SEIZING THE MOMENT: PROMISING OPPORTUNITIES TO PROMOTE FINANCIAL INCLUSION*

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1. INTRODUCTION

During the past three decades, Thailand's economy has experienced expedited growth, and the standard of living of Thai people has improved considerably. According to research conducted by Thailand Development Research Institute (2011), the incidence of poverty in 2009, as measured by the proportion of the Thai population whose expenditure fell below the poverty line, declined to 9 percent. Regardless of the improvement in economic growth prospects however, the problems related to inequality in terms of income, savings and asset possession are still issues of pressing concern.

Why is poverty so hard to escape? This is one of the most basic questions asked by development economists. There appear to be two main reasons that could explain why poor Thai people cannot escape from the poverty trap. First, some sections of the Thai population lack access to economic and social resources, particularly credit, capital, skills, and natural resources (Kobsak, 2007; Chaiyasit, 2007; Ashvin, 2007; Adis, 2010). Without sufficient knowledge, capability and finance, those people cannot excel in their profession and cannot earn enough to support their own living. Second, some Thai people still do not have equal access to basic public services provided by the government, especially public health services (Worawan, 2010; Somchai, 2010). Under situations in which the public sector cannot provide adequate and appropriate levels of social welfare benefits or a minimal level of well-being and social support for all citizens, other mechanisms are required to make it possible for poor people to escape the poverty trap.

Microfinance is one of the financial innovations that enable the poor to be capable of lifting themselves out of poverty because, through microfinance institutions, the poor and low-income households have better access to basic financial services,

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such as deposits and loans. Sources of microfinance in Thailand can be largely categorized into three main types, namely formal institutions, semi-formal institutions and informal sources (FPO, 2008). Formal institutions refer to commercial banks and specialized financial institutions (SFIs). Examples of semi-formal institutions are cooperatives and village funds. Informal sources refer largely to informal and self-help groups or community savings groups.

2. GETTING TO KNOW MORE ABOUT FINANCIAL INCLUSION IN THAILAND

What is financial inclusion? Although the definition of this term varies, financial inclusion can be broadly defined as the process of ensuring that the vulnerable or weaker sections in an economy, such as low-income individuals, can access financial services and credit in a timely fashion and at reasonable cost.

The promotion of an inclusive financial system is a policy priority in many countries, including Thailand. An inclusive financial system is desirable for a number of reasons. It not only curtails the growth of exploitative informal sources of credit, but it also provides avenues for efficient allocation of productive resources as well as for secure and safe saving practices (Sarma, 2012). Although the importance of financial inclusion is recognized in Thailand, only a limited number of studies are devoted to measuring the extent of financial inclusion across the country. This article is an attempt to fill this gap. The objectives of this article are twofold. First, we provide an overview of financial inclusion in Thailand classified by provinces by using the composite financial inclusion index developed by Sarma (2012). Second, we analyze the characteristics of credit constrained households and also assess financing gaps for credit constrained households by exploring the extent of their demand for credit being unmet once the credit constraint has been removed.

2.1 An Overview of Financial Inclusion in Thailand

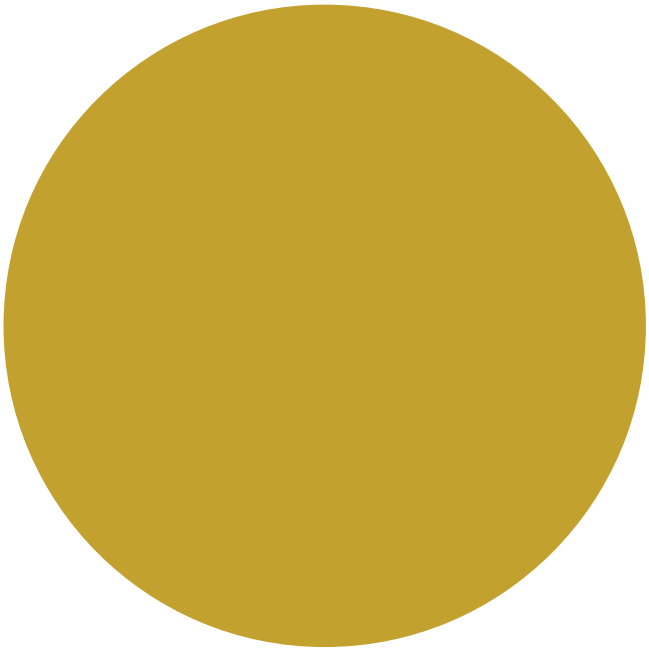
In Thailand, the promotion of an inclusive financial system is a policy priority, yet there is still a lack of comprehensive measures to determine the extent of financial inclusion in the Thai economy. A comprehensive measure for financial inclusion would enable us (a) to take stock of the state of affairs in the Thai economy with respect to people's access to financial services and (b) to monitor the progress of policy initiatives undertaken to promote financial inclusion in the country.

