

EFFECT OF INTEREST RATES ON LOAN PERFORMANCE OF MICROFINANCE INSTITUTIONS IN NAIVASHA SUB-COUNTY, KENYA

M.W. Kariuki 

School of Business, Jomo Kenyatta University of Agriculture and Technology, Kenya
kariukimartha6@gmail.com

S. Ngahu

School of Business, Jomo Kenyatta University of Agriculture and Technology, Kenya
solomon.ngahu3@gmail.com

Abstract

Interest rates are the primary drivers of financial institutions' financial performance. There are many reported cases of defaults in loan repayment among microfinance institutions. The study examined the effect of interest rates on loan performance of MFIs in Naivasha Sub-County. It examined MFIs. The study was limited to the five MFIs in Naivasha sub-County. The study adopted descriptive research design. The target population comprised of 36 employees. Census design was employed. The study used a structured questionnaire to collect data. The research instrument was pilot-tested before its use to collect data for the main study. Data analysis was facilitated by the use of SPSS. Both descriptive and inferential statistics were used. The study established that default risk premium and liquidity risk premium negatively affected loan performance. Interest rates were found to substantially influence loan performance. It was concluded that MFIs faced default on loans advanced which was attributed to risky borrowing. It was inferred that MFIs faced liquidity risk. Since defaults usually occur for short term loans, MFIs are recommended to charge reasonable premiums which borrowers can afford and at the same time mitigate default risk. MFIs are advised to consider easily tradable assets accepted as collateral in order to mitigate liquidity risk while lending.

Keywords: Default Risk Premium, Interest Rates, Liquidity Risk Premium, Loan Performance, Microfinance Institutions

INTRODUCTION

One of the major roles of financial institutions is to advance credit facilities to their customers at a specified interest rate. Indeed, the primary source of revenues for financial institutions such as commercial banks, Saving and Credit Cooperatives (SACCOs), microfinance banks (MFBs) and microfinance institutions (MFIs) is the interest they charge on the loans they lend their customers. MFIs ordinarily thrive on the interest they charge borrowers; a fact that underpins the importance of the subject of interest rates to these firms. However, the interest rates are capped by specific regulations. Usury laws and restrictions on interest rates could affect the operations of MFIs (Avgouleas, 2007). The afore stated laws are put in place purposely to protect customers from MFIs by placing a ceiling above which interest rates should not be charged. This, however, is argued could negate the financial performance and viability of MFIs (Delfiner, Pailhe & Peron, 2006).

Pandey (2010) in a study on financial management in India opined that MFIs and other financial institutions are required to develop a credit policy to govern their operations. In the same light, the author noted that, given that MFIs obtain their revenue from interest accruing from advancing credit facilities to low income persons, the loan repayment may be uncertain. In the same respect, Ditcher (2003) advised that the success of lending out finances is based on an extensive appraisal of the risk of extending such facilities and also the characteristics of the borrower. Yet, it is lamented that lending decisions by these financial institutions are more often than not based on the subjective feelings regarding risk in relation to repayment by the borrower. The MFIs' justification of employing this appraisal is that it is both simple and inexpensive (Horne, 2007).

Gashaw (2014) analyzed MFIS in Ethiopia, Uganda and Kenya in regard to loan outreach to the poor and the quest for financial viability. The author notes that the concern of enhancing financial inclusion to the poor is exceedingly relevant to developing countries that go for right policies towards financial inclusion. However, it is acknowledged that even the microfinance sector faces challenges in its strife to reach the wider poor. Statistics indicate that regarding microfinance operations, Kenya and Uganda are ranked first and second respectively in Africa and fifth and eighth in the world in that order. Ethiopia is also fast emerging though it lies outside of the ranking (EIU, 2013). In spite of this feat in microfinance in the aforestated countries, Gashaw observes that, the credit accessibility falls short of the escalating demand.

