Default Risk and Debt Recovery Strategies of Microfinance Institutions: A Comparative Study of MFIS in Ghana

Kwadwo Obeng*
Department of Accounting, University of Professional Studies, Accra.

Redeemer Yao Krah
Department of Accounting, University of Professional Studies, Accra.

ABSTRACT

The objective of this research is to identify and compare the strategies used by SIL and PCSL[1] to minimise the risk of loan default and to recover debt. It also evaluates the effectiveness of the debt recovery strategies. The data was collected through questionnaire administered to the management and staff of both institutions in addition to information obtained from their financial statements. The percentage of non-performing loans to the total loan portfolio of both institutions from 2008-2010 was compared to the industry figures. The findings were that PCSL's non-performing loans ratio was below the industry average. There was no difference between the industry's average and SIL's non-performing loans ratio. The research concluded that the debt recovery strategies of PCSL are comparatively better than strategies adopted by SIL.

Key words: Non-performing loans, Debt recovery, MFIs, Ghana.

1. INTRODUCTION

One of the most impressive developments in the world of social economic development in the last few years has been the successful explosion and impact of microfinance on society at large. Microfinance can be defined as 'the provision of financial services and the management of small amounts of money through a range of products and a system of intermediary functions that are targeted at low income clients' (Bank of Ghana, 2007). Microfinance consists primarily of providing financial services including, savings, and micro-credit, micro-insurance, micro-leasing and transfers in relatively small transactions designed to be accessible to micro-enterprises and to low-income households. Research indicates that since the last 20 years, the microfinance industry has expanded especially during the 1980's and 1990's, particularly in Asia, Africa, and Latin America, thousands of microfinance NGOs (Non-Government Organisations) were established to provide microloans, using individual and group lending methodologies. In the 1990's, while many of the NGOs failed to reach scale or financial sustainability, others led the way in demonstrating that poor people, particularly poor women, are excellent borrowers, when provided with efficient, responsive loan services at commercial rates. In Africa, there is a large demand for microfinance by the poor and low income people. This high demand necessitated the inclusion of microfinance into the formal financial system. (Africa Development Bank, 2006).

Despite the fact that microfinance has proven to be an effective and powerful tool for poverty reduction due to its ability to penetrate the poorer strata of society, there have been challenges characterising the strategies used by microfinance institutions in recovering debt from clients. The difficulty in recovering debts has resulted in a relatively slow rate of growth and has also kept the cost of credit high. The difficulty microfinance institutions have in recovering debt from clients makes it difficult for them to always have funds available to lend. This leads to a slower rate of growth than would have been desired by the institutions. The current study is motivated by the need to understand the strategies that the MFIs are adopting to deal with this menace of bad loans. The objectives of the study are to find out the strategies put in place by the two MFIs to minimise risk of loan default by their clients as well as to identify the strategies put in place by these MFIs to recover debt. Finally, the study aims at determining if the debt recovery strategies used by the two institutions are effective.

The remaining part of the paper is organised in four sections. The first section provides what has been done and known about MFIs in the literature, provide insight into both the theoretical and empirical literature works. The next section describes the research methodology and the third section contains the results and discussions. The final section provides the conclusion and recommendations.

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[1] The decision of the researchers based on the understanding with the MFIs involved in the study is to use their abbreviated names in publications. However, their full names will be made available upon request to the authors through their email addresses.

2. LITERATURE REVIEW

The first part of the literature review examines the theoretical literature covering overview of microfinancing in Ghana, the joint liability and high frequency repayment postulates.

O*verview of Microfinance in Ghana*

Microfinance has existed in several forms for centuries. The history of microfinance in Africa can be traced to Nigeria, back in the fifteenth century. It was carried from there to the Caribbean by slaves. Susu, a popular term for microfinance West Africa, is a Yoruba word. Indeed, the concept of microfinance is not new in Ghana. For instance, available evidence suggests that the first credit in Africa was established in northern Ghana in 1955 by Canadian catholic missionaries. Microfinance has been widely credited with reducing poverty and empowering women. (African Development Bank, 2006).

According to the 2010 Bank of Ghana Report, the number of registered Non-Bank Financial Institutions in the country was 46 with total assets of GH¢1,131.52 million representing an increase of 20.6% over the total assets of the previous year. Microfinance now serves up to 15% of the population while the formal banking sector serves about 10% (Pollio & Obuobie, 2010).

