



LOAN REPAYMENT PERFORMANCE OF MICRO SMALL ENTERPRISES

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Abstract:

Micro and small business is an entity that is privately owned and operated, with a small number of employees and relatively low volume of sales. The term MSE incorporates firms in both the formal and informal sectors. The main purpose of this study is to critically evaluate the loan repayment performance of privately owned small-scale enterprises financed by Omo Micro Finance Institution and to investigate the major determinants behind their loan recovery record and to examine the impact of the identified factors on the loan repayment performance of Micro and Small Enterprises credit scheme. In this study both descriptive and causal type of the Research design is used Population comprised of Borrowers of 278 Micro and Small Enterprises of Omo micro finance in Wolaita Sodo town. Stratified Random sampling is used. the first stage, by stratified sampling 164 MSEs were selected based on the pre-determined scientific method from five different sectors of enterprise organization in the sector from the town. For the study Primary as well as secondary data had been used. Structured questionnaire had been used to collect first hand data from small and micro enterprises through field survey. The data collected from the field were analyzed using the descriptive statistical tools like percentages, mean and standard deviation. In addition, the regression model (multiple regression models) had been used to analyze the loan repayment performance of the micro and small enterprises. The variables are Beneficiary size of the enterprises, business related experience, loan size, loan supervision, loan initiation and suitability of repayment situation. The evidences of both descriptive analysis and multiple regression show that business related experience is found to be one of the major determinants adversely affecting the loan repayment performance. The informal sector will benefit from the study findings by understanding the reasons why financial institutions are not able to meet some of their financial demands whilst having pending loan repayment cases from their sector. The study is expected to stimulate more research on factors that influence loan repayment in other sectors of the economy and develop ways in which loan repayment rates can be improved

Background of the Study:

Loan is defined as a type of debt, and like all debt instruments, a loan entails the redistribution of financial assets over time between the lender and the borrower. In a loan, the borrower initially receives or borrows an amount of money called the principal from the lender, and is obligated to pay back an equal amount of money to the lender at a later time. Typically, the money is paid back in regular installments or partial repayments in an annuity; each installment being of the same amount (Signoriello, 1991). However, loans from other financial institutions like the informal financial institutions may have a different repayment structure which is custom made for the borrower.

Micro and Small Scale Enterprises:

Micro and small business is an entity that is privately owned and operated, with a small number of employees and relatively low volume of sales. Small businesses are normally privately owned corporations, partnerships or sole proprietorships. There is no clear definition of small scale enterprises as small varies by country and industry. However, three criteria are mainly used in literature to define Micro and Small Scale Enterprises (MSEs). The first one, based on number of employees, defines MSEs as those enterprises below a certain number of workers (In Ethiopia, it can range from 5 to 30 employees including enterprise owner and his/her families). The degree of informality and size of employment have perhaps been the two most readily accepted criteria on which classification of MSEs is based. The term MSE incorporates firms in both the formal and informal sectors. However, the terms MSEs and informal sector are normally used interchangeably as most MSEs are informal enterprises (Mead and Morrison, 1996). The main objectives of these institutions are they deliver micro-loans, micro-savings, micro-insurance, money transfer, leasing, etc, to a large number of productive resource-poor people in the country in a cost-effective and sustainable way (Bayeh, 2012).

Statement of Problem:

- ✓ What factors mostly affect the loan repayment performance of MSEs in Wolaita Sodo town?
- ✓ Which sector(s) is (are) highly suspected to the influence of affecting factors?

- ✓ To what extent do the identified factors individually as well as totally affect the loan repayment performance of MSEs in the Wolaita Sodo town?

This study therefore is intended to narrow the research gap by identifying factors behind the loan default problem that MSEs are associated with.

Objective of the Study:

The main purpose of the study is to critically evaluate the loan repayment performance of privately owned small-scale enterprises financed by Omo Micro Finance Institution and to investigate the major determinants behind their loan recovery record.

