

LOAN RISK DIVERSIFICATION AND FINANCIAL PERFORMANCE OF MICROFINANCE INSTITUTIONS IN WESTERN REGION KENYA

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# LOAN RISK DIVERSIFICATION AND FINANCIAL PERFORMANCE OF MICROFINANCE INSTITUTIONS IN WESTERN REGION KENYA

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#### **ABSTRACT**

A microfinance institution-driving goal is to gain profits so that they can uphold sustainable and stable growth. The internal and external economic environs are both regarded as critical drivers for the performance of the Microfinance. The study sought to assess the effect of loan risk diversification on financial performance of microfinance Institutions in Western region Kenya. This study was based on modern portfolio theory and balance scorecard theory. The study embraced descriptive research design. This study employed purposive sampling approach to pick a sample size of fifty-six respondents from the fifteen microfinance institutions. Questionnaires were used and they targeted the credit managers, accountants and the finance managers of the microfinance institutions since they were the ones who were better placed to offer the information required for the investigation. A pilot test was conducted to check the reliability of the instrument in data collection. For purposes of validity, the questionnaires were divided into several sections to confirm that every evaluated data achieved the objectives. The research intended to analyze the microfinance institutions in western region Kenya. The discoveries from the investigation were principally advantageous in providing additional knowledge to existing as well as future establishments on loan portfolio management that will be embraced to prevent further losses and closure of microfinance institutions. Inferential as well as descriptive statistics was used in analyzing data. This was done using multiple regression model and frequency distribution using mean, standard deviation and percentages. Results indicated that the Loan Risk Diversification Practices had a significant influence in predicting the Financial Performance of Micro-Finance Institutions in Western Region Kenya. This was indicated by significant unstandardized beta coefficients of  $\beta$  = 0.214. The study findings will be beneficial to MFIs that seek to improve on loan portfolio management that significantly improves their financial performance. Legitimate knowledge would give them an additional favorable position in dealing with their loans. The study findings revealed that loan risk diversification has a significant influence on financial performance of MFIs in western region Kenya; therefore the study recommended that the management of MFIs should consider the three variables in loan portfolio management practices

Keywords: Loan Risk Diversification, Loan Portfolio Management, Financial Performance

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#### **INTRODUCTION**

Financial segment in any economy fills in as an impetus for development and advancement. Micro finances can play out this job through their critical elements of efficient payment system provision, financial intermediation, and the facilitation of implementing monetary policies (Aburime, 2008). Management of loan portfolio includes customer screening, planning of loan portfolio, and loan risk control, Karekaho(2009). Loan portfolio comprises loans made or purchased and are held for reimbursement. Successful administering of the loan portfolio is crucial to microfinance organization sufficiency and wellbeing (Janson, 2002). Organizing of loan portfolio, screening of customer and controlling of portfolio are totally undertaken with the main target of accomplishing performance purposed by loan portfolio, which, is shown in loan interest payment, profit being realized, credit repayment, and customers" objective achievement (Martin, 1996). Subsequently, when MFIs" focused on loan portfolio performance not being realized, addressing management of loan portfolio becomes unavoidable.

Loan portfolio management has become the more valid asset of many Microfinance institutions in the world (Kumanayake, et.al, 2019). Financial risks begin with the probability that a borrower may not pay the advance on time with interest (credit hazard). They incorporate the likelihood of the MFI to lose a huge aspect of the value of its credit portfolio because of excessive inflation, downturn of economy and other remotely created causes (market risk) (Kumanayake, et.al, 2019). According to (Nairo & Pfister, 2016) who undertook a research on the evolving role of credit portfolio management United States of America, stated that loan portfolio management is evolving this is because loan books can no longer be managed in isolation but they still remain a key function. In Australia a recent study by (Noll, 2020) about how the COVID-19 pandemic has threatened lenders with one of the most severe economic shocks in recent times, exposing significant shortcomings in traditional procedures in

this gap. There was a lack of linkage between the loan portfolio and resources at stake, as well as little focus on the loan portfolio's linkage to strategic return targets. He suggested strategies that were necessary to manage loan portfolio in such times Flexibility of calculating risk scores for the future. With the onset of the COVID-19 crisis, the risk in the lender's loan portfolio shifted significantly, and monitoring each business line's contribution to the enterprise's total return goal became critical, since the gross yield on the loan portfolio is the single largest contributor to a lender's returns

