

DETERMINANTS OF LOAN REPAYMENT DEFAULTS IN MICROFINANCE**BANKS IN KENYA****KARANJA JAMES****University of Nairobi****Abstract**

The Monitoring and effective controlling of non-performing advances is of crucial importance to any Microfinance Bank financial performance and the economy's financial environment. The future is always uncertain and there is a credit risk associated with loans advances to borrowers which can lead to financial Crisis/distress in the institutions. Loan Repayment default can be voluntary or involuntary and it can lead to Lenders additional cost which include loan recovery costs and Cost of refinancing. The objective of this study was to find out the Determinants of Loan Repayment Default in Microfinance Banks in Kenya. A descriptive research Design was used to examine the factors that cause loan repayment default in Microfinance Banks in Kenya. The Target population was 13 Licensed Microfinance banks in Kenya. A Random Sampling procedure was used amongst the target population. One credit officer and one borrower were randomly selected from each of the 13 MFB. The sample size was 26 credit Officers and 26 borrowers with a total of 52 Individuals. The Researcher used primary data which was obtained from credit officers and borrowers by administering of questionnaires. Data for the study was analyzed by use of Descriptive statistics. This involved the use of percentages, mean, median and frequency tables to present the data. SPSS and a regression model were employed to analyze the data. Loan Repayment default was the dependent variable, while Borrower characteristics, institutional factors and the Loan characteristics were the independent variables. The study found that institutional characteristics had significant positive relationship with loan repayment default in microfinance banks in Kenya; borrowers' characteristics had significant positive relationship with loan repayment default in microfinance banks in Kenya and loan characteristics had significant positive relationship with loan repayment default in microfinance banks in Kenya. The study therefore recommends that the credit offering institution should train their credit officers so that they can be competent and thorough when conducting credit appraisal this will ensure that the institution advances credit to those borrowers who have the ability to pay back and therefore reducing the rate of loan non-repayment. It is important for the management to conduct a thorough and in depth appraisal of the borrowers before advancing credit to them this will reduce the rate of loan defaulting. The interest rate that is being charged on loan is a major determinant of loan repayment rate it is therefore important for the institution charge interests that will enable the borrower to service their loans as required.

Key Words: Loan Repayment Default, Lenders/institutional Characteristics, Borrowers Characteristics, Loan Characteristics

Introduction

Microfinance Banks play a key role in any country's economy development. Their main activity is advancement or extension of credit facilities to borrowers. They generate most of their income from interest on loans as well as other income from non-funded business and transactional income from activities such as over the counter withdrawals, income from ATM/mobile banking platforms. These organizations are exposed to the different types of risk. Risk management is a critical aspect to the MFBs to ensure their survival and minimization to the risk exposures. Mac Donald and Koch (2006) as cited by Ndungu (2014) notes that although loans are the greatest contributors of operating income in microfinance institutions, they represent a greater exposure to the institutions.

A loan essentially means monies that have been advanced to a borrower who will repay back the principle plus some interest. Non loan repayment results in bad debts which have adverse negative impact on the financial performance of the institutions, since they negatively affect the profitability of firms. Kipyego (2013) notes that loan defaults is increasingly threatening the existence of the microfinance institutions. Effective credit management is therefore essential in order to ensure that the loans extended to the borrowers are repaid on time and that the profits generated are not negatively affected by provisions for bad loans. Different MFIs define Loan Repayment Default in many different ways according to their Credit Policy. According to Phillips and VanderHoff, (2004) Cited by Maigua (2017), a loan is said to have been defaulted when the borrower fails to pay the principle and /or interest or part of the principle. A loan is said to have been defaulted if the borrower does not make a payment after the first day when the loan instalment falls due (Ndungu, 2014). If it is not repaid within 30 days after the instalment has fallen due, its termed as a bad loan.

According to Maigua (2017) Loan defaults have effect to both the borrower and the institution. Bad loans posse a credit risk to the lender and may lead to losses and financial constraints when the borrower completely fails to repay and efforts to recover the loan are futile. The borrower might end up been blacklisted in the credit reference bureau (CRBs) and might end up unable to access credit facilities from formal financial institutions until they clear up their names by repaying back the loans to the lender. In addition their collateral end up been sold in order to recover the loans advanced to them. According to Berger and De Young (1997) cited in Ndungu (2014) most Non Performing loans in MFIs are due to inadequate loan underwriting, poor monitoring and Control by the MFI managers. Kibosia (2012) argued that loan repayment is determined by the character of the borrower, the interest rates charged on the loans advanced and the type of the loan. The character of the individual is of great importance in extending credit to a borrower. This is because some borrowers with a bad character will borrow with no intention of repaying back the loans even if they have the ability to service the loans. High interest rates with poor economic conditions influence the ability of the borrower to repay the loans.