Specific Objectives:

- ✓ To identify the major factors that affect loan repayment of Micro and Small Enterprises in Wolaita Sodo town.
- ✓ To examine the impact of the identified factors (like Beneficiary size of the enterprise members, Initiation for loan, Business experience, loan size, suitability of repayment situation and loan supervision) on the loan repayment performance of Micro and Small Enterprises credit scheme.
- ✓ To suggest suitable measures for concerned bodies to develop strategy for the proper and timely repayment of the loan from borrowers.

Significance of the Study:

The informal sector will also benefit from the study findings by understanding the reasons why financial institutions are not able to meet some of their financial demands whilst having pending loan repayment cases from their sector. The study is expected to stimulate more research on factors that influence loan repayment in other sectors of the economy and develop ways in which loan repayment rates can be improved

Scope of the Study:

The study focused on small-scale enterprise borrowers financed by Micro Finance Institutions especially, Omo Micro Finance in Wolaita Sodo town of Wolaita Zone. Other factors like time and financial constraints also limit its scope. Although the study was restricted only to Omo micro finance borrowers, its finding is expected to somehow reflect some of the common features of other Micro Finance Institutions.

Conceptual Frame Work:

This conceptual model gives clear idea of the problem in the research. Therefore, the researchers tried to set own model of conceptual frame work after intensive review of the previous study in the country and abroad that are closely related to factors in loan repayment of MSEs of the study area.

General Hypothesis of the Study:

Identified factors have significant impact on Loan Repayment in case of Micro and Small Enterprises of Omo Micro Finance borrowers. Alternative hypothesis that led to the actual findings of the study. That was:-

H1: Beneficiary size of the Enterprises Member has significant impact on Loan repayment performance of MSEs in Wolaita Sodo town of Wolaita Zone.

H2: Initiation for loan taking has significant impact on loan repayment performance of MSEs in Wolaita Sodo town of Wolaita Zone.

H3: Business experience/practice has significant impact on loan repayment performance of MSEs in Wolaita Sodo town of Wolaita Zone.

H4: Loan amount/size has significant impact on loan repayment performance of MSEs in Wolaita Sodo town of Wolaita Zone.

H5: Loan repayment /situation/ period has significant impact on loan repayment performance of MSEs in Wolaita Sodo town of Wolaita Zone.

H6: Loan supervision has significant impact on loan repayment performance of MSEs in Wolaita Sodo town of Wolaita Zone.

The Research Design: In this study the researcher used both descriptive and causal type of the Research design.

Sampling Frame: Population comprised of clients (Borrowers) of 278 Micro and Small Enterprises of Omo micro finance in Wolaita Sodo town.

Sample Size:

This study applied a simplified formula provided by Yamane (1967) in order to determine the required sample size at 95% confidence level with the sampling error limit of 5%. i.e, 278

$$n = \frac{1 + 278(5\%)^2}{1 + 278(5\%)^2 + 1}$$
$$n = 278 = 164$$

Sampling Techniques:

Stratified Random sampling is used. The first stage, by stratified sampling 164 MSEs were selected based on the pre-determined scientific method from five different sectors of enterprise organization in the sector from the town. At the second stage, from each stratum the calculated number of samples was conducted randomly, samples those were taken from five different homogeneous groups randomly to sum up the required sample size were presented as follows. Based on field data 2015

(278)(164)

Construction = 42 Manufacturing=36 27=Urban Agriculture 34= Trade 25=Service

Data Collection Methods:

For the study Primary as well as secondary data had been used. Secondary data from Omo micro finance reports (2009/10 to 2014/15) matured loan and its subsequent repayment) had been used to observe the trend of loan repayment in the sector. Structured questionnaire had been used to collect first hand data from small and micro enterprises through field survey. The data that was collected in this way had also been classified, coded, summarized and presented using text and table.

Data Analysis:

The data collected from the field were analyzed using the descriptive statistical tools like percentages, mean and standard deviation. In addition, the regression model (multiple regression models) had been used to analyze the loan repayment performance of the micro and small enterprises by the help of software SPSS v.20.

