# International Journal of Advanced Engineering and Management Research

Vol. 2 Issue 3, 2017



www.ijaemr.com

ISSN: 2456-3676

## EXAMINING THE CRITICAL FACTORS AFFECTING THE REPAYMENT OF MICROCREDIT LOAN PROVIDED BY MICROFINANCE INSTITUTIONS IN TRINCOMALEE DISTRICT, SRI LANKA

#### Mrs. Diluxshy Ravichandran,

Lecturer, Department of Business and Management Studies, Faculty of Communication and Business Studies, Trincomalee Campus, Eastern University Sri Lanka

#### Dr. Kumarasinghe PivithuruJanak,

Senior Lecturer, Department of Business and Economics, Faculty of Management Studies and Commerce, University of Sri Jayewardenepura. Sri Lanka.

#### **ABSTRACT**

Many rural credit schemes have sustained heavy losses because of poor loan collection. And yet a lot more have been dependent on government subsidy to financially cover the losses they faced through loan default. The main objective of the research was to find out the causes of loan default within micro finance institutions in Trincomalee district. 100 loan borrowers were picked using stratified simple random sampling for each stratum, which enable every member of the population have an equal and independent chance of being selected as respondents and also simplest, most convenient and bias free selection method. The data was collected by use of self-developed questionnaire issued to the microcredit borrowers, in depth interviews had with microcredit group leaders and MFIs' Manager and staff. The data was analyzed by using statistical software (SPSS V 21) and tabulated by use of tables and figures. The findings revealed that most borrowers did not spend the loan amount on intended and agreed purpose, study found out that loan repayment default was as result of inadequate return to repay the loan.

Key Words: Loan Default, Causes and Micro Finance Institutions

#### Introduction

Microfinance is a credit plus approach, which provide not only credit but more financial services such as insurance, transfers, savings, etc. In Indian setting; the most popular operating model of microfinance is Microfinance Institution(MFI) model and Self-Help Group Bank Linkage (SBLP)model. While SBLP model demonstrates larger outreach, MFI model is presently gaining impetus. It is reported that as of December 2010, 3652 MFIs reached about 200 million clients, of which, 66.99 percent were among the poorest when they took their first loan. However,

microfinance outreach is still limited, because a vast majority of the regions in the world cannot access financial services although poverty is acute and widespread.

Therefore, it implies that microfinance has to make larger outreach to achieve the goal of access to finance. However, microfinance has now-a-days faced the challenge of achieving triple goal of outreach, impact and sustainability, and as a result the critical microfinance triangle has become a concern for microfinance practitioners. Since, both institutional and financial sustainability has lately become priority, the microfinance institutions therefore, emphasis on repayment of loans. Repayment performance is a key variable, which is demonstrated as a prime performance indicator by the MFIs to attract donors and international funding and, which help in achieving financial sustainability. With this backdrop, the paper focuses on the problem and solution related to recovery from qualitative perspective and examines quantitatively the factor behind the recovery.

## Research problem

A major criticism of subsidized microfinance systems is their high default rates (Morduch, 2006; Robinson, 2001). As per the discussion with the MFI managers it is revealed earlier repayment rate was recorded as high. However, now did not record such a good repayment. This situation weakens the virility of the MFIs. Further repayment rate of credit reduces lenders net return thereby decreasing the ability of the institutions to generate resources internally for institutional growth. In extreme cases, this may result in distress condition or outright liquidation of the institution.

## **Research Questions**

Do borrower's characteristics such as age, sex, extra income, extra loan, education, no of dependents, responsibility, intension to pay, knowledge, and utility affect microcredit loan repayment of the borrowers?

Do business characteristics such as continuity, profitability, marketability and risk affect microcredit loan repayment of the borrowers?

## **Objective of the study**

The overall objective of the study is to better identify the factors that determine microcredit loan repayment of Microfinance Institutions.

## **Hypothesis**

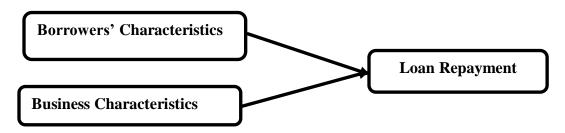
These empirical studies have taken place in Asian countries, setting the adoptability of the same in Sri Lanka is questionable, therefore taking into consideration of the existing literature on determinants of microcredit repayment in Trincomalee, the following hypothesis are formulated. Hypothesis one: There is no significant relationship between borrowers' characteristics and loan repayment

Hypothesis two: There is no significant relationship between business characteristics and loan repayment

## Significance of the study

As output of the analysis, identifying factors that contribute to successful loan repayment will help policy makers to formulate successful credit policies and programs that will again help in allocating financial resources effectively and efficiently. The study will have positive impact in promoting private investment and making it effective by creating smooth relationship between the borrower and the lender through its recommendations. Lesson will be drawn to loan defaulters. Other researchers will make use of the research out come because it will help them to identify the factors behind successful loan repayment and also will help them to make research on similar issues.