According to Atieno (2001), there has been a challenge to credit accessibility in the country which is blamed on supply-side constraints, that is, the financial institutions. The author observes that, the MFIs emerged purposely to address the foregoing problem by targeting the hitherto unbanked population. In spite of the statistics that the number of MFIs has been

growing in leaps and bounds since the 1980s, their capacity to grow has significantly been affected by their failure to operate within legal provisions (Republic of Kenya, 2005). The major challenge to their financial growth has been high default rates. Notably, MFIs in Kenya have over the time been witnessing high levels of non-performing loans which are, needless to say, occasioned by high default rates. The foregoing trend is a threat to their financial performance and very existence (Moti, Masinde, Mugenda & Sindani, 2012). It has been established that, the major challenges facing the MFIs in Kenya include funding, default in loan repayment, and government regulations (Githinji, 2008). The author recommends that the MFIs in the country ought to look for ways of enhancing their financial sustainability. These observations have persuaded this research study which seeks to find out the effect of interest rates on loan performance of MFIs in Naivasha Sub-County, Kenya.

Statement of the Problem

Interest rates are ordinarily the drivers of financial institutions' financial performance. They are the ones that determine the size of the profit margin for every transaction between a financial institution and its customers. Yet, there are many reported cases of defaults in loan repayment in MFIs. Presumptively, the interest rates partly contribute towards this. When borrowers default in repaying the credit facilities advanced to them, the MFI concerned will be negatively affected. There will be limited finances to run its operations and also to loan out to other potential borrowers. In the event the challenge of non-repayment persists for long, the firm will have huge bad debts; a situation that is likely to result in downsizing its workforce, stall its market expansion, and ultimately collapse. The MFIs play a huge role in enhancing accessibility of financial services especially to the poor and low-income earners in the society. This implies that any challenges affecting these institutions are bound to have far reaching impact on the society and the country's economy at large. The foregoing explains why this study was necessary to be conducted with the aim of examining the extent to which interest rates charged by MFIs affect their loan performance.

General Objective of the Study

To examine the effect of interest rates on loan performance of MFIs in Naivasha Sub-County

Specific Objectives of the Study

- i. To establish the effect of default risk premium on loan performance of MFIs in Naivasha Sub-County

- ii. To analyze the influence of liquidity risk premium on loan performance of MFIs in Naivasha Sub-County

Research Hypotheses

H₀₁: Default risk premium does not significantly affect loan performance of MFIs in Naivasha Sub-County

H₀₂: Liquidity risk premium does not significantly influence loan performance of MFIs in Naivasha Sub-County

THEORETICAL FRAMEWORK

In this section, the Fisher's theory of interest rates and the stakeholder theory are reviewed and discussed in the context of interest rates and loan performance of MFIs.

Fisher's Theory of Interest

The Fisher's theory was invented by Irving Fisher in 1930 but has been advanced and criticized by various theorists and scholars ever since (Harrod, 1971; Fisher, 1974; Tymoigne, 2006). The theory base its argument on that, individuals are impatient to spend income and opportunity to spend it. It is stated that the nature of capital and income was primarily supposed to serve as a basis for the interest rate which immediately followed it.

It is stated that the link between income and capital is the rate of interest. In other words, the theory defines the interest rate as the per cent of premium paid on money at a particular date in terms of money to be paid one year later. Theoretically, it is argued that money can be substituted with other sorts of goods. However, practically, it is only money that is traded between present and future, the foregoing argument justifies why the rate of interest is at times referred to as price of money and the market in which present and future money are traded for that price or premium is referred to as money market (Fisher, 1974).

It is opined that Fisher's real rate of interest framework is essential for the inflation-targeting framework. This is due to the reasoning that it rationalizes the notion that monetary policy ought to be concerned mainly with managing inflation expectations so as to keep interest rates at a stable level that enhances saving and investment (Cottrell, 1994; Smithin, 2003). In tandem with the interest rates and MFIs' loan performance, the Fisher's theory could be employed to explain the implication of inflation risk premium as a component of interest rates on the loan financial performance.

Stakeholder Theory

Stakeholder theory was the brainchild of Freeman (1984). The theory which is argued to exist in tension suggests that, firms have stakeholders whom they should pay attention to. Philips (2003) asserted that firms that diligently seek to serve the interests of a broad group of stakeholders are bound to create more value over time. Yet, it is averred that there are so many and various interpretations of basic stakeholder ideas that theory development has been difficult (Scherer & Patzer, 2011).