Multiple Regression Coefficients and Functions:

The dependent variable ‘loan repayment performance’ is the function of Borrowers’ characteristics, loan & lending characteristic related factors. The function specified as: $LR_i = f(P, L\ell)$ where; LR_i = loan repayment performance for the i-th borrower, P = represent the Borrowers’ characteristics that affect their loan repayment, $L\ell$ = stands for the loan related characteristics of the individual enterprises. The dependent variable ‘loan repayment performance’ is the function of Borrowers’ characteristics, loan & lending characteristics related factors.

Specifically, the equation of regression for this study was built from two sets of variables namely, dependent variable (loan repayment performance) and independent variables (Beneficiary size of enterprise members, Initiation for loan, Business related experience of enterprises, loan amount, Suitability of repayment period, and loan supervision).

Multiple regression function that was derived from the above description was defined by the formula $Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6$, where a-constant b_1, b_2, \dots, b_6 - are regression coefficients of independent variables x_1, x_2, \dots, x_6 respectively and Y is independent variable that represents loan repayment performance, x_1 -Beneficiary size of enterprise members x_2 -Loan initiation, x_3 - Business related experience /practice, x_4 - Loan size/amount, x_5 - Suitability of loan repayment situation, x_6 - Loan supervision

Table 2 Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N	N of Items
.755	.751	10	20

Results and Discussion:

Table 3: Questionnaire return rate

	Sectors of MSEs		Questionnaire Distributed		Questionnaire Returned	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Validity Construction	42	25.6	37	88		
Manufacturing	36	21.95	31	86.1		
Urban agriculture	27	16.46	25	92.6		
Trade	34	20.7	33	97		
Service	25	15.2	23	92		
Total	164	100	149	90.85		

As indicated in the table above of 164 questionnaires distributed for this research study, 149 useable questionnaires were returned giving a response rate of 90.85%.

Frequency of loan Default

Among loan defaulters 5% of the respondents failed once to repay their loan, 45% of them failed twice, 35% of them also was failed to pay three times and about 15% of the respondents was failed to pay four times according to the schedule.

Main Reasons for Loan Default of Micro and Small Enterprises:

About 3% of the respondents was replied that the reason for loan default was market problem, 15% of the respondents answered that the factor that mainly contributed to loan default was inter-management problems, 21% of the respondents confirmed that shortage of working capital was their main problem and about 41% of the respondents replied that the main reason for their loan default was supervision problem. The rests about 20% of the respondents were not defaulters.

Factors that affecting Loan Repayment performance of Micro and small Enterprises

Table 4: Comparison of Grand means and standard deviations

No	Factors affecting loan repayment performance of MSE's	Grand Mean	Grand	Deviation
	Rank of the factors			
1	Beneficiary size of the enterprise	3.94	0.506	5th
2	Initiation for loan	3.913	0.397	6th
3	Business Enterprise	3.97	0.375	2nd

4	Loan size	3.95	0.418	4th
5	Suitability of repayment situation	3.953	0.387	3rd
6	Loan supervision	3.993	0.313	1st

Source: Field Survey

As indicated in the table above, loan supervision stands first as an affecting factor with the grand mean value of 3.993 and standard deviation of 0.313. Next to this; business experience, suitability of repayment situation, loan size, beneficiary size of the enterprises, and initiation for loan represent the succeeding positions with the respective grand mean values of 3.97, 3.953, 3.95, 3.94, 3.913 and the standard deviation of 0.375, 0.387, 0.418, 0.375 and 0.397 respectively. As it was indicated in descriptive part of the analysis the defaulters replied that the main reason for their loan default as loan supervision(40%), working capital shortage(21%), Inter-management problem(15%) and market failure(3%). This indicates that the reasons they mentioned and the identified problems share similar characteristics directly and indirectly.

Analysis of the results by inferential statistics (correlation and multiple regressions)

Pearson's product Moment of correlation coefficient and regression analysis were performed. With the idea of these statistical techniques, conclusions are drawn with regard to the sample and decisions are made with the respect to the research hypothesis.