Discourse on management of loan portfolio particularly in microfinance institutions has also permeated the African continent. (Addae-Korankye, 2014) Focuses on what causes loan default or delinguency in Ghana's microfinance institutions and how this could be controlled. Buoyed by the understanding that microfinance institutions have been associated with effective implementation of programs, Addae-Korankye (2014) finds that interest rates, loan sizes, monitoring, appraisal, and client selection were major factors that could lead to loan default. Consequently, Addae-Korankye (2014) recommends that MFIs ought to have in place credit policies and procedures that are clear and effective, that should be reviewed regularly. Adugna (2014) examined factors that determine the quality of loan portfolios in microfinance institutions in Ethiopia. Motivated by a lack of quantitative research focusing on loan portfolio quality in MFIs in Ethiopia, Adugna established that institutional size, operating expense, gross loan portfolio, voluntary savings, and return on equity (ROE) had negative and significant relationships with loan loss rate (LLR) and write off ratio (WOR).

Analysis of loan portfolio management in Kenya has focused on aspects such as organizational profitability (Gongera, et al., 2013); micro-credit default (Gatimu & Kalui, 2014), (Muturi, 2016); loan performance (Moti, Masinde, Mugenda, & Sindani, 2012); and loan delinquency (Warue, 2012). According to Gongera et al. (2013), advancing loans

from deposits made by customers continues to put banks under liquidity risk. This however does not clearly spell out how such risk impacts on the eventual value of the banks. Gongera and colleagues argue that though loans present liquidity risks, they are a necessary evil given that higher loan volumes are commensurate with higher income accruals from interest and hence increased profit potentials

#### Statement of the problem

Loan defaults (credit risk) in the Microfinance Institutions have led to poor financial performance and this has resulted into numerous problems because of risks associated with lending for instance compliance risk, credit risk, strategic risk, reputation risk, liquidity risk, interest rate risk as well as price risk (Steinwand, 2000). Central Bank of Kenya (2016) in its yearly management report thought that high frequency of advance default has been reflected in the rising degrees of nonperforming credits by MFIs over the most recent 10 years. As indicated by the report, this circumstance

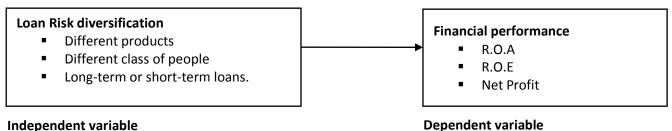
has antagonistically affected on credit portfolio performance and benefit of MFIs. This pattern represents a danger to the monetary feasibility and support-ability of the MFIs which thusly frustrates the provision of accomplishment of their set objectives. This is a problem in most microfinance institutions as it can lead to major losses, downsizing of employees and the institution may collapse (Bichanga & Aseyo, 2013). Therefore, the researcher was encouraged to assess and highlight the loan risk diversification and financial performance of Microfinances in Kenya, Western Region

#### **General Objective**

To assess the effect of loan risk diversification on financial performance of microfinance Institutions in Western region Kenya.

### **Hypothesis**

**HO**<sub>1</sub> There is no significant relationship Loan risk diversification and financial performance of Microfinance in Western region Kenya



#### Independent variable

Figure 1: Conceptual Framework

#### LITERATURE REVIEW

### **Theoretical Reviews**

#### **Modern Portfolio Theory**

Professor Harry Markowitz invented this theory in the year 1952, in the University of Chicago. Modern Portfolio Theory (MPT) is a venture hypothesis that aims to increase portfolio predicted return for a given level of portfolio risk, or to limit risk for a given level of expected benefit, by cautiously selecting the amounts of different properties. Despite the fact that MPT is broadly utilised in the financial industry and many of its developers have

received Nobel Prizes for the theory, its basic assumptions have recently been put to the test by fields for instance behavioural economics (William, 1964). MPT is a numerical plan for implementing the divergence concept in finance, with the goal of selecting an investment asset pool with a lower risk overall than any actual asset. This is understandable given how different forms of assets frequently vary in a motivator in conflicting directions. For instance, when costs in the stock market lower, the cost of security market (bond market) recurrently rise, and the vice versa. An election of the two kinds of assets

can in this manner have lower generally risk than both separately.