The measure of financial inclusion used in this article is the composite index for financial inclusion first proposed by Sarma (2012). Because this multi-dimensional index combines various banking sector indicators, it incorporates information on different dimensions of an inclusive financial system, including (a) accessibility of banking services, (b) availability of banking services, and (c) usage of banking services. The following are some of the major aspects of such a system:

- An inclusive financial system should be available widely among its users. According to Sarma (2012), an example of indicators which reflect the extent of banking penetra-

tion is the proportion of people having a bank account.

- In an inclusive financial system, banking services should be easily available to the users. Indicators for the availability of banking services consist of the number of bank branches and the number of automatic teller machines (ATMs).
- Under an inclusive financial system, banking services should be adequately utilized. Even though utilization can be in various forms, two basic financial services – credit and deposit – are incorporated into the financial inclusion index and the indicators could be the volume of credit and deposit available to adult individuals as a proportion of GDP.



The formula for computing the financial inclusion index (hereafter, IFI) is given below:

$$IFI = \frac{1}{2}\left[\frac{\sqrt{d_1^2+d_2^2+\ldots+d_n^2}}{\sqrt{w_1^2+w_2^2+\ldots+w_n^2}} + \left(1 - \frac{\sqrt{(w_1-d_1)^2+(w_2-d_2)^2+\ldots+(w_n-d_n)^2}}{\sqrt{w_1^2+w_2^2+\ldots+w_n^2}}\right)\right] \quad (1)$$

$$d_i = w_i \frac{A_i - m_i}{M_i - m_i}, \quad (2)$$

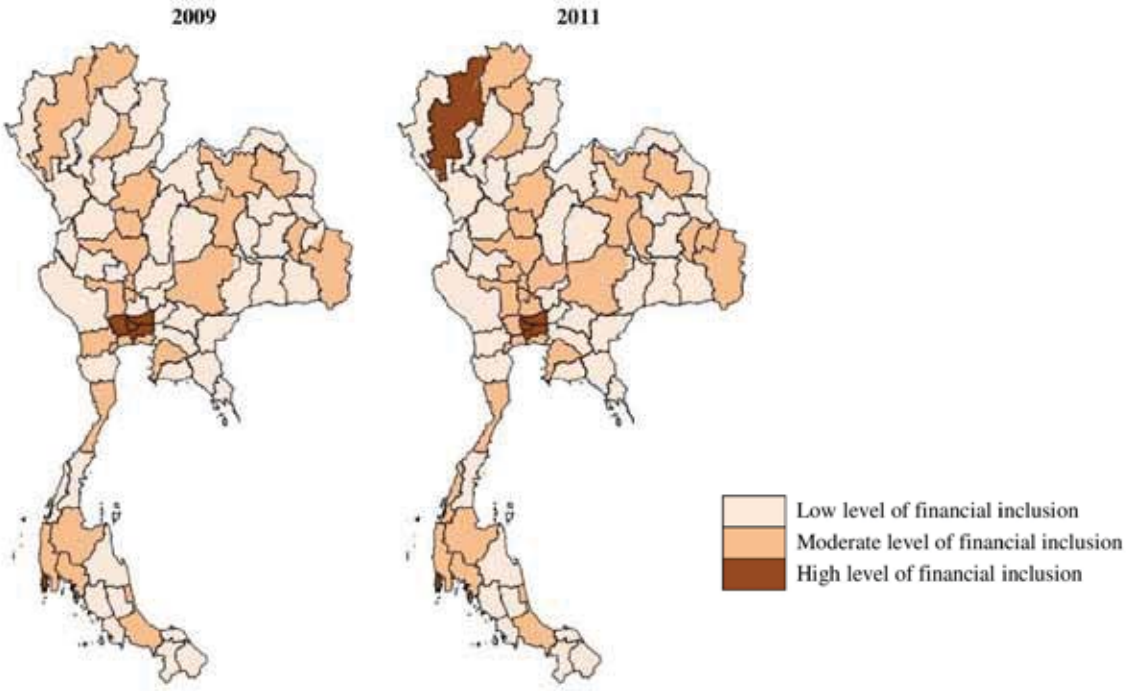
where the composite index, IFI, lies between 0 and 1. As IFI gets closer to 1, this means that the extent of the level of financial inclusion in that particular area is higher than would be indicated by IFI going in the opposite direction. The value of IFI can be used to classify countries into different categories according to level of financial inclusiveness (Sarma, 2012). The countries that have IFI values between 0 and 0.3 are considered as having a low level of financial inclusion; those having IFI values between 0.3 and 0.5 are considered as having a medium level, and those having IFI values between 0.5 and 1.0 are considered as having a high level.