Freeman, Harrison, Wicks, Parmar and de Colle (2010) supported the argument of the existence of a positive relationship between stakeholder-oriented management and the performance of a firm. The firm's performance according to Choi and Wang (2009) is more often than not measured in terms of financial returns. In other words, financial performance is the most relevant measure of the value created by a firm. More so, loan performance depicts financial performance of MFIs to a great extent given that these financial institutions rely on the interest accruing from loans advanced to borrowers. In the context of MFIs, stakeholder theory can be employed to illustrate how those firms advance the interests of the stakeholder through enhancement of loan performance.

EMPIRICAL REVIEW

This section reviews the empirical studies that have so far been carried out in respect of interest rates and microfinance institutions globally, regionally and in Kenya.

Default Risk Premium and Loan Performance

A study on the trade-off between sustainability and outreach as experienced by microfinance institutions (Milson, 2013), and a global analysis of leading microbanks in respect of financial performance and outreach (Cull, Demirguc-Kunt & Morduch, 2007) revealed some common observations. The two studies indicated that the real gross portfolio yield is a proxy for interest rates charged by MFIs. In addition, they argued that the depth of outreach-viability controversy determines whether or not to subsidize interest rates. The authors gave a contextual and practical analysis involving the poor, interest rates charged and loan repayment default. It was exemplified in the event the interest rate prevailing in the market cannot be afforded by poor people and these people continue borrowing loans aware they would default in repayment, and if the loss from such interest rate induced default is outweighs the revenue gain from higher interest rates, then real yield is anticipated to negate operational self-sufficiency (OSS).

Gashaw (2014) examined MFIs in Ethiopia, Uganda and Kenya. The specific point of interest was loan outreach to the poor and the quest for financial viability. In the study it is

acknowledged that it is very unlikely for a well-to-do client to borrow loans from MFIs in these countries due to the dominance of the commercial banking sector. The study observed that, the repayment rates amongst MFIs are part of their success stories which interpretatively implies that these firms have managed to keep the default risk sufficiently low. The authors further opined that, they are is a great belief that borrowers of credit from MFIs are able and willing to pay commercial interest rates. On the part of these institutions, low default rates are reported.

Notably, the MFIs are less efficient and often charge higher interest rates on loans and also have a shorter repayment plan. It is vital to note that, practically, wealthy clients barely subscribe to MFIs; however, clients who seek huge loans are likely to be those planning to default, thus the occurrence of high credit risks. This is justified by the argument that MFIs are unable to compete with commercial banks in providing huge loans to wealth and creditworthy clients. Gashaw's (2014) findings tallied with Quaye's (2012) global findings, Okumu's (2007) study, Bayeh's (2012) and Abate, Borzaga and Getnet's (2013) findings on Ethiopia.

Kimando, Kihoro and Njogu (2012) studied the factors influencing sustainability of MFIs in Murang'a Municipality, Kenya. The study findings indicated that the greatest challenge was non-repayment of loans borrowed as shown by 88.9 per cent of the study respondents. It was found out that credit rationing is a tool employed by many MFIs as a way of hedging the effects of default by borrowers. In this respect, it is advisable that MFIs demand for some form of collateral before giving loans. In addition, Bichanga and Aseyo (2013) examined the causes of loan default within microfinance institutions in Kenya. The authors noted that there are many such firms that depend on the government for subsidy as one way of addressing financial losses incurred through loan default. The study realized that the default in loan repayment was occasioned by non-supervision of borrowers on how to employ the credit advanced to them and also inadequate training of borrowers on how to put into use those funds prior to their receipt of the loan. More so, it was found out that some borrowers divert the funds borrowed to other projects which may not be financially viable and as such increasing the risk of default.

