

## **Chapter 10**

### **Conclusion and Policy Recommendations**

This chapter will present the concluding remarks. According to the researcher's knowledge, this is the first attempt to evaluate the MVC in Thailand by employing the concept of the triangle of microfinance which had been conducted by Zeller and Meyer in 2002. It will suggest some policies to improve the program to be more effective in helping the poor and reduce poverty. Finally, it will list some potential research topics in the future.

#### **10.1 Concluding Remarks**

This study presents an economic analysis of microcredit of village and urban community funds (MVC) in Thailand. The data in this study are mainly from the Thailand Socioeconomic Survey in 2009 and 2010 which had been conducted by the National Statistical Office. The overall goals of this study are to evaluate the microcredit of village and urban community funds performance in Thailand from outreach, sustainability, and impact on poverty reduction. The structure of this dissertation consists of ten chapters. First, it introduces the concept of microcredit, its philosophy and importance. Second, it investigates the determinants of borrowers of the MVC. Third, it investigates the determinants of loan sizes of the MVC. Fourth, it highlights the determinants of consumption and investment loan of the MVC. Fifth, it identifies the factors affecting borrower's defaults at household level. Sixth, it assesses the determinants of overdue debt of MVC at the community level. Seventh, it evaluates the contributions of the MVC on the creation of a home-based business through phones. Eighth, it figures out whether the MVC can help the poor to get out of poverty through phones. Ninth, it figures out whether the MVC can help the poor to get out of poverty through education. The last part of this chapter summarizes the important findings and proposes some policy recommendations.

### **10.1.1 The Definition of Microcredit and the Village Funds in Thailand**

Microcredit is a program that provides small loans for self-employment and consumption to the poor, especially for rural women who do not have any access to formal financial services. The difference between microcredit and microfinance is that, in addition to loans, microfinance institutions also provide a wider range of financial services, such as savings, insurance, remittance services and other training programs.

In Thailand, the microcredit for village and urban community fund (MVC) is the largest government microcredit program which has been in operation since 2001. The government revolutionized the local credit market by allocating one million Baht (about \$22,500) per village. It operated under the philosophy of values and wisdoms of local communities. The official objectives are the following: 1) the fund will be used as a source of fund for investment, job creation, income generation, welfare improvement and reducing expenses, 2) it will be used as an emergency funds, 3) the village fund provides deposit services for members, 4) it will be supplied as loans to other village funds for strengthening its economy and society, 5) it aims to develop overall rural economies.

### **10.1.2 The Determinants of Borrowers of the MVC**

This study investigates the determinants of borrowers and finds whether poor households are taking part in the MVC using the Logit model. Our findings indicate that the MVC program does not reach the poor. However, it targets two groups that are the near poor and the moderate-income households. For the near-poor, farm operating households especially landless farmer in rural area with income slightly above the poverty line are more likely to be borrowers. For the moderate-income group, households which have more assets and can access to other sources of credit have a higher probability to borrow from the MVC program. Moreover, the program has its merits when targeting at women and less educated of the household head.

### **10.1.3 The Determinants of Loan Sizes of the MVC**

The last study has shown some evidences of factors affecting the probability of participation. Instead, this study focuses on the intensity of participation.

It investigates the determinants of loan sizes of the MVC by applying Tobit and Heckman selection models to deal with censored data and possible selection bias problem. Both models have shown similar results and confirm that the poor at least do not get larger loan sizes than the non-poor. With the theoretical superiority of Heckman selection model over Tobit, it can be said that the poor tend to even get a smaller loan size than the non-poor. Surprisingly, the model It benefits the non-poor instead. The results clearly show that the near poor, rural households of low-income and landless farmers with younger-female and uneducated heads, whose income are just above the poverty line, tend to get larger amounts of loan than the poor. However, MVC does not target the rich. Households with higher income and education, especially those whose members work as entrepreneurs, professional and technical services, tend to get a smaller loan size.

