more financial institutions across banking sectors so as to provide a more broad based analysis. However, resource constraints placed this limitation.

The study also faces challenges of time resources limiting the study from collecting information for the study particularly where the respondent delay in filling the questionnaire and travelling for collection the filled questionnaire.

The respondents were found to be uncooperative from the respondents because of the sensitivity of the information required for the study. The researcher explained to the respondents that the information they provided was to be held confidential and was only for academic purpose only.

5.5 Recommendation

5.5.1 Policy Recommendation

Given the findings from this study, there are a number of policy recommendations that can be adopted by the DTMFIs Management in determining lending rates .A policy recommendation is simply written policy advice prepared for some group that has the authority to make decisions. The DTMFIs policy recommendations are the key indicators through which Deposit Taking MFIs policy decisions would be made in most levels of DTMFIs.

The study recommend that management of Deposit Taking MFIs should consider cost of fund (loans) which included taxation costs of provisioning ,core liquid asset requirement, transaction costs, Central Bank of Kenya supervisory fee , cost of capital (return on equity), Statutory reserve requirement , Management fees , Staff costs and

weighted average deposit rate ,reserve and liquidity requirement to determine lending rate in Deposit Taking MFIs.

Lending was the core business operation for the Deposit Taking MFIs and therefore the study recommend that Deposit Taking MFIs management should determine lending rates considering inflation conditions, demand for loans, macroeconomic environment and economic status.

The study recommended that management of Deposit Taking MFIs and credit departments should determine the lending rate based on interbank rate, competition of Interbank rate, credit risk premium due to various risks, including interest risk, credit risk, foreign exchange risk and legal risk, as well as demand and supply, Industry trend and that Policy rate that was linked to the Open Market operations to effectively determine the lending rate of Deposit Taking MFIs facility to the customers..

The study recommended that Deposit Taking MFIs should be keen of market factors such as competitions and risks, cost of fund such as salary of the staff and management fees and inflation due to economic changes in the country when determining lending rates as there existed a positive relationship between lending rate and factor determining lending rate for the Deposit Taking MFIs.

5.5.2 Suggestion for further research

The study investigated the determinants of lending rate in DTMFIs. A further research should be carried to determine impact of lending rates on profitability of DTMFIs to

establish the extent to which it influences profitability of the DTMFIs. The study also recommends that a further study should be carried out to determine the effects of market factors, costs of loans and inflation of financial performance of DTMFIs.

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APPENDICES

Appendix 1: QUESTIONNAIRE

1. Kindly indicates the range of lending rates your bank has adopted in your Deposit Taking MFIs.

7-8% []

9-10% []

11-12% []

13-14% []

15-16% []

17% and above []

Give reasons or your answer.....

2. To what extent has financial liberalization influence Deposit Taking MFIs lending rate ?

i. Very great Extent []

ii. Great Extent []

iii. Moderately Extent []

iv. Less Extent []

v. No Extent []

Explain your answer.....

3. Which of the following factors mostly influences Deposit Taking MFIs lending rates in your Deposit Taking MFIs? (Tick any three).

- i. Better contract enforcement []
- ii. Efficiency of the legal system []
- iii. Lack of corruption []
- iv. Deposit insurance scheme []
- v. Prudential regulation and bank supervision []

4. The following are cost factors that influence determination of lending rates in Deposit Taking MFIs in Kenya. To what extent do the following cost factors influence lending rate in Deposit Taking MFIs? (1-means strongly disagree, 2-disagree, 3-neutral, 4-agree and 5- strongly agree).