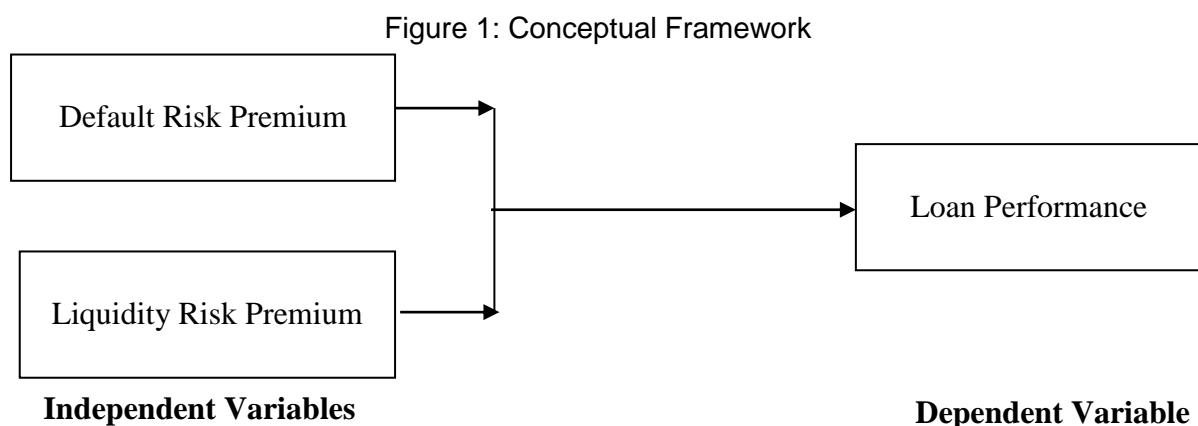
Liquidity Risk Premium and Loan Performance

Littlefield, Morduch and Hashemi (2003) sought to find out whether or not microfinance is an effective strategy to reach the millennium development goals (MDGs). They noted that the growth in outreach and loan portfolio led to exposure to a number of risks which included liquidity risk. Liquidity risk was argued to be as a result of the type of funding the MFIs received. Huang, Wang and Huang (2013) conducted an empirical analysis of liquid risk premium in China. They analyzed liquidity risk based on priced return, issued amount, and bond age amongst others. They noted that an increase in the issued amount translated to high liquidity.

De Nicolo and Ivaschenko (2009) examined the global liquidity, risk premiums and growth opportunities. The study obtained three key results. It was revealed that, it is there is an increase in market liquidity across the world since the early 1990s partly attributed to advanced international financial integration though markets have been increasingly exposed to global systemic liquidity shocks. Second, liquidity indicators seem to be vital determinants of bond spreads in advanced economies and EMBI spreads in emerging economies. Lastly, improvements in market liquidity have significant real effects since liquidity indicators have a significant and positive effect on proxy measures of growth opportunities in various countries.

In addition, Viral and Lasse (2005) investigated the link between asset pricing and liquidity risk. They developed a model that indicated that a security's required return depended on its anticipated liquidity and the covariance of its own return and liquidity with the market return and liquidity. The model further illustrates an understanding for the various channels through which liquidity risk may affect asset prices. In the study, it is noted that the possibility that liquidity might probably disappear from a market and as such fail to be available when needed, is big source of risk to an investor. It is believed amongst financial liquidity users that the greatest challenge is the variability and uncertainty of financial liquidity.

In a study on factors affecting institutional transformation with specific interest in MFIs in Kenya, it is observed that the requirement to have deposit reserve fund reduces available funds for lending but also reduces the firms' insolvency (Ndulu, 2010). This concurred with an earlier study by Christen, Lyman and Rosenberg (2003) where it was noted that the reserve fund is employed in case the financial institution becomes insolvent. Ndulu added that, in some countries such as Kenya, the aforesated reserve fund is transferred to and held by the Central Bank. The foregoing action is bound to increase the cost of capital and liquidity constraints to MFIs.



METHODOLOGY

Research Design

Research design is the blueprint of conducting a research study. It is the guide that the study relied on in the due course of the research. Specifically, the study adopted descriptive research design. Descriptive design primarily aims to provide precise and valid representation of the factors that are relevant to the research questions or objectives (Kothari, 2008). In this light, the current study sought the answer to the general question, that is, what is the effect of interest rates on loan performance of MFIs in Naivasha Sub-County?