Theories of Joint Liability and High Frequency Repayments

Fischer and Ghatak (2010) discussed two postulates: joint liability and high frequency repayment. Joint liability can be interpreted in two ways: explicitly and implicitly. The explicit interpretation involves an arrangement where when a borrower in a group of borrowers defaults; the other members are contractually bound to pay the loan. The implicit interpretation has to do with the belief by group members that a default by one borrower will lead to the group being denied credit even if it is not expressly stated in a contract.

According to Fischer and Ghatak (2010) high frequency repayments (HFR) is the tendency of most microfinance organisations to demand borrowers to make regular repayments soon after the loan is given out. They explained that this is because of a pervasive sense among microfinance practitioners that frequent repayment leads to high repayment rates. They discussed an alternative view to 'high frequency payments', which focuses on holding meetings with the borrower as opposed to the payment alone. The view held that frequent meetings with a borrower and receiving reports on the borrowers' business, helps to determine when a default is deliberate and when the borrower cannot genuinely pay.

Empirical Literature

Fischer and Ghatak (2010), in explaining the theory of joint liability, disclosed that a study carried out in the Philippines did not find any statistical difference in the rate of repayment of loans by people in a group (joint liability) and people who borrow individually (personal liability). They warned however that, the study was not conclusive since the customers of the bank had all been borrowing in a group, therefore although a joint liability situation did not exist, the informal peer monitoring still continued in the case of individual liability. Another study (Ghatak & Guinnane, 1999) found out that there was clear evidence to the effect that joint-liability groups led to faster repayment; however, they said that there were other strategies that were used and therefore they could not relate the success solely to that strategy. They further discussed studies on high frequency payments which revealed mixed results. Some studies found that high frequency payments led to a higher default rate, other studies found the opposite and some studies found out that the frequency of payment was not significant in determining whether a borrower defaults or repays.

A study conducted in the United States of America (Bhatt & Tang, 2002) on four microfinance institutions found that the educational level of a borrower and the proximity of a borrower's business to the lending agency, were the factors that were statistically significant in determining the likelihood of a borrower repaying a credit facility. The study also found that where borrowers incurred less transaction cost (including waiting time), they were more likely to repay the loans.

Another study (Oke, Adeyemo & Agbonlahor, 2007), conducted in South-Western Nigeria discovered a repayment rate of about 90 per cent. It also found out that members' spending on socio-cultural activities was positively related to repayment, a currency point increase in penalty for lateness will reduce repayment rate by 0.88 per cent, improvement in income will increase the rate of repayment, increasing banking opportunities in the area will improve microcredit repayment, access to adequate business information will increase repayment rate by 29 per cent. Members that belong to co-operative societies are the ones who had better repayment rate.

Delay of disbursement of loans reduced repayment rate by 0.98 per cent.

A study by Norell (2001) prescribes techniques that microfinance institutions can use to reduce arrears. The study found out that the key to reducing arrears was to quickly follow up late loans, form solidarity groups, update their credit policies regularly and enforce them, focus the service of credit officers in a specific geographic scope, avoid lending to start-up businesses, give clients training prior to giving out loans and provide financial incentives for credit officers. In discussing the quick follow up on late loans, Norell stated the case of a Nicaraguan credit officer for a microfinance institution who achieved an almost zero percent arrears rate by checking each day on a client who had missed a payment. He explained that a credit officer would be seen as a friend if he visited a day after a payment was missed to inquire about the missed payment and warn of the dangers of defaulting. However, a credit officer who visits a week after a missed payment would be seen as a police officer. The formation of solidarity groups is in line with the joint liability theory already discussed.

Focusing credit officers in a specific geographical scope reduces the amount of time and money needed for them to monitor borrowers. Also, concentrating efforts on a specific geographical area would bring about visible development including greater economic activity. Avoiding lending to businesses that have been in existence for less than twelve months can also reduce the risk of default. Most start-up businesses fail in the first year of operation. Therefore, a business that has survived on equity for its first year is less likely to default on a loan than a start-up business. Another important technique is providing financial incentives for credit officers. This can be based on a percentage of the salary of the officer paid to him/her as a bonus for achieving a specific rate of repayment.