In this article, we apply the assessment approach of Sarma (2012) to measure the level of financial inclusion for each type of financial institution at the provincial level. The sources of secondary data used in our analysis include commercial banks and financial institutions' statistics maintained by the Bank of Thailand, the database on the operation and financial positions of SFIs, which include the Bank for Agriculture and Agricultural Cooperatives (BAAC) and the Government Savings Bank (GSB), the household socio-economic survey, and the report on the operation of the Department of Community Development. Details of the indicators used in the construction of IFI are presented in Table 1. Results from the analysis of the level of financial inclusion through the IFI of commercial banks, SFIs and self-help groups are shown in Figures 1-3.

Table 1: Details of indicators for the main dimensions of the index of financial inclusion

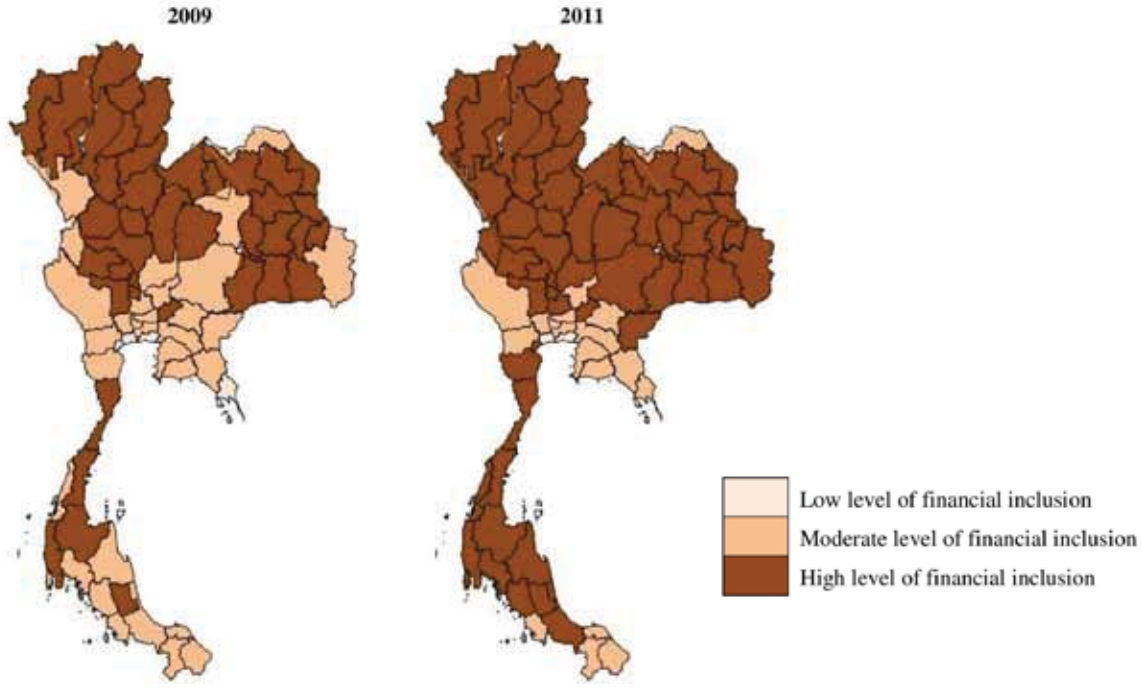
Main dimensions of IFI	Types of financial institution	Indicators
1. Accessibility of banking services (depth/penetration)	Banks	Percentage of households with saving account at commercial banks in each province
	Banks	Percentage of households with outstanding debts in each province
	Specialized financial institutions (SFIs)	Number of saving accounts per capita in each province
	SFIs	Number of loan accounts per capita in each province
	SFIs	Percentage of households with saving account at SFIs in each province
	SFIs	Percentage of households with loan account at SFIs in each province
	Semi-formal and self-help groups	Percentage of borrowers to provincial population
	Semi-formal and self-help groups	Percentage of semi-formal group members to provincial population
2. Availability of banking services	Banks	Number of commercial bank branches per 100,000 people in each province
	Banks	Number of commercial bank branches per 1,000 square kilometers in each province
	SFIs	Number of BAAC branches per 100,000 people in each province
	SFIs	Number of BAAC branches per 1,000 sq km in each province
	Semi-formal and self-help groups	Number of village funds per 100,000 people in each province
	Semi-formal and self-help groups	Number of saving groups per 100,000 people in each province
	Semi-formal and self-help groups	Number of cooperatives per 100,000 people in each province
	Semi-formal and self-help groups	Number of village funds per 1,000 sq km in each province
	Semi-formal and self-help groups	Number of saving groups per 1,000 sq km in each province
	Semi-formal and self-help groups	Number of cooperatives per 1,000 sq km in each province
3. Usage of banking services	Banks	Total bank deposits as a percentage of gross provincial products
	Banks	Total bank credits as a percentage of gross provincial products
	SFIs	SFIs' total deposits as a percentage of gross provincial products
	SFIs	SFIs' total credits as a percentage of gross provincial products
	Semi-formal and self-help groups	Village funds' total credits as a percentage of gross provincial products
	Semi-formal and self-help groups	Saving groups' total credits as a percentage of gross provincial products
	Semi-formal and self-help groups	Saving groups' total deposits as a percentage of gross provincial products
	Semi-formal and self-help groups	Cooperatives' total deposits as a percentage of gross provincial products
	Semi-formal and self-help groups	Cooperatives' total credits as a percentage of gross provincial products