Target Population

The target population describes the population to which the study findings are generalized. This population comprised of all the 36 employees working with the five MFIs (Faulu Kenya, KWFT, Speed Capital, Musoni, and Kadet) with operations in Naivasha sub-County.

Census Design

The census approach is necessitated when the target population is relatively small (Kothari, 2004) as it is the case with the current study whose target population was only 36 employees of MFIs. Census design not only was it necessitated by the size of the study population, but it enhanced the generalizability of the study findings due to the fact that all members of the study population participated in the study. The design, needless to say, eliminated both the sampling error and sampling bias; elements that would have otherwise compromised the study findings.

Research Instrument

This study employed a structured questionnaire to collect primary data from the respondents. The convenience of a structured questionnaire in data collection in that the questions therein are easily interpretable and its ease of application to respondents who are geographically spread out encouraged its adoption in this study. In addition, this instrument is cost effective and also free from interviewer bias (Mugenda & Mugenda, 2003).

Pilot Testing

It was recommended that the research questionnaire be pilot tested in order to assess both its reliability and validity before it is administered in the main study. In line with this, the questionnaire was pilot tested on employees working with MFIs in the neighbouring Gilgil sub-County who were randomly selected. The participants of the pilot study were excluded from the

main study which was justified by the fact that the main study was conducted in Naivasha sub-county.

Reliability of the Research Instrument

Reliability is the measure of consistency of the research instrument (Kimberlin & Winterstein, 2008). The Cronbach alpha was employed to measure the reliability of the research instrument. The reliability test results are as indicated in Table 3.1. As shown in the table, the four study constructs returned alpha values greater than 0.7 which was interpreted to mean that the research instrument was reliable.

Table 1: Reliability Test Results

Constructs	Test Items	Alpha Values
Default Risk Premium	6	0.77
Liquidity Risk Premium	6	0.76
Loan Performance	5	0.76

Validity of the Research Instrument

An instrument such as a structured questionnaire that measures what it purports to measure is said to be valid. The study established the content validity of the instrument by seeking expert opinion of the assigned university supervisor on the content of the questions captured in the research questionnaire.

Data Collection Procedure

Before the collection of primary data from the employees of the MFIs, the researcher sought permission from the School of Business of Jomo Kenyatta University of Agriculture and Technology. In addition, the consent of the management of the MFIs from where the respondents were drawn was obtained. The questionnaire was administered on the respondents through the management of each MFI. The filled questionnaire was collected after three days.

Data Processing and Analysis

The collected filled questionnaires were assessed for completeness and precision. Incomplete and/or inappropriately filled questionnaires were discarded. This minimized the number of outliers that would otherwise have compromised the study findings. The analysis of the cleaned data was facilitated by the Statistical Package for Social Sciences (SPSS version 21) analytical tool. The cleaned data were edited and coded ready for analysis. First, descriptive analysis in

form of frequencies, percentages, means and standard deviations was carried out. This was followed by inferential analysis in form of Pearson's correlation. Descriptive analysis enabled presentation of respondents views regarding the study constructs while inferential analysis related the independent variables (default risk premium, liquidity risk premium, and inflation premium) to the dependent variable (loan performance). The inferential analyses specifically multiple regression showed the extent to which interest rates affected loan performance. The study findings were presented in form of statistical tables. The following regression model guided the study.

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

Where:

Y	=	Loan Performance
β_0	=	Constant
X_1	=	Default Risk Premium
X_2	=	Liquidity Risk Premium
ε	=	Error Term
$\beta_1, \beta_2, \beta_3$	=	Regression Coefficients

FINDINGS AND DISCUSSIONS

Response Rate

A total of 36 questionnaires were administered on all employees working with MFIs in Naivasha sub-County. From this number, 31 were collected having been filled according to the expectations. This was equivalent to 86.11% response rate. The high response rate was attributed to the fact that the questionnaires were administered by the researcher in person who explained the rationale of the respondents to participate in the study.