Loan repayment default is influenced by many factors which include institutional factors, which are factors specific to the institution such as monitoring and control of loans advanced, trainings given to the loan officers; the borrower's characteristics which include the character of the individual, the income level of the borrower and the loan specific factors such as the amount of loan advanced to the borrower, the duration of repaying back the loan. Non Repayment of Loan by Borrowers may be voluntary and Non-voluntary (Waithera 2014). Institutional factors, Borrowers characteristics and the Loan specific Factors are the main Determinants of Loan Repayment Default.

In line with ensuring the loan repayment defaults are minimized, organizations that advance credit to Borrowers must know the factors that lead to loan non repayments and come up with ways to mitigate the risk of Default. This study therefore is aimed at establishing the determinants of loan repayment Default. MFBs practice both individual and group lending mechanism. In a group lending mechanism, the individuals in the group provide collateral or loan guarantee to any member of the group who applies for a loan. The members monitor each other and exclude risky borrowers from participating hence making prompt loan repayments (Modurch,1999).In the event one member doesn't repay his/her loan instalment, the group members raise the installment(Ndungu,2014).This mitigates the risk involved in the group lending mechanism. Extension of credit facilities to borrowers in microfinance banks involve the risk of default since they give out the loans with the promise from borrowers that's they will repay the Interest plus the principle amount. The future is uncertain and events can arise which may make the borrower unable to repay the loan as per the agreed terms and conditions. As a result the institutions must make sound decisions by projecting in to the future to ensure loans are repaid at the agreed time (Ndungu, 2014). Most Microfinance Banks have come with flexible repayment frequencies which range from weekly, monthly , quarterly and even termly (mostly for schools whose mode of operation is termly).The frequency depends on the nature of the business activity, purpose of the loan and /or household cash flow generating capacity.

Research Problem

The Monitoring and effective controlling of non-performing advances is of crucial importance to any Microfinance Bank financial performance and the economy's financial environment as cited by Maigua (2017). The future is always uncertain and there is a credit risk associated with loans advances to borrowers which can lead to financial Crisis/distress in the institutions. Muthoni (2016) notes that Loan Repayment default can be voluntary or involuntary and it can lead to Lenders additional cost which includes loan recovery costs and Cost of refinancing. These costs have effect to both the lender and the borrower (The borrower end up losing the recovered collateral to the lender).

Numerous global studies have been carried out on the factors that influence Loan repayment in different Sectors. Karenkye (2014) carried on a study on the causes of Loan default in microfinance institutions in Ghana and found out that loan Defaults was caused by Inadequate Loan sizes, High interest Rates and Poor Appraisal. Makorere (2014) Carried on a study in Tanzania on the factors causing Loan Repayment Default. Local Studies have also been carried out with generalization and in Different sectors. Akehege (2011) studied on what causes Non-Performing Loans in Commercial Banks in Kenya and found out that the level & Source of Income and poor credit Analysis have major impact on loan repayment Default. Kipkech (2005) carried out a study on the determinants of Loan Default basing his study on the Higher education Board. Kibosia (2012) did a study on the factors that Determined Loan defaults in SMES in Kenya Commercial banks and found out that Loan defaults is influenced by The character of The applicant and poor credit Monitoring. From The analysis of the various empirical studies, it's evident that studies have been done in different sectors Such as Higher Education Board, SMEs, and Commercial Banks in general, very few studies have been carried out on the Loan Repayment Defaults in Microfinance Banks. Therefore this study intended to find out what are the Determinants of Loan Repayment Defaults in Microfinance Banks in Kenya.

Research Objective

The objective of this study was to find out the Determinants of Loan Repayment Default in Microfinance Banks in Kenya.

Theoretical Literature Review

The Theoretical Literature Review covers the theories that are relevant to the study conceptualization.

Agency Theory

This theory explains the agency relationship that may exist between two parties, mainly between a principle (mainly shareholders in a business) and its agent (The managers or company executives). The agents represent the principle and enter into contractual agreements with third parties on behalf on the principle. Since the decisions and contracts agreed between the agent and the third party affect the principle, agency problems may arise. Therefore the Agency theory tries to resolve the problems that may arise due to unaligned goals or risk aversion between the principle and the agent. This theory tries to find out the mechanisms that can be used to motivate the agents in order to enable them make the right decisions regarding a firm and of interest make decisions that do are aimed at maximizing the welfare of the firm in general.