## **Operationalization**



Source: Modified frame work of Nawai&Shariff (2013)

#### **Description of the Study Area**

MFIs provide microcredit services throughout Sri Lanka and have a large number of borrowers. For this research, Tricomalee District was chosen Trincomalee is quiet and cosmopolitan with Tamils, Sinhalese, Muslims and Burghers all living in amity, microfinance services have been growing rapidly.

There are eleven divisional secretariat in Trincomalee district and twelve MFIs are functioning in Tricomalee district among them the study was conducted among five DS divisions where the population density is high in Town &Gravates, Muthur, Kinniya, Kuchchaveli, Thambalahamam and Kanthale namely with five MFIs functioning more than two years and their borrowers. This provided an adequate representative population for the study. The study was conducted by issuing self-developed questionnaire.

### **Sample Selection**

This study selected 100 borrowers out of 9200 total population, all borrowers who would provide a better understanding of and sufficient information about microcredit loan repayment. This study randomly selected borrowers in various microcredit loan schemes (economic purposes only), such as small businesses, services, plantations, animal husbandry, fishery and

manufacturing. This study used a stratified random sampling procedure where the population (borrowers) was divided into subgroups or strata (Zikmund, 2003). Borrowers are divided into two groups as repayment made on time and not paid on time.

## Data analysis method

The data collected from survey questionnaire were carefully coded and checked for consistency and entered into the SPSS spreadsheet. The analysis was performed with SPSS ver. 21. Descriptive statistics was employed to analyze data and the results were tested with parametric and non-parametric tests of significance. Besides, measures of central tendency (mean, standard deviation) were used to analyze the questionnaire survey result.

Before the survey was administered, a pre-test of the questionnaire was conducted with 20 microcredit borrowers to evaluate the clarity, consistency and appropriateness of the survey questions. Based on the comments and suggestions from the pre-test sample, the survey questions were amended. The survey questionnaire was divided into two sections. The first section was designed to gather information about the background of borrowers. The second section focused on the borrowers' personal, business and loan characteristics.

## **Factor analysis**

Bartlett's test of sphericity and the Kaisar-Meyer-Olkin measures of sampling adequacy both tests are used to determine the factorability of the matrix as a whole. Assumption indicates as follows, 'Bartlett's test of sphericity is large and significant' and 'if the KMO measure is greater than 0.50 than factorability existing. The test result is tabulated in the following table 4.14 and the results are complying with requirement to carry out factor analysis.

Table 0-1: KMO value and Barletss's value

S/N	Factors	KMO value	Bartlett's value	Significance level
01	Responsiveness	0.500	16.422	0.000
02	Intend to repay	0.509	14.904	0.002
03	Knowledge	0.546	13.080	0.004
04	Utilization	0.703	26.135	0.000
05	Continuity	0.632	29.432	0.000
06	Profitability	0.768	60.285	0.000
07	Marketability	0.627	61.051	0.000
0	Risk	0.747	64.051	0.000

Source: Survey data

### Univariate Analysis of Dimensions

Descriptive Statistics						
	N	Minimum	Maximum	Mean	SD	Variance
Responsiveness	100	4.00	5.00	4.6700	.44506	.198
Intend to pay	100	3.00	5.00	4.2800	.49173	.242
Knowledge	100	3.67	4.67	4.2233	.38506	.148
Utilization	100	1.00	5.00	3.0400	1.83266	3.359
Continuity	100	1.25	5.00	3.1350	1.54577	2.389
Marketability	100	3.00	5.00	3.0030	.48523	.231
Profitability	100	1.33	4.67	2.9500	1.32436	1.754
Risk	100	1.67	4.67	2.9200	1.16353	1.354
Borrowers' characteristics	100	2.50	4.83	3.6317	.95854	.919
Business characteristics	100	1.90	3.94	3.0262	.78496	.616
Valid N (listwise)	100					

Source: Survey data

#### **Correlations**

P value is 0.000, since "p" value is less than 0.05, then the null hypothesis was rejected. That means there was a difference between microcredit loan repayment and characteristics of borrowers at the 95 percent confidence level.

According to the below table, since "p" value is less than 0.05, then the null hypothesis was rejected. That means there was a difference between microcredit loan repayment and business characteristics at the 95 percent confidence level.