Figure 1: Level of financial inclusion for commercial banks – by province in 2009 and 2011



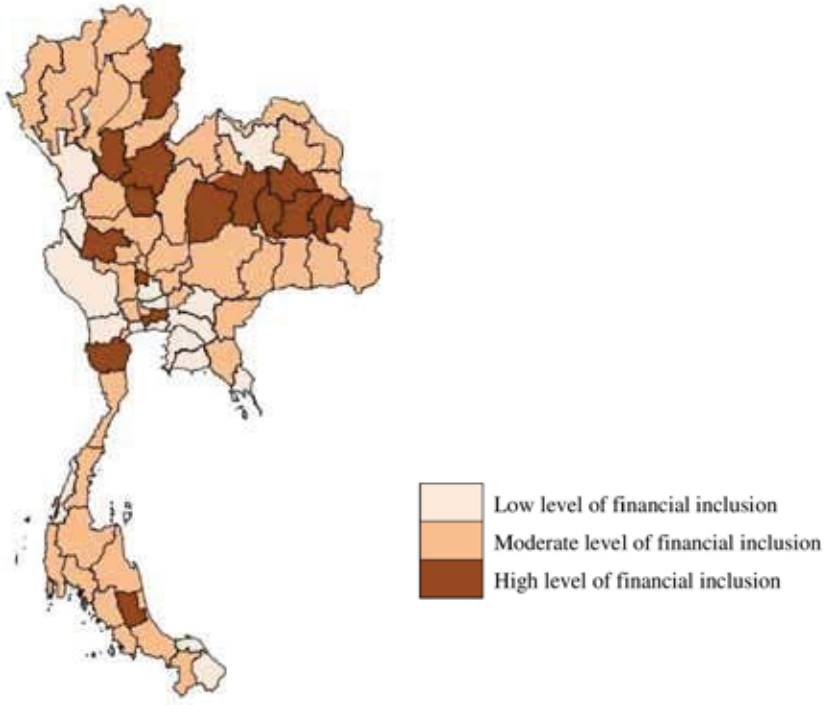
Source: IFIs were computed by TDRI using data compiled from different secondary sources.