In this research study, the principle is mainly the MFBs and the borrowers are the agents are the borrowers. The chances of a borrower failing to repay and its relationship with the agency theory is of a greater importance to this study. The Information asymmetry aspect, the Moral hazard perspective that make lenders give out loans to borrowers even when the chances of loan repayment is zero can be explained by the use of agency theory Adverse selection and moral hazard are some of the causes of Agency problems between a lender and a borrower. Adverse selection can be defined as a situation of Information asymmetry that can occur before a transaction. During the lending process the borrower might have information that the project been financed is not viable, and may not disclose the information to the Lender. The lender due to lack of the information, will advance the loan to the borrower who may end up not repaying the loan. On the other hand Moral Hazard means the malpractices that may occur in a financial institution mainly because one party that is insulated or protected from a risk is less concerned with the negative outcome of a risk that might occur. The loans advanced to borrowers are mainly insured against some risk, for instance if a car loan is extended to the borrower, the car is insured against accidents & theft. As a result the Borrower might not take the required precautions against the insured risk.

The Theory of Delegated Monitoring of Borrowers

This theory aims at reducing the cost of monitoring borrowers by the use of available information which is important in resolving problems that might arise between the borrower and the lender (Maigua, 2017). The Monitoring of a borrower is done before and after loan advancement. It involves gathering all the relevant information and screening all the available information about a borrower prior to the advancement of a loan. After the loan is processed, the MFB s also monitor the borrower to ensure that the monies are not diverted to other subdivision of borrowed funds to other projects other than the intended use is a major contributor of Loan non repayment. This Theory is of importance to this study as it highlights the importance of monitoring Borrowers and ensuring that they adhere to the Terms of

agreement as stipulated in the Loan contract. MFBs require borrowers to open and operate accounts with them. This helps to ensure that they monitor the cash inflows and outflows as well as the loan payments.

Information Asymmetry Theory

The Theory of Information Asymmetry Is based on the notion that the lender may not have all the information about the projects the borrower is financing using the borrowed funds. As a result of the information gaps, Cases of problems of Moral Hazards and adverse selection arise.

Determinants of Loan Repayment Default

These are the factors that lead to non-repayment of loans by borrowers as stipulated in their loan/Debt Contract or when the borrower violates some conditions as stipulated in the contract. A loan Repayment Default simply means failure of the borrower to pay back loan installments when they fall due. There are various factors that determine loan Repayment Defaults as discussed below:

Borrowers' characteristics

These are factors that are specific to the borrower which may influence his/her loan repayment (Maigua, 2017). According to Nawai & Sharrif (2010) as cited by Maigua (2017), this includes the income level of the borrower, age and the gender of the individual. According to the study by Maigua (2017), the age of the borrower, the number of years he/she banked with the microfinance institution and the kind of collateral had effect on the rate of loan repayments. The diversion of borrowed funds by the customer influences loan repayment default. Diversion of funds leads to non-financing of the projects which the borrower intended to finance and as a result the projects fail to generate cash flows as projected by the lender leading to loan defaults. The character of the individual determines if the loan will be repaid or not. Some borrowers borrow with no intention of repaying back the loan which definitely leads to loan repayment default.

Lenders/Institutional Characteristics

These are factors internal to the financial Institution that is advancing the credit (Loan) Facility that influence the loan Repayment Rate. They Include: the time taken by the institution from when the borrower does the loan Application to the time the actual loan disbursement is actualized. Delayed loan disbursement cause delay to financing of the borrowers' projects and as a result it may delay cash flows as projected by the borrower hence leading to a loan repayment default. The Financing cost is considered as a factor influencing loan repayment default. High loan application costs, insurance costs for the loans and other costs such as valuation cost for the loan collateral influence loan repayment rate.