Descriptive Analysis

This section covers the results and associated discussions of descriptive analysis. It is important to note that the data collected was on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

Default Risk Premium

The study determined the opinions of the respondents concerning default risk premium. Their views are summarized in Table 2 below.

Table 2: Descriptive Statistics for Default Risk Premium

	N	Min	Max	Mean	Std. Dev
Our customers often default in loan repayment	31	2	5	3.81	1.138
Sometimes our customers default in loan repayment	31	4	5	4.74	.445
Interest rate on loans is subject to risk of default of the borrower	31	1	5	4.52	1.061
Small loans attract higher interest rates than big loans	31	1	5	4.32	1.275
Long term loans attract higher interest rates than short term loans	31	4	5	1.84	.374
Our firm blacklists loan defaulters against being awarded future loans	31	3	5	4.81	.477

It was established that respondents strongly admitted that sometimes MFIs' customers default in loan repayment (mean = 4.74; std dev = 0.445); interest rate on loans is subject to risk of default of the borrower (mean = 4.52; std dev = 1.061); MFIs blacklist loan defaulters against being awarded future loans (mean = 4.81; std dev = 0.477). It was further agreed that customers often default in loan repayment (mean = 3.81; std dev = 1.138) and that small loans attract higher interest rates than big loans (mean = 4.32; std dev = 1.275). Respondents, however, disagreed (mean = 1.84; std dev = 0.374) that long term loans attract higher interest rates than short term loans.

Liquidity Risk Premium

The study further assessed the views of the respondents in respect to liquidity risk premium. The results of their responses regarding the construct under study are presented in Table 3.

Table 3: Descriptive Statistics for Liquidity Risk Premium

	N	Min	Max	Mean	Std. Dev
Our MFI faces liquidity risks	31	2	5	4.52	.851
Liquidity risks arise from the type of funding our firm receives	31	2	5	4.52	.851
The amounts issued as credit determine liquidity risk	31	2	5	4.39	.955
The competition in the sector determines liquidity risk	31	1	5	4.06	1.340
Our MFI is obligated to deposit reserve fund	31	3	5	4.77	.497
Reserve fund reduces liquidity of our MFI	31	3	5	4.23	.884

It was revealed that respondents strongly agreed (mean = 5.00; std dev = 0.851) that MFIs face liquidity risks and that liquidity risks arise from the type of funding the firm receives. In the same light, it was strongly concurred (mean = 4.77; std dev = 0.497) that MFIs are obligated to deposit reserve fund and was agreed that such reserve fund reduces liquidity of MFIs (mean = 4.23; std dev = 0.884). It was also agreed that the amount issued as credit determines liquidity risk (mean

= 4.39; std dev = 0.955); and that the competition in the sector determines liquidity risk and that reserve fund reduces liquidity of their MFI (mean = 4.06 std dev = 1.340).

Loan Performance

The study lastly analyzed opinions of the respondents concerning loan performance in microfinance institutions. Table 4 displays the results.

Table 4: Descriptive Statistics for Loan Performance

	N	Min	Max	Mean	Std. Dev
Our firm has a relatively large loan portfolio	31	2	5	4.65	.661
There is a limit on loan size advanced to borrowers	31	1	5	4.29	1.101
There are many cases of loan defaults	31	1	5	3.94	1.340
Returns from interest charged on loans are high	31	2	5	4.42	.765
Our firm has several cases of non-performing loans	31	2	5	3.97	.912

Respondents strongly admitted (mean = 4.65; std dev = 0.661) that MFIs have a relatively large loan portfolio. Moreover, it was agreed that there is a limit on loan size advanced to borrowers (mean = 4.29; std dev = 1.101); there are many cases of loan defaults (mean = 3.94; std dev = 1.340); returns from interest charged on loans are high (mean = 4.42; std dev = 0.765) and that MFIs have several cases of non-performing loans (mean = 3.97; std dev = 0.912).

Inferential Analysis

Relationship between Default Risk Premium and Loan Performance

The relationship between the default risk premium and loan performance was established. Table 5 outlines the outcome of the correlation analysis.