#### **10.1.4 The Determinants of Consumption and Investment Loan of the MVC**

This study investigates in detail about factors affecting the loan size for consumption and investment loans using the univariate and bivariate Tobit models. The result shows superiority of bivariate model over univariate. It implies that the Household decisions on borrowing for consumption and investment simultaneously. Moreover, it shows that the poor households tend to get a loan for consumption loan, while non-poor households tend to get credit for investment. The head of household who is a married woman and worked as an employee, having a low income with a high dependency ratio and had experience difficulty in getting emergency loan, tends to get larger loan sizes for consumption. In contrast to the head of household that worked as an employer or own a business and gaining access to other sources of credit, they tend to get larger loan sizes for investment. It is to be noted that loans to the poor for consumption may affect ability to repay debt.

#### **10.1.5 The Determinants of Borrower's Defaults of the MVC**

Due to the low default rate, it is one of the stories that show a success of the microcredit program. The purpose of this study is to investigate the factors that determined the probability of loan defaults using Probit and Bivariate probit models. The results show that it does not have endogeneity problem, therefore the results of both models are very similar. Household heads which have a higher

education and more assets tend to have a low probability to default. However, there is no evidence indicating that the poor borrowers have a larger default than the non-poor. Surprisingly, the result of borrowers who have been a committee (both at present and in the past) has no statistical significance for loan default: despite that this group is highly knowledgeable about the rules of the MVC as well as having direct controls of the MVC operation. However, they do not behave in the default of MVC better than other members.

Empirical results show that borrowers who intend to use the loan for investing in farm business are less likely to default. The frequency of borrowing make fewer default because the borrowers often have experience of the rules and know how to manage credit well. The results of this study have shown that the longer duration of a loan will lead to an increase in the debt defaults. Roslan and Karim (2009) stated that the reason may result from a term of loan longer than the project's business cycle. Revenues should be allocated to debt repayment for paying other activities.

Moreover, the Multinomial probit model was applied to determine the factors affecting four alternative repayment strategies. Most of the results are consistent with Probit and Bivariate probit models. More interestingly, the evidence shows that rural borrowers that have supplemental income are less likely to become irresponsible in not repaying any portion of the loan. It may be explained by social capital, which is higher in rural areas, as an important factor to determine rate of defaults. For example, social sanctions can lead to increased repayment rates (Ahlin and Townsend, 2007; Bhatt and Tang, 2002; Oke, Adeyemo and Agbonlahor, 2007).

#### **10.1.6 The Determinants of Overdue Debt of the MVC at Community Level**

The village fund is a joint responsibility of the group, thus it is considered as group lenders in the current study. This study analyzes the determinants of overdue debt of the MVC by using data from the Village Funds Report 2011 and six indicators of The National Rural Development 2011 (NRD54), which was developed by the Department of Community Development. The six indicators are listed as followed; infrastructure, economic, health, education, strong sense of community (proxy for social ties) and natural resources. In addition, peer monitoring

and degree of joint liability are examined to describe the overdue debt of group lending. The Heckman Selection model was conducted to deal with possible selection bias problem. However, the model shows independence between the selection and outcome equations.

The empirical evidences of the MVC show that peer monitoring and social ties are negatively associated with a probability of overdue debt, but the degree of joint liability is positively associated. For the natural resources indicator, there is a negative correlation with probability of overdue debt. Having the endowment of good natural resources does play an important role to help the villagers produce desired outcome.

To consider the intensity of overdue debt, the high degree of joint liability, having a strong sense of the community, and having good economic status all play an important role in reducing the amount of overdue debt.

#### **10.1.7 The Village Funds, Phones and Home-based Business**

In the study of the effect of the MVC on home-based business through phones, a pseudo panel data set was conducted by using the propensity score matching technique. Households, in which dwelling was used for business purpose in 2009, can find that there is a change in two ways. On one hand, a household may use dwelling for business purpose in 2010. On the other hand, a household may still be not using dwelling for business purpose in 2010.

This study proposes a Bivariate probit model and the results confirmed that there is a simultaneous relationship between home-based business and phone variables. Households participated in the Village Funds are more likely to have more phones and more phone charge. Moreover, more number of phones and phone charge expenditures also explained the creations of home-based business. This finding agrees with Bayes (2001) who indicated that “*telephone should be treated not only as a consumer good, but also as a production good, especially in poor rural areas.*” Thus, loans for the purchasing mobile phones have been seen as a consumption loan, and may also increase the household income through home-based business. It can be associated to the point that “consumption loans which have negative effects on the repayment” may not at all be entirely correct.