Loan Characteristics

These are factors specific to the loan advanced to the borrower. They include size of the loan, the repayment duration, the interest charged, other conditions such as penalty on late or non-loan repayment. If the borrower is underfunded (the amount of loan advanced does not fully finance his/her project) the borrower is likely to default because his business may not be able to generate enough cash flows to repay back the loan. The interest rate that the lender charges on the loan is a major determinant of loan repayment rate. High interest rates may make the borrower unable to service their loans as required

Microeconomic variables

Microeconomic Variables such as inflation and government restriction on interest rates such as interest rate capping influence the loan repayment rates by borrowers

Empirical Literature Review

Kibosia (2012) carried out a study on the factors that determined Loan non repayment among SMEs in Kenyan commercial banks. Her objective for the study was to establish the main determinants of SME loan defaults among commercial banks in Kenya. She further narrowed her study by aiming to establish if there was a relationship between what caused loan non repayment in commercial banks and the lack of loan repayments in the SME sector. She used a descriptive study design to collect data for her study. She used all the 44 Commercial banks in Kenya for the study population. She sampled the commercial banks in Nairobi. In order to come up with the sample of the population a census Survey was done for the study. She used questionnaires to collect her data and multiple Linear Regressions is analysis of data collected. From the study, it was found out that interest rates and the number of years the businesses operated had effect on loan non repayment rates. It also found out that the character of the borrower, the type of loan, and the repayment period. The researcher recommended that apart from commercial banks adopting credit scoring in vetting its clients during loan applications, emphasis should be put in managing the credit risk in their organizations. All determinants of loan Defaults were not covered in the study.

Kariuki (2014) sort to find out the factors that were key in Influencing Non -performing Loans in microfinance institutions in Kenya. The study was aimed at assessing the effect of institutional characteristics, customer characteristics and micro economic Variables on non-performing loans. He used a Descriptive survey approach in his study in all the 52 MFIs in Kenya which were his population. His sample size was 52 Respondents from the 52 MFIs who were mainly credit officers/Managers from the MFIs. He used questionnaires to collect his data both primary and secondary with only 69 % response rate. In analyzing the collected Data, descriptive statistics were used which included both percentages, means and standard deviation in order to measure the interrelationship between the variables. He also used MS excel and SPSS version 17 to display the information. The study found out that Institutional characteristics contributed most to non-performing loans of MFIs followed by Macroeconomic variables and lastly Customer characteristics. From the study, it was recommended that MFIs should have good Credit Procedures that were to assist the organization in selecting clients for loan approvals. The study also recommended that organizations should have systems to aid in monitoring of loans and mechanisms of dealing with customers who defaulted in repaying back the loans by coming up with clear plans and procedures.

Kiraithe (2015) conducted a study on the factors that influenced Loan Defaulting by SME owners in Kenya. The researcher studied the SMEs within Thika Township of Kiambu County. The study was aimed at investigating what influenced loan defaulting among SME owners In Thika Township in Kiambu County. He also sought to establish the considerations that MFIs used in granting Loan to SMEs Owners, the characteristics of SME owners that influenced defaulting. The researcher also aimed at understanding the loan Trainings that was given to the SME owners and its relation to loan defaulting. The researcher also aimed at examining the enterprise related factors that fostered loan defaulting by SME owners. The researcher used as descriptive study design. The population of the study was 500 SME owners who operated in Thika Township, Kiambu County. The researcher used stratified random sampling for the SME owners with a sampling size of 50 respondents and 10 key informants. In order to collect data