Table 5: Relationship between Default Risk Premium and Loan Performance

		Loan Performance
Default Risk Premium	Pearson Correlation	-.467**
	Sig. (2-tailed)	.008
	N	31

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

The results indicated a negative, moderately strong and significant relationship between default risk premium and loan performance ($r = -0.467$; $p < 0.01$). This meant that the higher the default risk premium the lower the performance of loans. Default risk premium incorporated in

interest rate was perhaps perceived high and therefore resulting in borrowers defaulting in repaying loans. The results further suggested that the higher the interest rate as a result of higher default risk premium then the higher the non-performance of the loans.

Relationship between Liquidity Risk Premium and Loan Performance

In tandem with the third objective of the study, the existing relationship between liquidity risk and loan performance was investigated. The results are as shown in Table 6.

Table 6: Relationship between Liquidity Risk Premium and Loan Performance

Liquidity Risk Premium		Loan Performance
	Pearson Correlation	-.673**
	Sig. (2-tailed)	.000
	N	31

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

The findings depicted that liquidity risk premium had a negative, strong and statistically significant relationship with loan performance ($r = -0.673$; $p < 0.01$). The results implied that, liquidity risk premium had an adverse effect on loan performance. It can be explained that if the assets pledged as collateral for loans advanced cannot be converted into cash quickly or traded at fair market value, the institution faces liquidity risk. As a result, the institution incorporates high liquidity premium to cover the risk. High liquidity risk premium causes a rise in interest rate which is a disincentive to loan repayment and hence the negative effect.

Effect of Interest Rates on Loan Performance

This section outlines the results of inferential analysis that enabled the determination of the extent to which interest rates affected loan performance of MFIs in Naivasha Sub-County. Table 7 shows the results of correlation (R) and coefficient of determination (r^2). As indicated, the correlation between interest rates as represented by the two constructs namely inflation risk premium and default risk premium, and loan performance was found to be negative and strong ($R = -0.682$). This meant that interest rates had a great influence on the performance of loans amongst MFIs. The higher the interest rates, the poorer the loan performance and the reverse is true. It was further explained that an increase in interest rates on credit facilities advanced to borrowers was likely to deter them from servicing their loans according to the agreed terms and conditions. On the other hand, the coefficient of determination ($r^2 = 0.406$) indicated that 40.6%

of loan performance could be attributed to interest rates. This meant that interest rates were part of the major determinants of how loans were repaid.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	-.682 ^a	.465	.406	.55433

a. Predictors: (Constant), Default Risk Premium, Liquidity Risk Premium

The results of analysis of variance (ANOVA) as indicated in Table 8) shows that the influence of interest rates or the combined effect of default risk premium, and liquidity risk premium on loan performance was significant ($F = 7.833$; $p < 0.05$). Therefore, interest rates were further ascertained to be fundamentally important to loan performance amongst MFIs.

Table 8: ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.221	3	2.407	7.833	.001 ^a
	Residual	8.297	27	.307		
	Total	15.517	30			

a. Predictors: (Constant), Default Risk Premium, Liquidity Risk Premium

b. b. Dependent Variable: Loan Performance

The extent to which interest rates, as represented by the three parameters (default risk premium, and liquidity risk premium) affected loan performance is shown in Table 9.

Table 9: Results of Multiple Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	1.375	1.019			1.349	.188
Default Risk Premium	-.125	.253	-.099		-.492	.627
Liquidity Risk Premium	-.771	.224	-.711		-3.45	.002

a. Dependent Variable: Loan Performance

The results of the multiple regression analysis shown in Table 9 are summarized as:

$$Y = 1.375 - 0.125X_1 - 0.771X_2$$

Where, the two X-values represented default risk premium and liquidity risk premium respectively. The results indicated that a unit change in loan performance resulted from 0.125, and 0.771 unit changes in default risk premium and liquidity risk premium respectively but in the

opposite direction. In other words, for loan performance to increase by 1 unit, then the two types of premium representing interest rates had to be reduced by the indicated units. The value of the constant (1.375) indicated that there are other factors whose combined effect on loan performance was slightly greater than interest rates (-0.896). The results shown in Table 9 further led to rejection of the second null hypothesis ($t = -3.45$; $p < 0.05$) while the first null hypothesis failed to be rejected ($t = -0.492$; $p > 0.05$).