This theory was used in the analysis since it is an advantageous method for investors looking to develop diversified portfolios, which is essential for risk diversification and portfolio preparation. It further advocated for efficient portfolio selection and this can be attained if investment portfolio is constructed such that all possible risk is eliminated. The microfinance institutions can use MPT to reduce risk by introducing different products suitable for different classes of individuals and they can be either short-term or long-term products. Diversification in microfinance institutions through offering different products for different classes of clients will limit the possibility that a single adverse effect could have a catastrophic consequence. Loan risk diversification is a form of risk reduction. MPT also enables clients to build more profitable investments. Modern portfolio theory (MPT) is a theory that defines the how risk-averse investors should construct portfolios to elevate expected return given a certain amount of market risk. For that reason the firms need to conduct risk analysis so as to understand the market and the kind of risks they are exposed to, consequently enable informed credit decision making concerning portfolio planning and budgeting.

The theory was important to this study because it explained how loan portfolios can be structured to increase profitability and reduce loan defaults in microfinance institutions. It contributed to this study by clarifying lending uncertainties and how they can be handled not only at the individual borrower level, but also at the portfolio level. Theoretical perspectives into how companies can arrange a loan portfolio in view of their goals were offered by portfolio theory.

#### The balance scorecard theory

Kaplan & Norton (1992) introduced the Balanced Scorecard (BSC) concept. This theory was invented by US firm Analog Devices in the year 1987. A number of scholars praised it, with the most well-known study being a 1992 paper in Harvard

Business Review by Kaplan and Master David Norton titled "The balance scorecard – measures that drive execution". The report by Kaplan and Norton seemed timely and was recognised as kicking off the scorecard approach, which is the first step of "putting the BSC to work" (Kaplan & Norton, 1993) Because of its rap gathering, the BSC has transformed into the most popular model of multiestimation execution assessment. Focusing totally on money related results does not outfit a relationship with the information that it requires to flourish in the current state. Money related results offer a hint of past performance; anyway do not outfit you with information into your current status or where you will probably be in future.

You must consider both financial and nonmonetary pointers in order to make a reasonable estimation of performance, Kaplan (2000). The term 'balanced Scorecard' is normal for the changed idea given to long run and short-run, cash related and non-budgetary measures, driving and loosen markers and outside and interior execution (1996a, perspectives Kaplan and Norton, 1996b).Balanced scorecard hypothesis is the principle hypothesis is applicable in light of the fact that it estimates performance in two point of view non-monetary indicators monetary and guaranteeing gainfulness in a firm.

The study used balanced scorecard framework as it is able to assess performance of microfinance institutions in numerous measures as well as dimensions. The BSC is designed to reveal the need for balance in terms of financial as well as nonfinancial aspects of clients, internal business operations, as well as improvement. The customer perspective entailed the examination's independent variables: Loan risk analysis, portfolio planning as well as risk diversification. BSC converts a company's purpose into a series of performance metrics, providing the necessary basis for strategic measurement as well as management (Kaplan & Norton, 1996). The BSC contributed to this study in that it clarified how companies should monitor short-term monetary results while also tracking

their progress in developing capacities and attaining intangible capital that produce growth for future financial success. As a result, it was a valuable instrument in this research.

### **Empirical Reviews**

# Loan Risk Diversification and Financial Performance

Gatuhu (2011) in her investigation about the impact of credit management on the performance of microfinance on finance organizations in Kenya utilizing a descriptive overview plan on all the MFIs enrolled under AMFI revealed the variables; customer evaluation, control of credit risk and policy on the collection have an impact on the financial performance of MFIs. She declared that there exists solid connection between customer evaluation and performance in finances of MFIs, control of credit risk, and policy on collection. She further declared that a unit increment in customer evaluation would prompt increment in monetary execution of MFIs in Kenya; this means there is a

certain relationship amid customer evaluation and MFIs financial performance, an expansion in control of risk of credit would prompt increment in the MFIs financial performance in Kenya, which portrays that that there exists a sure connection amid MFIs financial performance and credit risk control as well as a unit increment in strategy on collection would prompt increment in performance; this means there is a positive connection between performance in finances of the MFIs as well as the procedure on collection. Customer evaluation, control of credit risk, and policy on collection essentially impacts the MFIs financial performance in Kenya.