Figure 2: Level of financial inclusion for specialized financial institutions – by province in 2009 and 2011



Source: IFIs were computed by TDRI using data compiled from different secondary sources.

Figure 3: Level of financial inclusion for self-help groups – by province in 2011



Source: IFIs were computed by TDRI using data compiled from different secondary sources.

The key results from the analysis of overall financial inclusion, measured by access to basic financial services, can be summarized as follows. First, on average, almost 94 percent of all provinces in Thailand have a moderate to low level of access to financial services provided by commercial banks, even though the level of financial inclusion at the provincial level improved between 2009 and 2011. Second, with regard to the access to financial services of SFIs, our results show that citizens in different provinces had better access to financial services offered by BAAC and GSB in 2011 than they did in 2009. Last but not least, the majority of the provinces (about 58 percent) were found to have a moderate level of access to financial services offered by semi-formal and self-help groups.

2.2 Assessment of Credit Gaps for Thai Households

As the results in the previous section show, most of the provinces in Thailand have low to moderate access to commercial bank deposits and credits; however, it might be the case that some people in those provinces still have constrained access to basic deposit and credit services in the formal banking system. Since the lack of access to credit is more prevalent in general, this section is focused more on credit issues.

A number of previous studies revealed that credit constraints impose a negative impact on households and businesses, particularly those enterprises and households that have commercially viable investment projects but cannot access sufficient amounts of credit to respond to the demand. In other words, such households and entrepreneurs experience credit rationing or a situation in which lenders limit the supply of additional credits to borrowers who demand funds.

Despite the attempts made by various institutions such as the World Bank, the Asian Development Bank and the Bank of Thailand, in studying the current situation for financial inclusion in Thailand, to the best of our knowledge, there exists no

study which estimates the size of the credit gap in Thailand. The present study is aimed at filling this gap in the literature by using the econometric approach along the lines of Cox and Jappelli (1993) to estimate the size of the credit gap in four areas surveyed by TDRI, namely Bangkok, Chiang Rai, Nakhon Ratchasima, and Nakhon Si Thammarat.

In this section, we estimate the model for the desired debt level if households are not credit constrained and hold a positive level of debt. We then use the coefficients from such model estimation to estimate the desirable level of debt of constrained households with positive demand for debt. However, the estimates are likely to be biased if a variable that affects a household that is credit constrained or has positive debt also affects the desired level of debt. To address the sample selection bias issue, in this article, we use the Heckman selection approach to deal with such issues (Heckman, 1979) and also take into account two sources of selection bias by adopting the model estimation approach suggested by Catsiapis and Robinson (1982).

We use the two-step approach in estimating the size of the credit gap. In the first stage, we estimate the selection equations (4) and (5) which set apart households that are credit constrained from those that are not constrained, and households that have a positive level of debt, respectively. We then estimate the equation for households' desired level of debt:

$$Y_i^* = \beta_{10} + \sum_{d=1}^{p} \beta_{1d} X_{1d,i} + \varepsilon_{1,i} \qquad (3)$$

along with the probit models for credit constrained situation and debt incidence respectively:

$$v_i^* = \beta_{20} + \sum_{c=1}^{q} \beta_{2c} X_{2c,i} + \varepsilon_{2,i}, \text{ where } N_i = \begin{cases} 1 \text{ if } v_i^* > 0 \\ 0 \text{ if } v_i^* \leq 0 \end{cases}, \qquad (4)$$

and

$$\eta_i^* = \beta_{30} + \sum_{f=1}^{q} \beta_{3f} X_{3f,i} + \varepsilon_{3,i}, \text{ where } H_i = \begin{cases} 1 \text{ if } \eta_i^* > 0 \\ 0 \text{ if } \eta_i^* \leq 0 \end{cases}, \qquad (5)$$

where Y_i^* denotes household i's desired level of debt, a variable which will be observed only among households that are not credit constrained and have a positive level of debt. X_{1d}, X_{2c} and X_{3f} are vectors of explanatory variables that explain household debt, credit constraint and debt incidence, respectively. v_i^* and n_i^* are unobserved latent variables for the presence of credit constraints, N_i and the existence of outstanding debt, H_i, respectively. Empirically, we observe the binary variable N_i that takes a value of one if a household i was denied partial or full credit, or did not apply for a loan due to fear of denial ($v_i^* > 0$) and zero otherwise ($v_i^* \leq 0$), and the variable H_i that takes a value of one if a household i has outstanding debt ($n_i^* > 0$) and zero otherwise ($n_i^* \leq 0$). Examples of explanatory variables are liquidity condition, age of the household head, education level of the household head, assets, traveling time, household size, occupation of the household head, level of risk-taking attitude and amount of debt outstanding. To deal with the two sources of sample selection bias, we compute the inverse Mills ratio (IMR) from the probit models (4) and (5). We then include IMR as one of the variables in equation (1). Equation (1) can be re-written as follows:

$$Y_i^* = \beta_{10} + \sum_{d=1}^{p} \beta_{1d} X_{1d,i} + \sigma_1 \rho_{1,2} IMR_2 + \sigma_2 \rho_{1,3} IMR_3 + \varepsilon_{1,i}, \qquad (6)$$

where IMR_2 and IMR_3 are computed from $\frac{\phi(v_i)}{\Phi(v_i)}$ and $\frac{\phi(\eta_i)}{\Phi(\eta_i)}$ from the probit models (4) and (5), respectively. It is hypothesized that IMR_2 will have a negative impact on the households' debt but IMR_3 will have a positive impact on the amount of household debt.

To estimate the credit gap of credit-constrained households, we find the difference between the desired amount of debt of households estimated from equation (6) and the actual amount of debts of households. The data used in the estimation of the credit gap are the data of credit constrained households.

We begin with a discussion on the estimation results for the credit constraint regression.

There are a number of factors that cause households to be credit constrained, namely short-term liquidity and debt payment behavior. In particular, households that have expenditure exceeding income are more likely to be denied partial or full credit. Formal financial institutions are likely to deny credit to households that have a default history (Table 2). In practice, since it is costly for the financial institutions to set aside reserves for non-performing loans (NPLs), many financial institutions are very cautious in granting credit to risky and illiquid customers. As shown in Table 2, the socio-economic characteristics of households were also found to be significant factors that explain the credit constraint condition. Households with a relatively old household head are less likely to be denied credit. Moreover, a household head with a primary education (or less) and a household head that received a secondary education or was awarded a vocational certificate are more likely to be credit constrained. Finally, households whose household head is unemployed or looking for a job were found to be more credit constrained than other households.

Next, we consider the estimation results for the debt incidence regression (Table 3). The results from our analysis show that households' short-term liquidity is still an important factor that explains the debt incidence of households. Households that have low income but high expenditure are more likely to find additional sources of finance. Households that have a lot of fixed assets are more likely to incur debts since they tend to use their fixed assets as collateral in securing more debt. Moreover, transaction cost is also found to be an important factor that explains debt incidence. If households have to spend lots of time in getting from the home to the financial institutions, they would have less incentive to acquire financial services from the financial institutions. Households' socio-economic factors, such as age and the education background of the

Table 2: Estimation results for the credit constraint regression

Variables	Coefficient	Robust clustered S.E.
Financial liquidity	-0.362***	0.141
Age of household head	-0.088	0.063
Age of household head squared	0.001*	0.001
Sex of household head	0.008	0.325
Household size	-0.249	0.327
Default history	1.02***	0.397
Level of education of household head (with tertiary education as a reference group):		
- At most a primary education	-1.294***	0.348
- Secondary education or vocational certificate	-1.255***	0.307
Occupation of household head (with the unemployed as a reference group):		
- Employed in agricultural sector	-0.686***	0.195
- Self-employed	-0.364*	0.210
- Civil servant/state enterprise employee	-0.766*	0.396
- Employee in private company	-1.003***	0.155
Ln (value of fixed assets)	-0.035	0.125
Ln (value of financial assets)	0.184***	0.036
Ln (outstanding debt)	0.042	0.029
Marital status of household head (with single as a reference group):		
- Divorced	5.184***	0.807
- Married	5.412***	0.650
Ln (traveling time from home to financial institution)	-0.092	0.082
Constant	-5.417***	1.554
Other control variables (province dummies)	Yes	
Pseudo R-squared	0.244	
Number of observations	494	