### **10.1.8 The Village Funds, Phones and Poverty reduction**

This study evaluates the effect of the MVC on poverty reduction through mobile phones. A pseudo panel data set was conducted by using the propensity score matching technique. Poor households in 2009 can find their poverty status changed in two ways. On one hand, a poor household may turn to be non-poor in 2010. On the other hand, a poor household may still be poor in 2010.

To deal with the expected endogeneity problem between number of phones and household poverty, a probit regression with instrumental variables (ivprobit) is employed as the tool for this work. Empirical results have shown that households participating in the Village Fund have positive effects on phones. In addition, phones also have a positive effect on poverty status change. This evidence confirms the contributions of the Village Funds' participation in the creation of poverty reduction via phones.

### **10.1.9 The Village Funds, Education and Poverty reduction**

This study evaluates the effect of the MVC on poverty reduction through education among the poor households in 2009. To find the similar household, one from 2009 and another one from 2010, a pseudo panel data set was conducted by using the propensity score matching technique. This study proposes a Bivariate probit model and the results showed some evidence of simultaneous relationship between the phone and poverty status change variables. Empirical evidences have shown that households participating in the Village Fund had a higher probability to spend more on education. Among the poor, the loan is being used in providing education for their children. However, within one year, the increasing of education expenditure could not reduce poverty within the household. If education was truly free, they would be able to spend some money to make a better living or even uplifting their life out of poverty. In reality, although the poor households are faced with resource constraints, the monthly household expenditures on education per total consumption expenditures does not show much of a difference between the poor and non-poor households. In 2010, the poor households had a monthly household expenditure on education with an average of 4.57 percent, while the non-poor households had on average of 5.51 percent. Instead, increasing the number of motorcycles in a household is more likely to help the household get out of poverty. People need to have access to convenient

transportation to go to school, getting to work, going to the hospital, meeting friends and purchasing necessary items at the market.

Overall, the performances of the MVC demonstrated that it does not help the poor to gain access to financial credit. However, some borrowers, who are classified as poor, are used the financial credit mainly for non-productive purposes, which is a consumption smoothing motive. With a focus on financial sustainability, the repayment rate of the MVC is quite high. However, it is also possible to decrease the loan default and overdue debt account. Finally, the study presented some evidence of welfare impact, poverty reduction and building home-based business, which had been contributed from the MVC.

## **10.2 Policy Recommendations**

### **Policy 1: Loan to the poor to improve outreach performance.**

The program can improve its performance by targeting more intensively to households which are poorer than their current clients. The loan should be given priority to the poor households. They are classified as characteristics that have large demographic dependency ratios, are homeless, identified as farm and general workers, and having a higher incidence of widows as heads of households. Medhi (2002) classified these characteristics as poor households. Farm and general worker should be given priority to access to the MVC because the study found that they were less likely to obtain a loan. In addition, the MVC should give priority to those who can not get access to other sources of funding than those that can borrow from others. This strategy may lead the MVC program to reach the real poor who may need more loans to improve their well-beings than the near poor. Despite the poor borrowing for consumption, it will improve their welfare and consumption smoothing of their households.

Moreover, evidence from borrower's default study indicates that the MVC should not deprive the poor because they are not risky as has been traditionally financial institutions assumed.

**Policy 2: The need to educate local committee about how to deal with the loan agreements to be reasonable and flexible.**

The local committee will decide who should get the loan. The conditions basically include the member's ability to repay, the purpose of borrowing and the loan sizes. The appropriate agreements can be made the borrower has repaid the loan and the fund have continued to rotate.

Most of the loan agreements set a one year term for a loan. It is not suitable for all borrowers. Agrarian may be convenient to return the loans after the harvest season. However, the frequency of repayments such as every month or bimonthly may result in fewer defaults in some cases. Most of the borrowers who used loan for consumption worked as an employee and they receive daily or monthly wages. Therefore, one year term for repaying a loan may not be appropriate.