Pearson's product moment of correlation coefficient (R^2)

This usually called coefficient of determination was used to determine whether there is significant relationship between independent variables and the dependent variables or not.

Table 5: Pearson's product moment of correlation coefficient

Correlations	X1	X2	X3	X4	X5	X6	Y				
X1=Beneficiary size of the enterprise member								Pearson Correlation	1	.590**	.646**
	.761**	.607**	.657**	.782**							
	Sig. (2-tailed)			.000	.000	.000	.000	.000	.000		
	N	149	149	149	149	149	149	149	149		
X2=Initiation for loan								Pearson Correlation	.590**	1	.626**
									.552**	.579**	.509**
	.664**										
	Sig. (2-tailed)		.000		.000	.000	.000	.000	.000		
	N	149	149	149	149	149	149	149	149		
X3=Business experience								Pearson Correlation	.646**	.626**	1
									.696**	.610**	.696**
	.801**										
	Sig. (2-tailed)		.000	.000		.000	.000	.000	.000		
	N	149	149	149	149	149	149	149	149		
X4=Loan Size								Pearson Correlation	.761**	.552**	.696**
									.635**	.683**	.794**
	.770**										
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000		
	N	149	149	149	149	149	149	149	149		
X5=Suitability of repayment situation								Pearson Correlation	.607**	.579**	.610**
									.635**	1	
	.645**	.717**									
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000		
	N	149	149	149	149	149	149	149	149		
X6=Loan Supervision								Pearson Correlation	.657**	.509**	.696**
									.683**	.645**	1
	.770**										
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000		
	N	149	149	149	149	149	149	149	149		
Y=Loan repayment performance								Pearson Correlation	.782**	.664**	.801**
									.794**	.717**	
	.770**	1									
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000		
	N	149	149	149	149	149	149	149	149		

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

Source: The Field Data

The table 5 above shows that a matrix of the correlation coefficients of six independent variables and one dependent variable under study and with the result that each variable is perfectly correlated with itself having the value is equal to 1 along the diagonal of the table. The result in the table indicates that at level of 95% confidence, which is with the p-value ($p \leq 0.05$) all the identified factors are significantly associated with loan repayment performance. At $P \leq 0.05$, the loan repayment affecting factors such as loan initiation (0.664), suitability of repayment situation/period (0.717), loan supervision (0.77), Beneficiary size of the enterprise members (0.782), loan size (0.794) and business experience (0.801) are represented by the ascending order of correlation coefficient. This implies that the factors impacts on loan repayment performance are also take place in similar order.

Multiple Regressions Analysis

Multiple regression analysis is a logical extension of these principles to the situation in which there are predictors and each predictor variable has its own coefficient and the outcome variable is predicted from a combination of all the variables multiplied by their respective coefficients.

Table 6 Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		Change Statistics			
				R Square Change	F Change	df1	df2	Sig.	F Change
1	.909a	.827	.819	.098124	.827	112.870	6	142	.000

Source: Survey result

a. Predictors: (Constant), loan supervision, loan initiation, suitability of repayment period, beneficiary size of the enterprise, business related experiences/practice, loan size.

b. Dependent Variable: Loan repayment performance

The results have shown that the variables included in the model explain about 82.7% of the loan variability in repayment. This also suggests that for the sampled borrowers there may be other factors which account about 17.3% and determining their repayment capacity but were not included in this study. The value presented as 9.8% in the table above is coefficient of determination with error terms that used to analyze the explained variance of the variables.