Table 0-2: Correlations

Correlations						
		Incident	Borrowers'	Business	Loan	
		of LRP	characteristics	characteristics	characteristics	
Incident of LRP	Pearson	1	.977**	.986**	.942**	
	Correlation					
	Sig. (2-		.000	.000	.000	

	tailed)				
	N	100	100	100	100
Borrowers'	Pearson	.977**	1	.944**	.898**
characteristics	Correlation				
	Sig. (2-	.000		.000	.000
	tailed)				
	N	100	100	100	100
Business	Pearson	.986**	.944**	1	.952**
characteristics	Correlation				
	Sig. (2-	.000	.000		.000
	tailed)				
	N	100	100	100	100
**. Correlation is significant at the 0.01					
level (2-tailed).					

Source: Survey data

## **Findings**

The significant positive sign on the Gender variable indicated that the probability of a loan repayment problem was higher for males than for females. As hypothesized, male borrowers were less responsible and disciplined in repaying their microcredit loans than female borrowers. This finding is similar to the results reported by most previous result that found female borrowers are more creditworthy than male borrowers such as Sharma & Zeller (1997), Papias&Ganesan (2008), Derban et al., (2005), and Roslan & MohdZaini (2009). Chaudhary and Ishfaq's (2003) and Roslan and Abd Karim's (2009)

In this study the borrowers' educational level did not have a significant effect on the probability of a loan repayment problem. This contrasts with Bhatt and Tang's (2002) results in a study of microenterprises in the USA and Chaudray and Ishfaq's (2003)

The number of dependents in the borrowers' household also influences the ability of borrowers to repay the microcredit loan Household Size, it is a continuous variable and it is assumed that the larger the house hold size the negative impact will have on successful loan repayment performance which is attributed to higher house hold expenses. Thus, it is hypothesized that the borrower who has many dependents will have a higher probability of having a problem in paying back the microcredit loan (Brehanu&Fufa, 2008).

The results also showed that extra income and repayment were negatively significant in the loan repayment problem this is inline with the study by Brehanu and Fufa (2008)

The Extra Loan variable indicates the commitments of loan repayments faced by the borrower. This study examines whether the borrowers confront their loan repayment when borrowing extra loans from friends and relatives. This result is inline with study reported by Suraya H M (2011),

that many Malaysian microfinance borrowers borrowed from more than one face difficulties to repay.

The study concluded that most of the borrowers did not use the loans they received from the MFIs for the intended and agreed purposes. Such diversions were the reason why they were unable to keep up to date in their repayments. Besides, borrower's attitude towards their debt is also the main reason in determining loan repayment performance. Borrowers who set their mind that every debt must be repaid have higher chances to repay on time. The result also shows that borrowers who have regular income and savings tend to become good borrowers. These borrowers usually manage their income well and are not lavish with the profit received. The borrowers also have a problem to pay back their loans that make them delinquent because they have to pay other debts such as, supplier debt, shop rental and family expenses. Usually when their sales drop or have personal problems such as sick or family sick, it will affect their loans repayment. Unpredictable crises such as illness or death of family members may affect borrower's repayment (Norell, 2001). Besides, the amount of loan received by the borrowers may also affect borrowers' repayment performance where the bigger total loan received by the borrowers, the higher probability of the borrowers to default. When the borrowers received more loans, there is a tendency that the excess loan may be diverted to other un-productive, none for business uses such as for personal use, children's school fees, purchasing and redeem jewelry and pay other debt (Norell, 2001). Based on the interviews with respondents, most of them admit that they use some of the loan for other things.

From the foregoing discussion with borrowers and microfinance institution's staff, it can be concluded that credit monitoring is directly related to loan performance. Despite this the respondents didn't support the argument that loan would perform well only by proper monitoring if proper assessment is not carried out while advancing the credit. This indicates that follow up would never substitute credit analysis or assessment. On the other hand though loan monitoring requires budget, allocating higher budget might not ensure loan performance as a good number of respondents are neutral to the assertion.

#### Limitations

There are a number of limitations in this research relating to sample selection, data and estimation techniques. These include: Some information collected from the borrowers is not purely correct, they may have manipulated information to get loan by thinking that we collect information for giving loan to them. The conclusion and recommendations have been arrived based on the available information, it is assume that the information used for this research is correct and accurate. This study used only the borrowers' characters. Many other variables were not tested in this study, such as business characteristics, loan characteristics, institutional characteristics, and characteristics of employees.

#### **Summary and conclusion**

Microfinance was introduced in Sri Lanka to provide financing facilities to the poor and microenterprises to start up business or to finance business activities such to buy tools and machines, business equipment and, raw materials. Most of the MFIs in Sri Lanka are subsidized institution where they received funds in the form of grants from the government and foreign countries and majority of them are too dependent on the grants that make them not sustainable. Therefore, high repayment is important for them to continually providing microfinance to their clients. The study concluded that most of the borrowers did not use the loans they received from the MFIs for the intended and agreed purposes. Such diversions were the reason why they were unable to keep up to date in their repayments. The study recommends that in order for MFIs to reduce default in loan repayments, they should monitor the borrowers regularly so as to ensure that they use the loans they received for the agreed and intended. This could be done through getting regular account statements from borrowers as well as physically visiting the borrowers to monitor and evaluate the progress of their loan projects.