#### **METHODOLOGY**

This research used descriptive research design which is mainly survey, cross sectional, and correlational. The target population for this research study comprised of fifteen microfinance institutions found in western region of Kenya as per the records of Central Bank of Kenya.

**Table 1: Target population** 

Microfinance	Credit	Accountants	Finance	Total	
	Managers		Managers	sample	
Faulu Microfinance	1	1	1	3	
KWFT	1	1	1	5	
Rafiki Microfinance	1	1	1	3	
Women's Microfinance Initiative	1	1	1	4	
SMEP Microfinance	0	2	1	4	
Platinum Credit	1	1	1	3	
CentSavvy Credit	1	1	0	6	
Musoni	1	1	1	4	
ECLOF of Kenya	1	1	1	3	
Opportunity International	1	2	1	4	
Getbucks	1	1	1	3	
Jamii bora	0	1	1	3	
Jitegemee Credit	1	1	1	3	
Juhudi Kilimo	1	1	1	3	
ASA	1	3	0	5	
Total	13	19	13	56	

Source: CBK & AMFI (2021)

Purposive sampling method was utilized to pick the sample from every microfinance institution under investigation. The method gave approximations of aggregate populace parameters with superior

accuracy. Purposive sampling approach was employed to draw fifty six respondents from fifteen Microfinance institutions in western region Kenya (all the credit managers, accountants, and finance managers in the fifteen micro-finance institutions). The information for this investigation was gathered from both primary as well as secondary sources. Questionnaires were used to collect the primary data. Structured questionnaire were utilized to acquire information from the sample. These questionnaires targeted the credit managers, accountants and the finance managers of the microfinance institutions since they were better placed to offer the information needed for the investigation. The Statistical Package for the Social Sciences (SPSS) was used to tabulate as well as scrutinize the data obtained by the use of questionnaires. In the data interpretation, descriptive insights such as percentages and frequencies were used. Regression analysis utilized in the testing the total independent variables influence on the dependent variable. The regression model used in the research is seen below:

Y=  $\alpha+\beta1X1+\beta2X2+\beta3X3+\varphi$ Where Y= Financial performance of microfinance institutions measured by ROA  $\alpha=$  Term that is Constant  $\beta$ = Beta Coefficient – This estimates what number of standard deviations a dependent variable will change, per standard deviation increment in the independent variable.

X1= Risk analysis

X2= Portfolio planning

X3= Risk diversification

ę= Error term

#### ANALYSIS AND REPRESENTATION OF DATA

## **Construct validity**

The degree to which instruments utilized for collection of data in the field assess the study's particular hypothesis is referred to as construct validity (Kendell & Jablensky, 2003). Construct validity was determined using Kaiser-Meyer-Olkin (KMO), Bartlett's tests, as well as factor analysis with Varimax rotation. KMO was utilised to assess sampling adequacy, or whether the number of items utilised in measuring a given construct (variable) was sufficient; it ranged from 0 to 1, with 1 showing ideal outcomes and a minimum threshold of 0.5 signifying better outcomes (Kendell & Jablensky, 2003).

**Table 2: Sampling Adequacy and Sphericity Test Results** 

	Kaiser-Meyer-Olkin (KMO)	Bartlett's Test of Sphericity			
Variable	Measure of Sampling Adequacy	Approx. Chi- Square	Degrees of freedom	p-value	
Financial Performance	0.620	38.391	21	0.012	
Loan Risk Analysis	0.652	52.819	21	0.000	
Loan Portfolio Planning	0.581	47.875	36	0.008	
Loan Risk Diversification	0.595	69.151	28	0.000	

Table 2 revealed that the KMO outcomes for sampling adequacy for all variables were above the 0.5 minimum threshold value set by Kendell, 2003; the measure for sampling adequacy for Financial Performance was 0.620, Loan Risk Analysis was 0.652, Loan Portfolio Planning was 0.581 and Loan Risk Diversification was 0.595. On all of the factors, these findings showed an appropriate level of sampling adequacy. As seen in table 2, the

significant findings of Bartlett's Test of Sphericity showed that the sampled products for every variable were from a population of similar variance;  $(\chi^2 \ (15) = 38.391, \ p=0.012 < 0.05)$  for Financial Performance,  $(\chi^2 \ (21) = 52.819, \ p=0.000 < 0.05)$  for Loan Risk Analysis,  $(\chi^2 \ (36) = 47.875, \ p=0.008 < 0.05)$  for Loan Portfolio Planning and  $(\chi^2 \ (28) = 69.151, \ p=0.000 < 0.05)$  for Loan Risk Diversification.