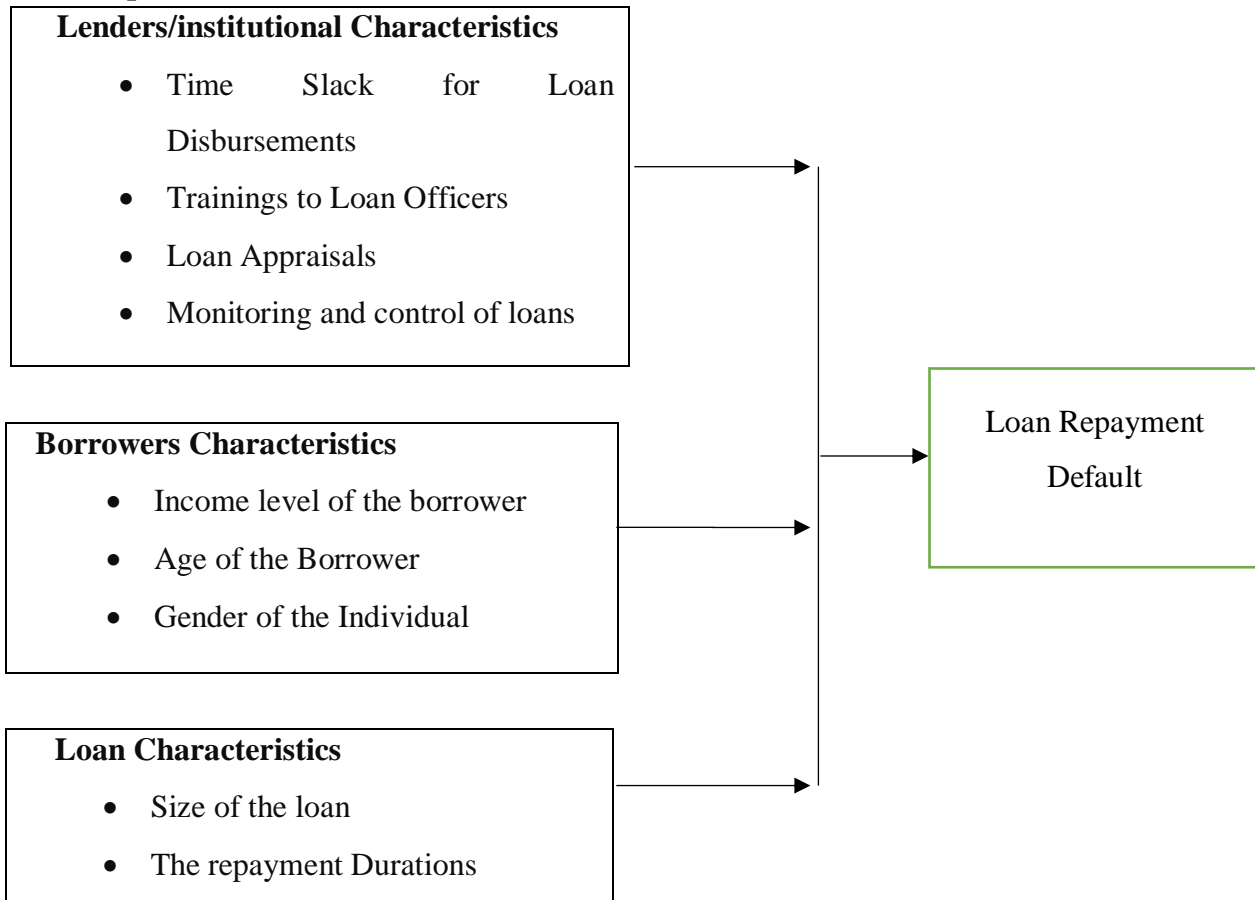
structured questionnaires were administered to the SME owners and detailed discussion questions for the key informants. The study found out that diversion of loan funds and lack of need to achieve business influence SME owner's defaults.

Muriithi (2013) studied on what caused Non- performing Loans among commercial banks in Kenya. His Main objective was to determine the causes of non-performing Loans in commercial banks in Kenya. The population of his study was all the 43 Commercial banks in Kenya as per the CBK banking supervision Report of 2012. The data used for the study covered a five year period from 2008 to 2012 with the use of secondary data from published annual reports .The statistical package for SPSS version 17 in analysis of the collected data while spreadsheets were used to aid in data presentation. From the study it was clear that there existed a positive correlation between the non-performing loans and the inflation rate (0.136) while a negative correlation existed between the real interest rate (which was -0.468 as per the study) and the non-performing loans, as well as to the growth rate in loans (-0.013).It was from this findings that it was recommended that the government needed to come up with measures that controlled real interest rate in Kenya and commercial banks needed to come up with policies that control the amount of loans.

Mosha (2016) carried out an investigation on what determined loan defaults in microfinance institutions in Tanzania. He selected two Microfinance institutions in two selected branches which were PRIDE and FINCA. The Study was done with the objective of determining the factors for loan defaults in MFIs in Tanzania. The study was covered a period of 10Years that is from the Year 2004 to 2014. Cross sectional study design was used to gather information for the study. Structured and semi structured interviews were administered among the selected 196 respondents to gather primary data while secondary data was collected from published and unpublished materials. The data was analyzed by the use of descriptive statistics and logistic regression. It was found out that that the loss of collateral and the denial of future loans were the major effects of loan defaults.

Asongo and Idama (2014) carried out a study in Nigeria on the causes of Loan defaults in microfinance banks. They based their study on the case Standard Microfinance bank, Yola in Adamawa State in Nigeria. They used Questionnaires to collect data. The data was the analyzed by the use of SPSS version 21. It was found out that failure to supervise the Utilization of Loans advanced, Client Dropouts and staff Turnover, not reminding some customers on loan repayment, lack on penalty on loan non repayment by some customers, multiple borrowing and failure of some staff to comply with the policies. It was recommended that microfinance banks should practice best policies and optimum performance.