#### Recommendations

This study recommends the MFIs to enhance their loan monitoring through peer monitoring like in group lending approach such as through entrepreneur's club or mentor mentee program where this can reduce the borrowers attitude to not pay back their loans and help them to enhance their business. Besides, the new borrowers can learn from the successful borrowers in running their business. This can reduce the operational cost of MFIs in monitoring their clients. The study also suggests differentiating the terms and conditions between applying loan for start-up the business and for working capital purpose because normally who apply for start-up the business are new entrepreneurs and have less experience in business. They not only need credit but more than that, they need business training like how to promote their product, prepare financial statement and the presentable of the product. Therefore, it is suggested to provide related training skills to the new entrepreneurs to enhance their business skills.

#### Reference

- Bhatt, N. and Tang, S.Y. (2002). Determinants of repayment in microcredit: evidence from programs in the United States. *International Journal of Urban and Regional Research*, 26(6), 360-376.
- Brehanu, A. and Fufa, B. (2008). Repayment rate of loans from semi-formal financial institutions among small-scale farmers in Ethiopia: Two-limit Tobit analysis. *The Journal of Socio-Economics*, 37(6), 2221-2230. http://dx.doi.org/10.1016/j.socec.2008.02.003
- Chaudhary, M. A. and Ishfaq, M. (2003). Credit worthiness of rural borrowers of Pakistan. *The Journal of Socio Economics*, 32, 675-684.

- Derban, W., Binner, J. and Mullineux, A. (2005). Loan repayment performance in community development finance institutions in the UK. Small Business Economics, 25, 319-332.
- Gonzalez-Vega, C. (1998). Microfinance: broader achievements and new challenges. Economics and Sociology Occasional Paper No. 2518. The Ohio State University.
- Hossain, M. (1988). Credit for Alleviation of Rural Poverty: the Grameen Bank in Bangladesh. Research Report; 65. International Food Policy Research Institute in Collaboration with the Bangladesh Institute of Development Studies. February 1988.
- Ledgerwood, J. (1999). Microfinance Handbook: An Institutional and Financial Perspective. The World Bank. Washington.
- Mokhtar, S. H., Nartea, G., &Gan, C. (2012). Determinants of microcredit loans repayment problem among microfinance borrowers in Malaysia (pp. 33-45).
- Morduch, J. (2006). Smart subsidies. ESR Review, 8(1), 10.
- Nawai, N. B. and Shariff, M. N. M. (2013). Determinants of repayment performance in microfinance programs in Malaysia (Vol. 11, pp. 14-29).
- Nawai, N. and Shariff, M. N. M. (2012). Factors Affecting Repayment Performance in Microfinance Programs in Malaysia. Procedia-Social and Behavioral Sciences, 62, 806-811. http://dx.doi.org/10.1016/j.sbspro.2012.09.136
- Norell D (2001) How to reduce arrears in microfinance institutions. J. microfinance.3 (1): 115-130. Oaks, California, U.S.A.
- Papias, M.M. and Ganesan, P. (2009). Repayment behaviour in credit and savings cooperative societies. Empirical and theoretical evidence from rural Rwanda. *International Journal of Social Economics*, 36(5), 608-625.
- Robinson, M. (2002). The Microfinance Revolution: Sustainable Finance for the Poor. The World Bank. Washington, D.C. 38.
- Robinson, M. S. (2001). The Microfinance Revolution: Sustainable Finance for the Poor. The World Bank, Washington, D.C.
- Roslan, A.H. and MohdZaini, A. K. (2009). Determinants of microcredit repayment in Malaysia: the case of Agrobank. Humanity & Social Sciences Journal, 4(1), 45-52.
- Silwal, A.R. (2003). Repayment performance of Nepali Village Banks. Unpublished Master Dissertation. Swarthmore College, Swarthmore.
- Woller, G. and Parsons, R. (2002). Assessing the community economic impact of microfinance institutions. *Journal of Developmental Entrepreneurship*, 7(2), 133-150.

Yunus, M. (1999). Banker to the Poor. The autobiography of Muhammad Yunus, founder of Grameen Bank. Aurum Press Limited, London.

Sharma, M. and Zeller, M. (1997). Repayment performance in group based credit programmes in Bangladesh. World Development, 25(10), 1731-1742.

www.cgap.org. CGAP(2006)