****, ** and * denote statistical significance at 0.01, 0.05 and 0.10, respectively.*

Table 3: Estimation results for debt incidence regression

Variables	Coefficient	Robust clustered S.E.
Financial liquidity	-0.519***	0.169
Age of household head	0.040	0.025
Age of household head squared	-0.001***	0.001
Sex of household head	0.028	0.083
Ln (household size)	0.297**	0.150
Level of education of household head (with tertiary education as a reference group):		
- At most primary education	-0.304*	0.181
- Secondary education or vocational certificate	0.059	0.138
Occupation of household head (with the unemployed as a reference group):		
- Employed in agricultural sector	0.086	0.188
- Self-employed	-0.032	0.122
- Civil servant/state enterprise employee	-0.157	0.127
- Employee in private company	0.095	0.285
Ln (value of fixed assets)	0.134**	0.055
Marital status of household head (with single as a reference group):		
- Divorced	0.316	0.200
- Married	0.372**	0.175
Ln (traveling time from home to financial institution)	-0.092***	0.034
Ln (risk preference)	0.007	0.330
Constant	-2.242***	0.793
Other control variables (province dummies)	Yes	
Pseudo R-squared	0.123	
Number of observations	487	

****, ** and * denote statistical significance at 0.01, 0.05 and 0.10, respectively.*

household head, are also found to be important determinants of debt incidence. Households with older head of household compared to households with younger head of household, and households whose household head has low level of education are less likely to be indebted to formal financial institutions.

Lastly, we present the estimation results for the households' outstanding debt level (Table 4). We found that the amount of outstanding debt is positively correlated with households' income. In practice, the income of the loan applicant is the key factor in determining the credit limit. A low-income applicant is thus more likely to be granted a small credit limit. Second, the amount of outstanding debt depends on household size, age, educational background and occupation of the household head. Households with an older head are not able to borrow as much as households with a younger head because a younger household head has greater potential to accumulate a large amount of earnings. Large households tend to be characterized by a lot of spending; therefore, the households with more members tend to borrow more relative to other groups. Households headed by an entrepreneur, employee in a private company or a person who works in the agricultural sector tend to have larger outstanding debts compared with households with an unemployed head. The educational background of the household head also matters. If the household head received at least a tertiary education, the amount of outstanding household debt would be less relative to households whose head has a lower educational background. The type of household assets plays a role in explaining the amount of outstanding debt. Households with more fixed assets are more likely to be indebted, while households with a high level of financial assets tend to have a lower amount of outstanding debt.

By considering the estimated coefficients of IMR in the credit constraint and debt incidence regressions, we find that both of the estimated coefficients have the correct signs, i.e., the unobservable factors that tend to increase the likelihood of incurring debt lead to higher desired amount of credit. In addition, the unobservable factors that tend to raise the likelihood of households being credit constrained reduce the desired amount of credit.

From our analysis of the credit gap of households in the four provinces that are in our pilot areas presented above, the results show that, if the credit-constrained households can remove all the factors behind the credit constraint, the average desired debt level of these households in our sample will increase by approximately 440,000 baht (US$1 = about 32 baht) per household. In addition, the size of the financing gap of credit-constrained households in the four pilot provinces varies across households, depending on the sex, educational background and occupation of the household head (Tables 5-7). We find that, if households can deal with the credit constraint condition, the desired debt level of the households with a male head will increase by 505,000 baht or approximately 6.7 times the desired debt level of the households with a female head. The desired debt level of households with a higher than tertiary educated head will increase by 729,000 baht or about twice the level of the desired debt for households with a less educated head. In considering the occupation of the household head, our results show that households whose head is a civil servant or employee in a state enterprise have the highest desired debt level compared with households with a self-employed head or private employee head.

Table 4: Estimation results for households' outstanding debt regression

Variables	Coefficient	Robust clustered S.E.
Ln (household income)	0.416*	0.152
Age of household head	1.177***	0.147
Age of household head squared	-0.014***	0.002
Sex of household head	0.144	0.158
Ln (household size)	4.423***	0.326
Default history	-9.696***	1.215
Level of education of household head (with tertiary education as a reference group):		
- At most primary education	10.457***	1.373
- Secondary education or vocational certificate	11.887***	1.559
Occupation of household head (with the unemployed as a reference group):		
- Employed in agricultural sector	6.879***	0.910
- Self-employed	3.173***	0.448
- Civil servant/state enterprise employee	6.937***	0.897
- Employee in private company	10.314***	1.239
Ln (value of fixed assets)	1.365***	0.147
Ln (value of financial assets)	-1.815***	0.215
Marital status of household head (with single as a reference group):		
- Divorced	-51.144***	5.712
- Married	-52.94***	5.916
IMR (credit constraint)	-10.817***	1.244
IMR (debt incidence)	10.41***	1.341
Constant	37.71***	2.751
Other control variables (province dummies)	Yes	
R-squared	0.607	
Number of observations	302	