**Table 3: Factor Analysis for Loan Risk Diversification** 

Statement	<b>Factor Loading</b>	Communalities	Decision
Loan risk diversification has backed the financial			
performance of your institution.	.812	.931	Retained
Your institution applies loan risk diversification in			
management of your loan portfolio.	.856	.970	Retained
Do your institution utilize the banking management			
unsystematic and systematic in management of you loan	.768	.864	Retained
portfolio.	./08	.804	
Diversification of the industry has increased the need for	.495	.414	Retained
credit information sharing.	.495	.414	
Diversification of the industry has reduced the need for	.655	.504	Retained
credit information sharing.	.055	.504	
Corporate loan portfolio diversification leads to increase of			
your institution's cost in any way.	.735	.697	Retained
There is an increase in credit risk with diversification.	.780	.903	Retained
Corporate loan portfolio diversification reduces the credit	044	015	Retained
risk.	.944	.915	

Source: Pilot study result

Table 3 showed that communalities for all the 8 items under Loan Risk Diversification Construct were all above the minimum threshold of 0.3 (Costello & Osborne, 2008); these indicated that the items shared a common variance. The Factor loadings for all the 8 items were above a minimum threshold of 0.4 (see table 3); an indication that sample size of these 8 items was adequate enough to measure Loan Risk Diversification

# **Descriptive Characteristics of Financial Performance**

# **Financial performance**

To attain the general objective of this study, the researcher collected and analysed secondary data on ROA, ROE and Net profit from annual statements of MFIs in Western Region, Kenya from 2017 to 2019.

Statement			Strongly	Disagree	Undecided	Agree	Strongly
			Disagree				Agree
MFIs use return or	equity to measure th	eir	3	4	6	19	13
profitability.			7%	9%	13%	42%	29%
MFIs use return or	assets to measure th	eir	5	2	5	22	11
profitability.			11%	4%	11%	49%	24%
MFIs rely mostly o	n return on asset to m	aximize	3	2	9	19	12
profit margin.			7%	4%	20%	42%	27%
MFIs rely mostly o	n return on equity to i	maximize	2	2	7	24	10
profit margin.			4%	4%	16%	53%	22%
Return on equity h	as significant effect to	)	2	2	8	20	13
shareholders inves	stment.		4%	4%	18%	44%	29%
The total asset has	a significant effect to	profit	2	2	7	22	12
margin.			4%	4%	16%	49%	27%
The higher the retu	urn, the more product	ive and	3	1	7	15	19
efficient managem	ent utilizes economic	resources.	7%	2%	16%	33%	42%
	NA(0/NA)	Ctd Dav	St	Std. Error of Minim			
Average level of	Mean(%Mean)	Std. Dev.				m I	Maximum
FP	3.8444 (77%)	0.62406		0.09303	2.00		4.57

Most of the respondents approved that MFIs use return on equity to measure their profitability, that MFIs use return on assets to measure their profitability, that MFIs rely mostly on return on asset to maximize profit margin, that MFIs rely mostly on return on equity to maximize profit margin, that return on equity has significant effect to shareholders investment and lastly agreed that the total asset has a significant effect to profit margin as indicated by 42%, 49%, 42%, 53%, 44% and 49% respectively in table 4. Additionally, 42% of the respondents strongly concurred that the higher the return, the more productive and efficient management utilizes economic resources.

On average, the level of financial performance of MFIs in Western Region Kenya was at 77% (mean=3.8444, std. dev. =0.62406) rated very high as exhibited in table 4. This is an implication that majority of the MFI's in Western Region seems to have a high Financial Performance which might be positively influenced by the Loan Portfolio Management.

#### **Descriptive Characteristics** Risk οf Loan Diversification

The study described the sample findings on loan risk diversification among the selected Micro Finance institutions in western region Kenya and the discoveries were exhibited in table 5.