A study conducted in the United States of America (Bhatt & Tang, 2002) on four microfinance institutions found that the educational level of a borrower and the proximity of a borrower's business to the lending agency, were the factors that were statistically significant in determining the likelihood of a borrower repaying a credit facility. The study also found that where borrowers incurred less transaction cost (including waiting time), they were more likely to repay the loan. Finally, the study found out that the probability of sanctions also made a borrower more likely to pay back a loan. Another surprising result was that there was no difference between the repayment behaviour of a borrower who earned steady income from employment and the borrower who operated his own business. On the basis of their findings they suggested that microfinance programmes in the United States had to adopt the following strategies in order to maximise the rate of repayment of loans.

1. Identify borrowers with the ability to run a viable business (emphasis on educational level)

2. Offer training and technical assistance to the borrower.

3. Move closer (physically) to the customer.

4. Adopt effective sanctioning mechanisms against defaulters.

One interesting thing about the findings of Bhatt and Tang was that the gender of a borrower was not significant in determining the repayment rate. This comes as a surprise since it had been widely believed that women were better borrowers than men. However, we believe that in relatively less developed countries, the gender issue is significant.

This belief is supported by the findings of a study conducted in Malaysia. The study by Roslan and Karim (2009), found out that the most important factors that determined the likelihood of borrowers to repay the loans made out to them from microcredit institutions included

i.   The gender of the borrower i.e. a male borrower is more likely to default than a female borrower.

ii.   The type of activity i.e. borrowers involved in service activities are more likely to repay than those involved production activities.

iii. The training offered to clients i.e. borrowers that are offered training are more likely to repay than those who lack proper training.

iv.   Amount lent i.e. the higher the amount lent, the lower the risk of default.

v.   Payment period i.e. the longer the payment period, the higher the risk of default

3. METHODOLOGY

The study is a descriptive research which uses the survey approach of data collection with the purpose of

assessing the debt recovery strategies used by two selected MFIs in Ghana. Primary and secondary data was collected for the work. The data collected is cross-sectional and analysed quantitatively, although some inferences are made through qualitative analysis. The population for interest for this study are all the management and staff of SIL and PCSL.

 A structured-questionnaire was used as the primary research instrument. The questionnaires included mostly closed- ended questions (pre-coded) to make it simpler for the respondents and also for easy analysis. Secondary data collection was considered for additional information. The research questionnaires were hand delivered to the respondents by our research assistants. To ensure external validity, the questionnaire for this study was given to a research expert in management of microfinance for review.

 In analysing the data collected, the researchers used SPSS. The researchers used the student's t test to test for significant differences between data collected from the microfinance institutions.
 A structured-questionnaire was used as the primary research instrument. The questionnaires included mostly closed- ended questions (pre-coded) to make it simpler for the respondents and also for easy analysis. The nature of the study was explained to respondents, and respondents' confidentiality of any information provided was also assured. Respondents were also provided with detailed instructions as to how the questionnaires would be; to be completed and returned.

A section of the questionnaire solicits information on the strategies put in place by microfinance institutions to minimise risk of loan default by their clients. This section measured the frequency in which those strategies have been followed. Items were measured on a Five-point Scale: 1(Not at all), 2 (Rarely), 3 (Sometimes), 4 (Often), and 5 (Always). Sampled items on this section included: Extensive screening, Joint-liability groups, Repayment incentives: Increasing loan size and decreasing interest rates, and Statistical credit scoring,

Another set of items were developed to assess the strategies used by micro-finance institutions in debt recovery. This section measured the frequency in which those strategies have been followed. Items were measured on a Five-point Scale: 1(Not at all), 2 (Rarely), 3 (Sometimes), 4 (Often), and 5 (Always). Sampled items on this section included: legal actions, deductions from savings, size of collateral, payment from guarantors' income, and extension of credit repayment period et cetera.

The questionnaires also contained items that help to examine the level of effectiveness of the debt recovery strategies. The level of effectiveness of the strategies was measured on a Five-Point Likert Scale (Likert, 1932): 1(Strongly disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), and 5 (Strongly agree). Sampled items include the strategies that have let to improvement in: credit repayment, more credit, and return on investment, better relationship between the institution and clients, client satisfaction, market share et cetera.

4.RESULTS AND DISCUSSIONS
The results are presented and discussed in this section looking at the strategies of minimizing risk of default between the two MFI, the debt recovery strategies of the MFIs, and the evaluation of the effectiveness of the debt recovery strategies.

Strategies to Minimize Risk of Default
The respondents were asked to indicate the extent to which their MFI use the three common strategies in minimizing their risk exposure to loan default, suing a five point Likert Scale. The result is shown Table 1.