Conceptual Framework



Independent variable

Dependent Variable

Research Methodology

A descriptive research Design was used to examine the factors that cause loan repayment default in Microfinance Banks in Kenya. The population elements were credit officers and the borrowers in the institutions. The Target population was 13 Licensed Microfinance banks in Kenya. This study targeted two Credit officer and two borrowers from each of the 13 MFBs. A Random Sampling procedure was used amongst the target population. One credit officer and one borrower were randomly selected from each of the 13 MFB. The sample size was 26 credit Officers and 26 borrowers with a total of 52 Individuals. The Researcher used primary data which was obtained from credit officers and borrowers by administering of questionnaires. The questionnaires were structured in line with the main aim of the study. The questionnaires had both open and closed ended question to help the researcher obtain the required information relevant for the study. Data for the study was analyzed by use of Descriptive statistics. This involved the use of percentages, mean, median and frequency tables to present the data. SPSS and a regression model were employed to analyze the data. Loan Repayment default was the dependent variable, while Borrower characteristics, institutional factors and the Loan characteristics were the independent variables

$$LRD_I = f (X_1, X_2, X_3, \dots, X_n)$$

Where: LRD_1 Is the Loan Repayment Default; $X_1...X_n$ are the Determinants of loan Repayment defaults. The Above Function was depicted in the model as below.

$$LRD_1 = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \Sigma$$

Where: LRD_1 = Loan Repayment Default, which is the dependent variable; β =Regression; Coefficient; X_1 =Institutional Characteristics; X_2 =Borrowers Characteristics; X_3 =Loan Characteristics; Σ =Error Term

Results and Discussion

Factors Affecting Loan Repayment

Credit Officers opinion on Lenders Factors

	N	Min.	Max.	Mean	Std. Dev.
Delay in Loans processing is a factor to loan repayment Default	19	1.00	5.00	3.5000	1.04319
Lack of trainings to credit officers and poor knowledge on credit processes is a factor to loan repayment default.	19	1.00	5.00	3.7222	1.22741
Poor loan appraisal lead to loan repayment Default	19	3.00	5.00	4.2778	.75190
Proper Credit monitoring is key to loan repayments	19	3.00	5.00	4.2222	.64676
The credit procedures and policies within the institution have effect on loan repayment	19	1.00	5.00	3.3889	1.24328

From the findings, the credit officers agreed that poor loan appraisal lead to loan repayment default as shown by a mean of 4.2778, proper credit monitoring is key to loan repayments as shown by a mean of 4.2222, lack of trainings to credit officers and poor knowledge on credit processes is a factor to loan repayment default as shown by a mean of 3.7222, and delay in loans processing is a factor to loan repayment default as shown by a mean of 3.5000. They also disagreed that the credit procedures and policies within the institution have effect on loan repayment as shown by a mean of 3.3889. the findings are in agreement with Koranky (2014), who indicated that poor evaluation and absence of Checking of loan repayments are a major causes of loan repayment defaults.

Extent to Which Borrowers' Characteristics Lead to Loan Repayment Default

	N	Min.	Max.	Mean	Std. Dev.
Failure by the borrower to disclose some vital information during loan application results to loan default	39	2.00	5.00	3.8205	.82308
Diversion of funds from the intended purpose of borrowing leads can lead to default	39	1.00	5.00	3.3846	1.20559
The income level of the borrower determines if the loan will be repaid	39	2.00	5.00	4.2821	.79302
The age of the Borrower Influences the repayment rate	39	1.00	5.00	3.1795	.99662
High Loan Amounts advanced to borrowers with low income levels Influences high Loan default rates	39	2.00	5.00	4.2564	.90954
Short Loan repayment durations leads to loan defaults	39	1.00	5.00	3.6923	1.32096

From the findings, the respondents agreed that the income level of the borrower determines if the loan will be repaid as shown by a mean of 4.2821, high loan amounts advanced to borrowers

with low income levels influences high loan default rates as shown by a mean of 4.2564, failure by the borrower to disclose some vital information during loan application results to loan default as shown by a mean of 3.8205, and short loan repayment durations leads to loan defaults as shown by a mean of 3.6923. the findings further showed that the respondents disagreed that diversion of funds from the intended purpose of borrowing leads can lead to default as shown by a mean of 3.3846, and the age of the borrower influences the repayment rate as shown by a mean of 3.1795. The findings of the study do not fully agree with the study by Maigua (2017) that the age of the borrower, the number of years he/she banked with the microfinance institution and the kind of collateral had effect on the rate of loan repayments.