| Statement | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Statutory reserve requirement | | | | | |
| Core liquid asset requirement | | | | | |
| Central Bank of Kenya supervisory fee | | | | | |
| Taxation for the Deposit Taking MFIs withholding taxes, stamp duties, transaction taxes, and value added taxes, profit taxes and license fees | | | | | |
| Weighted average deposit rate ,Reserve and liquidity requirements, mandatory investment levels, | | | | | |
| Management fees and | | | | | |
| Staff costs | | | | | |
| Transaction costs | | | | | |
| Communication costs | | | | | |
| Costs of provisioning | | | | | |
| Projected profit | | | | | |
| Cost of capital (return on equity). | | | | | |
| Internal cash reserves | | | | | |

5. The following are inflation factors that influence determination of lending rates in Deposit Taking MFIs in Kenya. To what extent do the following economic factors

influence lending rate in Deposit Taking MFIs? (1-means strongly disagree, 2-disagree, 3-neutral, 4-agree and 5- strongly agree).

| Economic Conditions | 1 | 2 | 3 | 4 | 5 |
|-----------------------|---|---|---|---|---|
| T-bill/GRZ bond rates | | | | | |
| Inflation | | | | | |
| Foreign Exchange rate | | | | | |

6. The following are Market factors that influence determination of lending rates in Deposit Taking MFIs in Kenya. To what extent do the following markets factors influence lending rate in Deposit Taking MFIs? (1-means strongly disagree, 2-disagree, 3-neutral, 4-agree and 5- strongly agree).

| Market Conditions | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Credit risk premium due to various risks, including interest risk, credit risk, foreign exchange risk and legal risk, as a result of uncertainty. | | | | | |
| Liquidity premium or Excess Liquidity in the Inter-Bank Market | | | | | |
| Competition leading to Interbank rate | | | | | |
| Overnight facility rate | | | | | |
| Policy rate that is linked to the Open Market Operations | | | | | |
| Demand and supply | | | | | |
| Industry trend | | | | | |
| Market expectations | | | | | |
| Interbank rate | | | | | |

7. To what extent do you agree with the following statement concerning lending rates in the Deposit Taking MFIs? Rate on a scale of 1 to 5 (1=strongly agree 2=agree 3=no idea 4=disagree 5=strongly disagree)

| Commercial lending rates issues | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Deposit Taking MFIs Interest rate spread influence the lending rate to borrowers | | | | | |
| changes in the values of Deposit Taking MFIs interest rate contributes to changes on Deposit Taking MFIs financial performance | | | | | |
| During periods of relatively high lending interest rates, loans advanced fall sharply | | | | | |
| There is a relationship between the unexpected changes in the long-term interest rate and rate of inflation affecting lending rates | | | | | |
| Interest rate ceilings affect borrowers who may be looking for higher amounts than the one offered by the Deposit Taking MFIs | | | | | |

8. Explain the effect of interest rate ceiling on the financial performance of the Deposit Taking MFIs?

.....

9. What type of loan interest rate do you practice in your DTMFI?

- Float interest rates []
- Fixed interest rate []
- Both []

10. To what extent does interest rate spread affect financial performance of your Deposit Taking MFIs? Rate on a scale of 1 to 5 (5= Very Great;4=Great; 3=Moderate; 2=Low; 1=Very low)

| | Interest rate spread | 1 | 2 | 3 | 4 | 5 |
|----|---|---|---|---|---|---|
| a) | Lending Rate dictates the profitability of the DTMFIs | | | | | |
| b) | Lending Rate induces competition from other financial institutions | | | | | |
| c) | Lending Rate affects feasible investment opportunities with future growth potential | | | | | |

Lending Rate

11. To what extent do lending interest rates affect financial performance of your Deposit Taking MFIs?

Rate on a scale of 1 to 5 (5= Very Great;4=Great; 3=Moderate; 2=Low; 1=Very low)

| Lending rates | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| Lending Rate dictates the profitability of the Deposit Taking MFIs | | | | | |
| Lending Rate induces competition from other financial institutions | | | | | |
| Lending Rate affects feasible investment opportunities with future growth potential | | | | | |
| Changes in loan supply is greatly influenced lending rates in by Deposit Taking MFIs | | | | | |