Panel 1 of Table 1 shows that the mean of responses from SIL is 4.67 with a standard deviation of 0.617 while that of PCSL is 4.00 with a standard deviation of 0.795. The student's test at a confidence level of 95% gives t (33) = 2.693, p =0.011. This shows that there is no significant difference between the extensive screening of applicants between the two microfinance institutions. Extensive screening of a loan applicant is therefore a strategy employed to minimise the risk of loan default by MFIs. The implication is that MFIs should pay much attention to who should be granted the loans and who should not. It means that MFIs should put in place effective systems for screening loan applications focusing of competence of loan officers and strict procedural check lists.

Panel 2 of Table 1 shows how the MFIs employed joint liability strategy in loan default risk minimization. It revealed that the mean of SIL is 4.36 with a standard deviation of 0.842 while that of PCSL is 2.24 with a standard deviation of 1.446. The student's test at a confidence level of 95%, t (33) = 4.939, p =0.000. This shows that there is a significant difference between the uses of joint liability groups between the two

microfinance institutions. A Joint-Liability group is therefore a strategy employed effectively by SIL but not so with PCSL.

Table 1 Strategies for Minimizing Default Risk

Institution	Mean	Frequency	Standard Deviation
Panel 1: Extensive Screening of Loan Applicant			.
SIL	4.67	15	.617
PCSL	4.00	20	.795
Panel 2: Joint-Liability Groups			
SIL	4.36	14	.842
PCSL	2.24	21	1.446
Panel 3: Repayment Incentives to Clients			
SIL	**2.87**	**15**	**.516**
PCSL	2.71	21	1.189

Source: Survey Data (May 2015)

The Panel 3 Table 1 shows that the mean of responses from SIL is 2.87 with a standard deviation of 0.516 while that of PCSL is 2.71 with a standard deviation of 1.189. The student's test at a confidence level of 95% gives t (34) = 0.464, p =0.645. This shows that there is no significant difference in the use of this strategy between the two microfinance institutions. Giving clients incentives for repayment is therefore a strategy averagely employed by both institutions.

Debt Recovery Strategies

What are the debt recovery strategies used by the selected microfinance institutions to recover debt? The analysis below discusses three strategies that the institutions use in recovering debts from clients who have defaulted.

The comparative employment data is given in **Table 2.**

Table 2: Strategies for Debt Recovery in MFIs

Institution	Mean	Frequency	Standard Deviation
Panel 1: Legal action			
SIL	3.40	15	.910
PCSL	4.43	21	.811
Panel 2: Set off against savings			
SIL	3.87	15	.834
PCSL	3.19	21	1.601
Panel 3: Seizure of Collateral			
SIL	3.60	15	.828
PCLS	4.71	21	.784

Source: Research data, 2015

Panel 1 Table 2 shows that the mean of responses from SIL is 3.40 with a standard deviation of 0.910 while that of PCSL is 4.43 with a standard deviation of 0.811. The student's test at a confidence level of 95% gives t (34) = -3.567, p =0.001. This shows that there is a significant difference in the use of this strategy between the two microfinance institutions: SIL uses it sometimes while PCSL uses it often.

The Table 2 again shows in panel 2 that the mean of responses from SIL is 3.87 with a standard deviation of 0.834 while that of PCSL is 3.19 with a standard deviation of 1.601. The student's test at a confidence level of

95% gives t (34) = 1.494, p =0.000. This shows that there is a significant difference in the use of this strategy between the two microfinance institutions: SIL is more likely to use it than PCSL.

The use of activation of collateral security is another strategy for debt recovery used by both MFIs. Panel 3 that the mean of SIL is 3.60 with a standard deviation of 0.828 while that of PCSL is 4.71 with a standard deviation of 0.784. The student's test at a confidence level of 95% gives t (34) = 4.108, p =0.000. This shows that there is a significant difference in the use of this strategy between the two microfinance institutions: SIL is likely to use it sometimes while PCSL is likely to use it often.

