The impact of micro loan on the income growth of the microenterprises in Sri Lanka

Shohani Upeksha Badullaewage[*] and Dhammika P. Withanage
Department of Economics, Faculty of Humanities and Social Sciences,
University of Sri Jayewardenepura, Sri Lanka.
[*]Corresponding author: shohani.92v@gmail.com

Introduction

The micro loan is a financial tool under the scheme of microfinance services which provides financial assistance to the low income sectors, including the micro and small enterprises. It is mostly obtained for the developing economies for which other commercial intermediaries are reluctant to provide the same financial assistance. The micro enterprises are said to be the less privileged business entity which could contribute income to the economy.

Many studies have revealed that the income of micro entrepreneurs have increased after the provision of micro loans (Aheeyar, 2007). The research conducted by Naeem et al., (2015), revealed that the microfinance has overall significant impact on sale revenue and net income of microenterprises. According to Kyale (2013) the provision of Micro Finance Institutions (MFIs) loan products along with favorable interest rates can minimize the challenges facing Small and Medium Enterprises (SMEs) and provide an opportunity for them to grow and expand.

Microenterprise industry is one sector of the economy in Sri Lanka in which microfinance institutions are playing a substantial role to foster the industry by providing micro loans to micro enterprises. However, the expected growth level has not been achieved due to some reasons and limitations such as higher interest rates, stringent terms and conditions and disutility of funds. Therefore, this study is aimed to research the impact on micro loan over the income growth of the microenterprises in Sri Lanka and to propose a more effective mechanism so that the government and microfinance institutions can adopt in order to meet the expected growth level of microenterprises.

Methodology

The target population of the study was microcredit recipients in Homagama Divisional Secretariat area. Out of which borrowers of sixty microenterprises in different sectors were selected based on the information obtained from the microfinance institutions in the area as the sample. The primary data were collected by using questionnaire survey and interviews.

Under the quantitative techniques, paired sample t - test was conducted to analyze the significant differences between the mean income before and after the provision of micro loan. The Eta squared was used to measure the magnitude of micro loan intervention's effect. The hypothesis is mentioned below.

H_1: *There is a significance difference between the mean income before and after the provision of micro loan*

A linear multiple regression was conducted through multivariate analysis to measure the impact of each independent variables upon the income growth of the microenterprises.

$$IG = \alpha + \beta1(AL) + \beta2(FR) + \beta3(IL)$$

Where; IG = Income growth, AL = Amount of the loan borrowed from MFIs, FR = Facilities in acquiring raw materials after the provision of micro loan, IL = the amount of the loan invested for the business. IG was used as a dependent variable. AL, FR and IL were used as independent variables and measured as continuous, nominal and ordinal variables respectively.

The two Gamma tests were conducted respectively to evaluate the relationship between the adequacy of micro loan and satisfaction of the services provided by the microfinance institutions and the improvement of the business after the provision of micro loan. Two separate Kendall's tau-b tests were conducted accordingly to evaluate the same relationship. The Chi-square test was conducted to evaluate the relationship between amount of the loan invested for the business and the facilities obtained in acquiring the raw materials.

Results and discussion

As per the descriptive analysis (See Table 1), majority of the loan borrowers have agreed that the income growth of the business was improved after the provision of micro loans.

Table1 Reasons for disutility of loan

Reasons	Percentage
For consumption	21.05%
To renovate houses	42.11%
For children's education	10.53%
to repay loans and mortgages	26.32%

The 21 percent , 42 percent and 26 percent of micro entrepreneurs have spent parts of the loans resprctively for consumption, renovate houses and repay mortgage loans. Most of them faced difficulties in achieving the expected growth due to stringent terms, highger interest rates, insuffiecient loan amounts and poor flow of information.

Statistics revealed that there is significant difference ($p < 0.05$) in microenterprise's income after the provision of micro loans (Table 2). The Eta

134

squared value is 0.2, which is a large effect with the substantial differences in income.

Table 2 Results of paired sample t- test

Type of Impact	Mean Difference	t value	Sig. level	Effect size – Eta squared $\dfrac{t^2}{t^2 + N + 1}$
Impact on income growth	8.317	3.843	.000	0.20

Table 3 The results of regression analysis

Parameter	Beta	Sig.	Partial Eta Squared
Intercept	4.723	.000	.037
AL	2.124	.000	3.89
IL	-4.476	.391	1.4
FR	-2.053	.980	.110

As per the regression analysis (Table 3), amount of loan significantly contribute to estimate the income growth of micro enterprises ($p<0.05$). When the other factors remain constant, the increase in one unit of amount of loan leads to increase the income by 2.12 units. Micro entrepreneurs who had not invested the full loan amount, income growth decrease by 4.47 units than those who had invested the same. Similarly, the micro entrepreneurs who had not obtained the facility for the purchase of raw materials, income growth decrease by 2.05 units than those who had obtained the same. But, the investment of the total amount of loan into business and facilities gained in acquiring raw materials do not significantly contribute to estimate the income growth.

Table 4 Symmetric measures of Gamma and Kendall's tau-b test

			Value	Asymp. Std.	Approx. T^b	Approx. Sig.	Correlation
Relationship between the adequacy of the micro loan and the improvement of the business in terms of income growth	Ordinal by Ordinal	Kendall's tau-b	.718	.064	9.549	.000	0.781
		Gamma	.931	.050	9.549	.000	
Relationship between the adequacy of micro loan and the satisfaction of the microfinance services	Ordinal by Ordinal	Kendall's tau-b	.690	.054	10.058	.000	0.69
		Gamma	.935	.036	10.058	.000	

135

Kendall's tau-b correlation depicts that there is a strong positive relationship (78%) between the adequacy of the micro loan and the improvement of the business in terms of income growth (Table 4). The value of Kendall tau-b is 0.718 and gamma is 0.931, which indicate that there is a moderate and strong positive relationship between the adequacy of the loan and the improvement of the business respectively. Kendall's tau-b correlation depicts that there is a strong positive relationship (69%) between the adequacy of the micro loan and the satisfaction of the services provided by the microfinance institutions. The value of Kendall tau-b is 0.69 and gamma is 0.935, which indicates moderate and strong positive relationship between the adequacy of the loan and the satisfaction about the services respectively.

As per the Chi-square statistics the Pearson Chi-Square value is 44.211 and Continuity Correction value is 29.831 with the associated $p<0.05$). This implies that there is relationship between the amount of the loan invested for the business and the facilities received in obtaining the raw materials.

Conclusion

The study concludes that the micro loan creates positive impact upon the income growth of microenterprises in Sri Lanka. Although they have faced constraints in financing loans they are satisfied of the loan amount. High income growth could be expected if the higher level of loan is invested for the business.

The study recommends that the affordable loan slab should be available with individual desire, and also MFIs should launch programs to educate micro enterprises in income growth and profit maximization, and that moreover, a well-organized network within the industry to monitor the implemented systems, programs and standards in the industry concerned.

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