Coefficients of Multiple Regressions and its interpretations

Table 7: The Coefficient of MSEs loan repayment performance affecting factors by the regression model

Model	Unstudied	Confidants	Standardized Coefficient Beta		t	Sig	Correlations	
Error	B Std.	Beta	Zero					
Order	Partial	Part						
Constant	-.595	.0210	-2.834	.005				
X1	.214	.060	.208	3.542	.001	.782	.285	.124
X2	.092	.043	.103	2.117	.036	.664	.175	.074
X3	.362	.079	.263	4.572	.000	.801	.358	.160
X4	.140	.047	.183	2.969	.004	.794	.242	.104
X5	.142	.055	.134	2.602	.010	.717	.213	.091
X6	.209	.062	.187	3.347	.001	.770	.270	.117

a. Dependent Variable: Y

Source: Survey Result

This output of the model is very important in concluding that those early identified factors of this study are whether significantly affect the loan repayment performance of MSEs or not. This also can be proved by comparing the results yield by the model with that the pre-determined level of significant (5%). In the case of this study, the identified factor is said to be significant only if its p-value is less or equal to 0.05. Depending on the observed values the respective null hypothesis is either rejected (i.e. the alternative hypothesis are accepted) or the null are accepted (i.e. the alternative hypothesis are rejected) leading to the decision that the factor has significant effect in the given interval of confidence level and vice-versa.

Hypothesis Testing:

Results of the regression analysis in above table 7 shows that beneficiary size of the enterprises' member which is influenced by extra member of the enterprise owners, having external employee and the dependents with no additional income creation in the family has a significant impact on MSEs loan repayment performance and assigned by the value $p=0.001$ which is less than $p=0.05$. Hence the Alternative hypothesis stated as beneficiary size of the enterprises' member has significant effect on loan repayment performance of MSEs in Wolaita Sodo town is accepted. The another factor is business related experience which in turn is also affected by hasty involvement of Enterprise's in to business by the outside pressure and failure to manage finance /pre-mature selection of business type/, individuals experience in business management, failure to analyze the situation of prominent market, lack of training in the chosen activity, lack of additional income source and inability to attract customer by providing quality service/product has also positive significant impact since $p=0.000$ which is less than $p=0.05$ and the alternative hypothesis is accepted. This approves that business related experience has a significant impact in loan repayment performance of MSEs at Wolaita Sodo town. Among the identified factors under the characteristics of enterprises initiation for loan is also found to be positively significant with $p= 0.036$ which is less than $p=0.05$. Here also the alternative hypothesis is accepted.

Moreover, the identified factors of loan related issues such as loan size, suitability of repayment period/situation and loan supervision have positively significant values which are represented by 0.004, 0.01, and 0.001 respectively. Therefore, their respective alternative hypotheses are accepted instead.

As presented in model summary the finding of this study indicates that the identified factors have about 82.7% contribution in affecting loan repayment performance of MSEs in the study area.

Conclusions and Recommendations:

Conclusion:

- ✓ Variables relating to SMEs loan repayment form the most dominant group of determinants of bad loans, accounting about 82.7% of the variability. The variables are Beneficiary size of the enterprises, business related experience, loan size, loan supervision, loan initiation and suitability of repayment situation.
- ✓ The evidences of both descriptive analysis and multiple regression show that business related experience is found to be one of the major determinants adversely affecting the loan repayment performance having the value of 64.2% by taking the variable while others are constant. This indicates that in the study area MSEs did not have enough business related experience to manage their own activities properly and as the result they fail to repay the loan they received.
- ✓ Another important point to rise is loan size and that decreasing the loan size increases the loan default rate.

Recommendations:

- ✓ It has been asserted that business related experience is one of the major determinants adversely affecting the loan repayment rate of borrowers. It is in turn a combined effect of the borrower's pre-selection of business activity, type of business, poor practice of individuals' business management, lack of technical and business management training, inability to generate additional income from other activities and failure to satisfy customers in delivering quality service/product. All these variables revolve around the effectiveness of the business related experience of the MSEs. Therefore a thorough assessment of the borrower's business related experience, appraisal of the business plan to determine the appropriate loan size and terms of the loan should be conducted to ensure the proper utilization of the loan for the intended purpose.
- ✓ The adverse and significant association between business related experience and loan recovery rate seems to suggest the need for training to small scale entrepreneurs so as to develop their entrepreneurship and managerial capacity.
- ✓ Finally, this study has focused on certain variables related to affecting factors of loan repayment performance of borrowers. However, loan repayment performance in the study area was not investigated. Thus, further researches can be conducted on this issue to fill the gap in this area.

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