Strategy Evaluation

The study explores management view about the effectiveness of the debt recovery strategies used by the selected microfinance institutions. An effective strategy should lead to:

- Faster credit repayment,
- Increased demand for credit by clients,
- Improves returns on investment
- Better Relationship between the Institution and the Clients

Table 3 presents the views of respondents on the effectiveness of these strategies

Table 3: Strategy effectiveness

Institution	Mean	Frequency	Standard Deviation
Panel 1: Faster Credit Repayment			
SIL	4.20	15	.561
PCL	4.14	21	.727
Panel 2: More Demand For Credit			
SIL	3.33	15	.900
PCSL	3.80	20	.696
Panel 3: Return on Investment			
SIL	4.00	15	.756
PCSL	4.05	21	.805
Panel 4 Better Relationship with Clients			
SIL	3.93	15	.704
PCSL	4.14	21	.727

Panel 1 Table 3 shows that the mean of responses from SIL is 4.20 with a standard deviation of 0.561 while that of PCSL is 4.14 with a standard deviation of 0.727. The student's test at a confidence level of 95% gives t (34) = 0.255, p =0.800. This shows that there is no significant difference in this claim between the two microfinance institutions. The respondents of both microfinance institutions agree that their strategies lead to faster credit repayment.

Panel 2 Table 3 indicates that the mean of responses from SIL is 3.33 with a standard deviation of 0.900 while that of PCSL is 3.80 with a standard deviation of 0.696. The student's test at a confidence level of 95% gives t (33) = -1.732, p =0.093. This shows that there is no significant difference in this claim between the two microfinance institutions. The respondents of both microfinance institutions agree that their strategies lead to more demand for credit by clients.

The third Panel of Table 3 shows that the mean of responses from SIL is 4.00 with a standard deviation of 0.756 while that of PCSL is 4.05 with a standard deviation of 0.805. The student's test at a confidence level of 95% gives t (34) = -1.179, p =0.859. This shows that there is no significant difference in this claim between the two microfinance institutions. The respondents of both microfinance institutions agree that their strategies lead to a reasonable return on investment for the institutions.

The fourth Panel of Table 3 revealed that the mean of responses from SILis 3.93 with a standard deviation of

0.704 while that of PCSL is 4.14 with a standard deviation of 0.727. The student's test at a confidence level of 95% gives t (34) = -0.864, p =0.394. This shows that there is no significant difference in this claim between the two microfinance institutions. The respondents of both microfinance institutions are neutral on whether the strategies lead to better relationship between them and their clients. The respondents from PCSL however, are more likely to agree that the strategies lead to a better relationship between the institution and clients.

Table 4: Overall Strategy Effectiveness

| Institution	Mean	Frequency	Standard Deviation
SIL	4.33	15	.488
PCSL	4.24	21	.625

(Source: Survey Data, May 2015)

In overall term, the mean of responses from SIL is 4.33 with a standard deviation of 0.488 while that of PCSL is 4.24 with a standard deviation of 0.625. The student's test at a confidence level of 95% gives t (34) = 0.492, p =0.626. This shows that there is no significant difference between the two microfinance institutions in this claim. The respondents from both microfinance institutions agree that their overall strategies for recovering debt are effective.

Non-Performing Loan Portfolio
The study obtained from the financial statements of the two MFIs and Bank of Ghana Monetary Policy Report 2012, information on the non-performing loans for period covering 2008 to 2010. This information is captured in Figure 1.
Figure 1: Ratio of Non-Performing Loans to Total Loan Portfolio
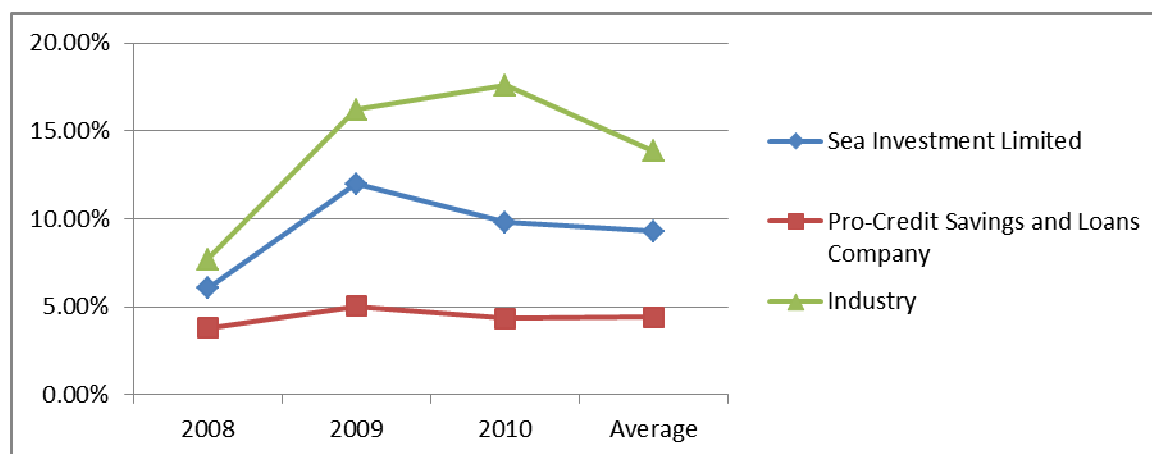
Source: Bank of Ghana Monetary Policy Report (February 2012), PCSL Annual Reports (2008-2010), SIL Financial Statements (2008-2010).