Table 5: Factor Analysis for Loan Risk Diversification Based on a Principal Components' Analysis with **Varimax Rotation for 8 items** 

	Statement	:	Strongly Disagree U		Undecided	Agree	Strongly
		ı	Disagree				Agree
Loan risk diversific	ation has backed the		3	7	6	17	12
financial performance of your institution.			7%	16%	13%	38%	27%
Your institution ap	plies loan risk diversifica	tion	2	6	5	19	13
in management of	your loan portfolio.		4%	13%	11%	42%	29%
Do your institution	utilize the banking		3	3	8	21	10
management unsy management of yo	stematic and systematic ou loan portfolio.	in	7%	7%	18%	47%	22%
Diversification of the industry has increased the			2	1	8	22	12
need for credit information sharing.			4%	2%	18%	49%	27%
Diversification of the industry has reduced the		the	5	1	9	15	15
need for credit info	ormation sharing.		11%	2%	20%	33%	33%
Corporate loan po	rtfolio diversification lea	ds to	1	4	5	25	10
increase of your in	stitution's cost in any wa	ay.	2%	9%	11%	56%	22%
There is an increas	e in credit risk with		2	1	10	24	8
diversification.			4%	2%	22%	53%	18%
Corporate loan portfolio diversification reduces		luces	4	1	6	17	17
the credit risk.			9%	2%	13%	38%	38%
Average Level of Loan Risk	Mean(%Mean) St	td. Dev.	Std. Erro mear	ſ	Minimum	Max	imum
Divorcification	2 70/1/76%	N 722E0	0.10	1772	2.00	1	75

Diversification 3.7944(76%) 0.10772 2.00 4.75 0.72258

From table 5, majority of the respondents agreed with the following sentiments; that loan risk diversification has backed the financial performance of their institution, that their institution applies loan risk diversification in management of the loan portfolio, that their institution utilize the banking management unsystematic and systematic in management of the loan portfolio and that the

diversification of the industry has increased the need for credit information sharing as indicated by 38%, 42%, 47% and 49% respectively. Additionally, 33% of the respondents strongly agreed that diversification of the industry has reduced the need for credit information sharing while another faction of 33% agreed on the same. Similarly, 53% of the respondents agreed that there is an increase in credit risk with diversification while 38% strongly agreed that corporate loan portfolio diversification reduces the credit risk and another 38% just agreed on the same sentiment.

Apparently, the average level of Loan Risk Diversification was at 76% (mean= 3.7944, Std. dev. = 0.72258) rated high. This is a clear implication that most of the Microfinance Institutions in Western Kenya, highly ensures that any investment portfolio is constructed such that all possible specific risks are eliminated. This seems in return to improve the financial performance of these MFI's

Linear Regression Analysis between Loan Risk Diversification and Financial Performance The objective of the study was to assess the effect of Loan Risk diversification on financial performance of Microfinance institutions in Western region Kenya. To achieve this, the researcher sought to test for the following hypothesis (**HO**<sub>1</sub>);

**H0**<sub>1</sub>: Loan Risk Diversification has no significant influence on the Financial Performance of Microfinance Institutions in Western region Kenya.

Table 6 summarized the results

Table 6: Linear Regression Analysis between Loan Risk Diversification and Financial Performance of Microfinance Institutions in Western Region Kenya

Model Summary							
Adjusted R							
Model	R	R Square	Square	Std. Error of the Estimate			
1	.431ª	.186	.167	0.41037			

a. Predictors: (Constant), Loan Risk Diversification

b. Dependent Variable: Financial Performance

#### **ANOVA**<sup>a</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1.655	1	1.655	9.827	.003 <sup>b</sup>
Residual	7.241	43	.168		
Total	8.896	44			

a. a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Loan Risk Diversification

#### Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	β	Std. Error	Beta	Т	Sig.
1 (Constant)	2.917	.331		8.823	.000
Loan Risk Diversification	.268	.086	.431	3.135	.003

a. a. Dependent Variable: Financial Performance

Source: Researcher (2021)

F (1, 43) =9.827, P = 0.003< 0.05, according to the ANOVA test discoveries in table 6. The Simple Linear Regression model was a good fit to our dataset. The model (Loan Risk Diversification) managed to explain 16.7% of the variation in the financial performance of Microfinance Institutions in Western region Kenya as shown by the Adjusted