SUMMARY

It was strongly admitted that customers sometimes default in loan repayment and that interest rate on loans was subject to risk of default of the borrower. The findings resonated with Kimando et al.'s (2012) observation that the greatest challenge facing MFIs in Murang'a Municipality, Kenya was non-repayment of loans borrowed. It was also strongly agreed that their firm blacklists loan defaulters against being awarded future loans. In addition, respondents indeed agreed customers often default in loan repayment and that small loans attract higher interest rates than big loans. Respondents, however, disagreed that long term loans attract higher interest rates than short term loans. The relationship between default risk premium and loan performance was moderately strong, negative and statistically significant at 0.01 significant level ($r = -0.467$; $p < 0.01$).

Respondents strongly agreed that their MFI faced liquidity risks and that liquidity risks arose from the type of funding the firm received. Moreover, respondents strongly concurred that their MFI was obligated to deposit reserve fund. This is in agreement with a study by Ndulu (2010) which found that MFIs are required to deposit reserve fund and that that requirement reduces available funds for lending hence reducing the firms' liquidity. They also agreed that the amount issued as credit determined liquidity risk. It was also noted that competition in the sector determined liquidity risk and that reserve fund reduced liquidity of their MFI. Further, the findings depicted that liquidity risk premium had a moderately strong, negative and statistically significant relationship ($r = -0.673$; $p < 0.01$) with loan performance.

Respondents strongly admitted that their firm had a relatively large loan portfolio. It was further agreed that there was a limit on loan size advanced to borrowers and there are many cases of loan defaults. In addition respondents were in agreement that returns from interest charged on loans were high and that their firm had several cases of non-performing loans. Loan performance was found to be explained by 40.6% of interest rates and the relationship between the two was established to be negative and strong. It was further found that there are other factors whose combined effect on loan performance was slightly greater than interest rates.

CONCLUSIONS

The study concluded that microfinance institutions faced default on loans advanced. This could be attributed to risky borrowers. The study further concluded that the interest rate charged on loans also led to defaults and hence loan non-performance. It was also concluded that MFI mitigated default of loans through blacklisting defaulters from getting loans in future. It was inferred that MFIs faced liquidity risk which was determined by the type of funding that they receive, the amount of credit issued and competition in the banking sector. More so, it was concluded that liquidity risk premium contributed to the non-performance of loans due to potential rise in interest rate which discourages repayment of loans.

RECOMMENDATIONS

Since defaults usually occur for short term loans, MFIs ought to charge a reasonable premium which borrowers can afford and the same time mitigate default risk. The institutions could also screen their borrowers to further mitigate default risk. These would likely enhance loan performance. To reduce liquidity risk and enhance loan performance, it is recommended that microfinance institutions should consider their loan portfolio, that is, the aggregate amount advanced to borrowers since too much lending would lead to liquidity problems. Further the institutions ought to consider easily tradable assets accepted as collateral in order to mitigate liquidity risk while lending.

LIMITATIONS AND FURTHER RESEARCH

When carrying out the study, the researcher faced a number of hurdles ranging from the nature of the research instrument to the skepticism of the respondents. The researcher instrument did not have open-ended questions that would have otherwise encouraged respondents to have open views regarding interest rates and loan performance. They were, however, restricted to the content of the instrument. In addressing this challenge, it was ensured that the content of the instrument addressed the study objectives. Another challenge was the skepticism posed by some respondents who initially failed to understand the rationale of participating in the study. This was addressed by explaining to them the benefits accruing from the study to MFIs which were their employers.

The study suggested other subjects that could be further investigated in regard to interest rate and loan performance in Kenya. These areas include influence of liquidity risk premium on performance of loans of microfinance institutions; the effect of default risk premium on loan performance amongst commercial banks; and the effect of interest rate on loan recovery by commercial banks.

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