Credit Officers Opinion on the Extent to Which the Loan Characteristics Lead to Loan Repayment Default

	N	Min.	Max.	Mean	Std. Dev.
The amount of loan Advanced determines the repayment rate	39	1.00	5.00	3.2564	1.06914
The Loan Repayment Duration influences the Loan repayments	39	2.00	5.00	3.8718	.89382
The penalties and additional fees associated with loan non repayment is a factor to Loan repayment	39	1.00	5.00	3.6667	1.17727

From the findings, the respondents agreed that the loan repayment duration influences the loan repayments as shown by a mean of 3.8718, and the penalties and additional fees associated with loan non repayment is a factor to loan repayment as shown by a mean of 3.6667. The findings further show that the respondents disagreed that the amount of loan advanced determines the repayment rate as shown by a mean of 3.2564. The findings agree with findings of Kibosia (2012) who carried out a study on the factors that determined Loan non repayment among SMEs in Kenyan commercial banks and found out that the character of the borrower, the type of loan, and the repayment period.

Correlation Analysis

		Loan Repayment Default projects	Institutional characteristics	Borrowers characteristics	Loan characteristics
Loan Repayment Default	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	254			
Institutional characteristics	Pearson Correlation	.788**	1		
	Sig. (2-tailed)	.001			
	N	254	254		
Borrowers characteristics	Pearson Correlation	.713**	.359	1	
	Sig. (2-tailed)	.000	.062		
	N	254	254	254	

Loan characteristics	Pearson Correlation	.775**	.516	.538	1
	Sig. (2-tailed)	.001	.058	.079	
	N	254	254	254	254

The results revealed that there was a strong positive correlation between institutional characteristics and loan repayment default in microfinance banks in Kenya as shown by $r = 0.788$, statistically significant $p = 0.001 < 0.01$; there was a positive correlation between borrowers characteristics and loan repayment default in microfinance banks in Kenya as shown by $r = 0.713$, statistically significant $P = 0.000$; there was a positive correlation between loan characteristics and loan repayment default in microfinance banks in Kenya as shown by $r = 0.775$, statistically significant $P = 0.001$. This implies that institutional characteristics, borrowers' characteristics, and loan characteristics with loan repayment default in microfinance banks in Kenya are related.

Multiple Regression Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.879 ^a	0.773	0.741	0.0453

Adjusted R squared was 0.741 implying that there was 74.1% variation of loan repayment default in microfinance banks in Kenya due to the changes of institutional characteristics, borrowers' characteristics, and loan characteristics. The remaining 21.9% imply that there are other factors that lead to loan repayment default which were not discussed in the study. R is the correlation coefficient which shows the relationship between the study variables. From the findings, the study found out that there was a strong positive relationship between the study variables as shown by 0.879.

Analysis of variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.533	3	7.844	22.964	.001 ^b
	Residual	11.956	35	0.342		
	Total	35.489	38			

From the ANOVA statistics, the processed data (population parameters) had a significance level of 0.001. This shows that the data is ideal for making conclusions on the population's parameter as the value of significance (p-value) is less than 5%. The F calculated was greater than F critical ($22.964 > 2.874$). This shows that institutional characteristics, borrowers' characteristics, and loan characteristics significantly influence loan repayment default in microfinance banks in Kenya.

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.007	0.146		6.897	0.002
	Institutional characteristics	0.532	0.099	0.333	5.374	0.009
	Borrowers characteristics	0.678	0.102	0.523	6.647	0.003
	Loan characteristics	0.512	0.085	0.405	6.024	0.005

The regression equation was

$$Y = 1.007 + 0.532 X_1 + 0.678 X_2 + 0.512 X_3$$

The equation above reveals that holding institutional characteristics, borrowers characteristics, and loan characteristics to a constant zero, the variables will significantly influence loan repayment default in microfinance banks in Kenya as shown by constant = 1.007.

Institutional characteristics is statistically significant to loan repayment default in microfinance banks in Kenya as shown by ($\beta = 0.532$, $P = 0.009$). This shows that institutional characteristics had significant positive relationship with loan repayment default in microfinance banks in Kenya. This implies that a unit increase in institutional characteristics will result to increase in loan repayment default in microfinance banks in Kenya.

Borrowers characteristics is statistically significant to loan repayment default in microfinance banks in Kenya as shown by ($\beta = 0.678$, $P = 0.003$). This shows that borrowers' characteristics had significant positive relationship with loan repayment default in microfinance banks in Kenya. This implies that a unit increase borrowers characteristics will result to increase in loan repayment default in microfinance banks in Kenya.