Figure 1 shows the proportion of non-performing loans of both microfinance institutions from 2008-2010. The figures for SIL were 6.03%, 12% and 9.80% with an average of 9% over the period. That of PCSL were 3.80%, 5.04% and 4.35% with an average of 4% over the same period. The industry figures over the same period were 7.7%, 16.2% and 17.6%. Using the students' test at a 95% confidence level to test for the difference between the means of non-performing loans of SIL and the industry averages, the results were t (4) = -1.283, p= 0.269. This means that there is no significant difference between the non-performing loans of SIL and the industry averages. This means that SIL is performing just as the industry average over the period.

Using the students' test at a 95% confidence level to test for the difference between the means of non-performing loans of PCSL and the industry averages, the results were t (4) = -3.030, p= 0.039. This means that there is a significant difference between the non-performing loans of PCSL and the industry averages. The debt recovery strategies of PCSL are much more effective than average industry result.

Discussion of Results

  A study (Ghatak & Guinnane, 1999), had found that joint-liability groups were effective in ensuring credit repayment. The researchers therefore expect that on account of the findings of that research, SIL's strategies would prove more effective than that of PCSL (Norell, 2001), had stressed the importance of following up immediately after a default in preventing a total default. The importance of this strategy is confirmed by the finding that both microfinance institutions use it.

Analysis of the data revealed that the respondents in both microfinance institutions agreed that the debt recovery strategies they employed lead to faster credit repayment, a reasonable return on investment, and that their debt recovery strategies overall were effective. However, they were neutral on whether or not the strategies lead to more demand for credit by clients, a better relationship between clients and the institution, greater client satisfaction or a larger market share. It is worth noting that the respondents of both microfinance institutions claimed that their strategies led to faster credit repayment, a reasonable return on investment and that their strategies overall were effective although they do not employ exactly the same strategies.
SIL's debt recovery strategies are not effective because their non-performing loans to total loan portfolio is effectively the same as that of the whole industry. This is despite the fact that SIL includes joint-liability groups and decreasing of interest rates as strategies to minimise the risk of loan default while PCSL does not. This finding contradicts the finding of a study (Ghatak & Guinnane, 1999) which indicated that there is clear evidence that joint-liability improves repayment. It however confirms a study in Nicaragua (Bauer, 2004) which found that joint-liability does not work.

5. CONCLUSIONS AND RECOMMENDATIONS

The researchers set out to find the strategies put in place by SIL and PCSL to minimise the risk of loan default by clients, to recover debt from clients who have defaulted in payment and the level of effectiveness of the debt recovery strategies. The researchers surveyed the management and staff of the two microfinance institutions and also examined the financial statements of both institutions in order to determine the proportion of bad or unrecoverable debts from the year 2008 to 2010. The only difference between the strategies used by the two microfinance institutions was that PCSL uses payments or deductions from a guarantor's income as a strategy to recover debt. The debt recovery strategies of SIL were not effective because there was no difference between their percentage of non-performing loans to total loan portfolio and that of the industry. The debt recovery strategies of PCSL were effective because their percentage of non-performing loans to total loan portfolio was significantly less than that of the industry. The strategy PCSL uses include payments or deductions from a guarantor's income. This strategy is not used by SIL, therefore the researchers concluded that payments or deductions from a guarantor's income is an effective debt recovery strategy that should be included in the strategies used by microfinance institutions in recovering debt.

Recommendations

The research recommends that MFIs should put in much effort into default risk minimization strategies through effective screening of applications before granting loans to their clients. This will help them reduce the proportion of loans that go bad (non-performing loans) which becomes cost to the institution. In addition, much aggressive debt recovery strategies should be seldom employed as this has high propensity to weaken the customer relationship and future demands for loans. We suggest that further studies can be made into specific strategies and their relationship to debt recovery rates of microfinance institutions. The study conducted by the researchers can also be conducted on a wider scale with more microfinance institutions instead of the current comparative study.

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