R Square = 0.167 as revealed in the model summary of table 6. The regression Coefficient outcomes displayed that the unstandardized beta coefficient was significant  $\beta$ = 0.268, t = 3.135, p=0.003<0.05.Loan Risk Diversification had a positive standardized beta coefficient = 0.431 as shown in the coefficients results of table; this

showed that a unit improvement in the Loan Risk Diversification was likely to result to an improvement in the Financial Performance of Microfinance institutions in Western region Kenya by 43.1%. To envisage the Financial Performance of MFIs in Western Region Kenya when given the level of Loan Risk Diversification The following model was suggested by the study:

Financial Performance = 2.917 + 0.268 Loan Risk Diversification

The model means that retaining other features constant, a component increase in Loan Risk Diversification will go to 0.268 times increase in MFIs financial performance in Western Region, Kenya

Western Region `Kenya thus need for further research to determine what these variables are. The Multiple Linear Regression model equation that was used to envisage the Financial Performance of Micro-Finance Institutions in Western Region Kenya when given the level of Loan Management Practices (Loan Risk Analysis, Loan Portfolio Planning, and Loan Risk Diversification) was:

FP = 2.736+ 0.085LRA + 0.030 LPP+ 0.214LRD

Where;

FP = Financial Performance
LRA = Loan Risk Analysis
LPP = Loan Portfolio Planning
LRD = Loan Risk Diversification

The study used a standardized beta coefficient to establish the variable that had the greatest influence on the fiscal results of MFIs. If the value of standardized beta coefficient is nearer to one, then it has a greater effect on the dependent variable. The standardized coefficient Beta for loan risk diversification was 0.345. Therefore, loan risk diversification had a greater influence when compared to the other two variables.

The loan risk diversification in the multiple regression patterns greatly affected financial results. On the individual simple linear regression model, loan risk diversification greatly affected

fiscal results, with a standardized beta coefficient of 0.431.

# SUMMARY, CONCLUSION AND RECOMMENDATION

Coefficient results of simple and multiple regression analysis pointed out that loan risk diversification has a statistically significant effect on MFIs financial performance. Coefficient results regression analysis indicated that Loan risk diversification has a statistically significant influence on financial performance of MFIs. The average level of Loan Risk Diversification was evidently valued high at 76 percent (mean= 3.7944, standard deviation = 0.72258). This is a strong indicator that the majority of Microfinance Institutions in Western Kenya make every effort to ensure that every loan portfolio is designed to remove any relevant risks. Consequently, the financial effectiveness of these MFIs tends to rise

Correlation analysis showed that the independent variable (loan risk diversification) has a constructive association with the financial performance of MFIs in Western Region, Kenya.

The study findings showed that Loan risk diversification has a positive and statistically significant impact on the financial performance of MFIs in Western Region, Kenya. These findings concurred with Gatuhu (2011) in her investigation about the impact of credit management on the performance of microfinance on finance organizations in Kenya which revealed the variables; customer evaluation, control of credit risk and policy on the collection have an impact on the financial performance of MFIs. She declared that there exists solid connection between customer evaluation and performance in finances of MFIs, control of credit risk, and policy on collection.

Therefore, Loan risk diversification ought to be focused on for the stability and survival of an institution.

It was also resolved that there is a positive and solid connection amongst Loan Risk Diversification and the financial performance of MFIs in Western region Kenya. This implied that a unit increment in the Loan Risk Diversification was likely lead to an improvement in the Financial Performance of Microfinance institutions in Western region Kenya. It means that when the Microfinance Institutions increase loan risk diversification for instance offering different products, classification of people into different classes and issuance of long term or short-term loans; their financial performance will increase significantly.

The study further established that Loan Risk Diversification influenced the financial performance of MFIs in the Western region of Kenya. Therefore, the study recommended that during loan diversification, the microfinance institutions management should encompass and consider establishing different products, different classes of

people and classification of loans into either longterm or short-term loans. This would aid in minimization of risks associated with the issuing of loans such as default risk.

### Suggestion for further research

The findings established that loan risk diversification is significant and influences the financial performance of MFIs in western region Kenya. Researchers have not explored loan diversification fully. Thus, further research should investigate this variable in different sectors of the economy. However, apart from this Loan Portfolio Management Practice (Loan Risk Diversification), there are other variables, not encompassed in the study that could probably affect Financial Performance of MFIs in Western Region Kenya. Thus, further research should investigate these other variables affecting financial performance.

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