Loan characteristics is statistically significant to loan repayment default in microfinance loan in Kenya as shown by ($\beta = 0.512$, $P = 0.005$). This shows that loan characteristics had significant positive relationship with loan repayment default in microfinance banks in Kenya. This implies that a unit increase loan characteristics will result to increase in loan repayment default in microfinance banks in Kenya.

Conclusions

The study found that institutional characteristics are statistically significant to loan repayment default in microfinance banks in Kenya. The study further found that institutional characteristics had significant positive relationship with loan repayment default in microfinance banks in Kenya. The study therefore concludes that a unit increase in institutional characteristics will result to increase in loan repayment default in microfinance banks in Kenya. The study established that borrowers' characteristics are statistically significant to loan repayment default in microfinance banks in Kenya. The study also found that borrowers' characteristics had significant positive relationship with loan repayment default in microfinance banks in Kenya. Based on the findings of the study, the study concludes that a unit increase in borrowers' characteristics will result to increase in loan repayment default in microfinance banks in Kenya. The study revealed that loan characteristics are statistically significant to loan repayment default in microfinance loan in Kenya. The study further found that loan characteristics had significant positive relationship with loan repayment default in microfinance banks in Kenya. The study therefore concludes that a unit increase loan characteristics will result to increase in loan repayment default in microfinance banks in Kenya.

Recommendations

A unit increase in institutional characteristics will result to increase in loan repayment default in microfinance banks in Kenya. The study therefore recommends that the credit offering institution should train their credit officers so that they can be competent and thorough when conducting credit appraisal this will ensure that the institution advances credit to those borrowers who have the ability to pay back and therefore reducing the rate of loan non-repayment. Poor Monitoring and control of the loans by the institution contribute to loan non-repayment, the institution should monitor how the funds are being used by the borrowers in terms of whether the loan is used for the intended reason and whether the borrowers are making loan repayments as agreed this will have a positive influence on rate of loan repayment. A unit increase in borrowers' characteristics will result to increase in loan repayment default in

microfinance banks in Kenya. Borrowers' characteristics such as their level of income affect loan repayment. It is important for the management to conduct a thorough and in depth appraisal of the borrowers before advancing credit to them this will reduce the rate of loan defaulting. The interest rate that is being charged on loan is a major determinant of loan repayment rate it is therefore important for the institution charge interests that will enable the borrower to service their loans as required.

Suggestions for Further Studies

The objective of this study is to find out the Determinants of Loan Repayment Default in Microfinance Banks in Kenya. The study focused on Microfinance Banks in Kenya the study therefore recommends replication of the study in other institutions such as commercial banks. The study explained 74.1% of loan repayment default in microfinance banks in Kenya; the study therefore recommends further studies to be done on other determinants of Loan Repayment Default in Microfinance Banks in Kenya.

References

- Akehege, B. (2011). *Determinants of non -performing loans among commercial banks in kenya*. University of Nairobi, Kenya
- Angaine, F. & Waari D.N. (2014). *Factors Influencing Loan Repayment in Micro-Finance Institutions in Kenya*, IOSR Journal of Business and Management (IOSR-JBM) 16(9)66-72
- Juma, R.C. (2003). *Reasons why Bank Customers fail to service their loans in Kenya*. University Of Nairobi
- Kangethe, W. (2015). *Effects of Outreach of Loan Defaults amongst Microfinance Institutions In Kenya*. University of Nairobi, Kenya
- Kariuki, J.K. (2014). *Factors influencing non-performing loans of microfinance Institutions in Kenya*. University of Nairobi.
- Kibosia, C.N. (2012). *Determinants of loan defaults by small and medium enterprises among commercial banks in Kenya*. University of Nairobi. Kenya
- Kipkeche, R. J. (2005). *Determinants of students' loan default: case study of higher education loans board*. Nairobi, Kenya
- Kiraithe, P. K. (2015). *Factors that influence loan defaulting by sme owners in Kenya: a study of smes within Thika Township of Kiambu County*. Kenya
- Maigua, T. W. (2017). *Determinants of Loan Repayment Default in Microfinance Institutions in Kenya*: University Of Nairobi
- Muriithi, M.W. (2013). *The causes of non-performing loans in commercial banks in Kenya*. University of Nairobi.
- Muthoni, R. (2016). *Determinants of loan repayments among clients of deposit taking Microfinances: case study of Faulu microfinance bank in Nairobi County*. University of Nairobi.
- Robinson, M. (2001). *The Microfinance Revolution: sustainable finance for the poor*. World Bank Publications