Moreover, an important role of local committee is to monitor and evaluate whether the borrower can use the money as intended or not. They should ignite an interest on part of the borrower to use the loan as method for decreasing the probability of defaults.

**Policy 3: There should be clear legal penalties for those who do not repay the loan.**

An interesting issue that evolved out of this study is on the borrowers who had been a committee (both in the current role and in the past role). We expected that this group is quite knowledgeable about the rules of the MVC as well as being able to directly manipulate the operation of the MVC. Then, they may have lower default rate than those who are not the committee members. However, there is no evidence to show that a committee performs a lot better than other members. This indicates that the penalties for defaulter may not be considered highly serious in practice. The study argues that there should be clear legal penalties for those who do not repay the loan to decrease the possibility of defaults.

**Policy 4: The need to introduce non-financial services as product innovations for the MVC.**

This study found that borrowers who did not repay any portion of loan tend to be urban households without a supplementary income. Therefore, their



income should be promoted to generate activities as a source of extra income for the borrower.

In addition to the compulsory savings that are available, MVC may provide other services to provide empowerment to the borrowers. Like in many other countries, the non-financial services are important in helping the borrower with a better living of the loan. This will result in a reduction in outstanding debt. For example, most of the borrowers worked as farmer and they seem to be familiar with the Bank for Agriculture and Agricultural Cooperative (BAAC). The MVC program may cooperate with the BAAC to provide agricultural extension to increment farm output or agricultural insurance innovations to help them manage risk.

**Policy 5: Government and community should give priority to projects that focus on the strong sense of the community.**

This study focused on five indicators of the strong senses of community. These senses are the learning community, obtaining social protection, the participation rate, integration of the community, and accessibility to capital. The results showed that the senses of community have a positive effect on repayment performance of the MVC. In other words, a community with a strong sense will have fewer problems of overdue debt. The government and the community should give priority to projects that focus on the strong sense of the community for the aim of decreasing overdue debt problem. For example, the MVC should provide more fundings to group of light-industrial production or OTOP production in villages, so that the allocation of profits is channeled to the community welfare service.

**Policy 6: Loans for investment should be encouraged. However, consumption loans have advantages as well.**

There is a role for the MVC as a poverty reduction policy tool. Previous studies have shown the importance of microcredit for investing in income-generating activities and expanding small business. However, the consumption loans would be considered as loans which have no return and may have some negative effects on repayment. This study found that households participating in the MVC

have positive effects on consumption expenditure such as phones. In addition, phones also have a positive effect on poverty reduction.

**Policy 7: In order to spread of welfare impact of the MVC, the policy should emphasize on having people access to ICT and provide information through phone.**

The study helps to seek for a better understanding of the poverty situation and to propose a method to alleviate the condition of the poor. There is some evidence that a phone can help to boost up home-based business and reduce poverty. Therefore, if policymakers are interested in reducing poverty, the results in this study suggests that they should emphasize on people having access to ICT and providing the information through phone. According to the data from SES 2009, among the poor only 28.09 percent cannot gain access to mobile phones. While non-poor households appear in that figure only 8.8 percent cannot gain access to a mobile phone.

### 10.3 Further research

First, the methodologies in this study should be applied to other sources of credit, for example, informal loan and the BAAC. Many sources of credit still make the household to be indebtedness or have a better situation in terms of income and running a business.

Second, even if there's no evidence showing that lending to the poor has more risk than giving a loan to those who are not poor, the study recommends some criteria for lending to the poor with a low default rate. Such an example would be on granting a loan size that is right for the poor.

Third, the role of social capital of the community on overdue debt account should be investigated. The study confirms a positive effect of peer monitoring, a degree of joint liability, and social ties. The lack of knowledge is on understanding how social capital induces a high rate of repayment.

Fourth, the results demonstrate that education may not be the answer in helping the poor to get out of poverty. Unfortunately, the education level attained may not be high enough to cause an increase in household income. Consideration should be more focused on the education level of the borrowers' children.

Finally, with the act of improving econometric modeling, the results in some study were based on a bivariate normality assumption. Future research is needed to assess the joint distribution by applying the copula approach to sample selection model. The real panel data should be constructed to determine the contribution of the MVC through phones and education.