****, ** and * denote statistical significance at 0.01, 0.05 and 0.10, respectively.*

Table 5: Average financial gap, by sex of household head

Sex of household head	Financial gap (Thai baht)
Female	75,017
Male	505,072
Total	443,636

Source: Estimated by Thailand Development Research Institute.

Table 6: Average financial gap, by educational background of household head

Educational background of household head	Financial gap (Thai baht)
Primary education	396,074
Tertiary education	729,006
Total	443,636

Source: Estimated by Thailand Development Research Institute.

Table 7: Average financial gap, by occupation of household head

Occupation of household head	Financial gap (Thai baht)
Civil servant or state enterprise employee	729,006
Private company employee	42,340
Self-employed	466,821
Total	443,636

Source: Estimated by Thailand Development Research Institute.

3. CONCLUSION AND POLICY IMPLICATIONS

Based on the analysis of aggregate level of financial inclusion across provinces in Thailand, it is apparent that most of the provinces in Thailand have low to moderate access to basic financial services, suggesting that some people in these provinces are still not in a formal banking environment that would help them to get easy access to basic deposit and credit services. Although SFIs, semi-formal and self-help groups, which are aimed at helping community people and the underserved in particular are, to some extent, able to help fill the gap, they still face some limitations.

In the study, we further conduct an empirical exercise to see what happens if impediments to financial access are removed by focusing on credit side issues, meaning that we analyze the extent of demand for credit by credit-constrained households if all the credit-constrained factors, such as information asymmetry between lenders and borrowers and credit history, are hypothetically removed. Overall, by studying the credit constraint condition that causes a number of households to be denied credits, we find that the following problems need to be tackled to improve financial inclusion of the people, especially when it comes to access to credit from formal financial institutions.

First, with regard to short-term liquidity issues, from our survey of households in the four pilot provinces, we find that the average proportion of household expenditure to household income is about 76 percent. A decline in liquidity over a short-term horizon does not cause households to face financial difficulty; however, if the lack of liquidity persists, households might face severe financial constraint and liquidity problems. To address these

issues, the responsible government agencies, private organizations along with community-based institutions need to cooperate in equipping the low-income households with understanding and knowledge of personal financial management, including income and expenditure management, as well as the concept of household accounting so that households can do financial planning and budgeting more effectively. Bearing in mind that a large number of Thai citizens still lack awareness and knowledge of the importance of personal financial management, as well as new financial products and services, it is high time to promote financial literacy in Thailand, especially among low-income earners. Since the financial world is becoming more and more complex, without proper education and knowledge about financial matters, people will be likely to make poor decisions with negative consequences, such as getting themselves into financial difficulty and experiencing financial instability. It is therefore indispensable that people should be taught about finance from a young age so that they can become financially stable when they grow up. Even though many agencies are developing financial literacy programs, current efforts are not sufficient for creating a substantial impact, as there is a lack of coordination. This situation calls for holistic development and promotion of financial literacy at all levels of education.

Second, the information asymmetry between borrowers and financial institutions is one of the key factors that explain why financial institutions require borrowers to pledge assets or collateral as a guarantee for loans. By using collateralized loans, financial institutions take less risk. Yet, many households, especially low-income households, face difficulty in finding assets to pledge as collateral. To address this problem, we should encourage the development and implementation of the joint credit guarantee system, particularly among rural households and micro-entrepreneurs via the linkage between banks, specialized financial institutions, semi-formal and self-help groups, to promote rural development and transformation through the provision of loans and guarantees on loans for agriculture and rural development projects. An example of a credit guarantee system that currently exists in Thailand is the one under the responsibility of the Thai Credit Guarantee Corporation (TCG), which was established to support SMEs in obtaining a greater amount of credit from financial institutions.

Third, with an unfavorable credit history, such as failure to repay a loan in a timely manner or defaulting on debts, borrowers will face difficulty in obtaining credit from financial institutions. In order to help such groups of potential borrowers, it is important that a debtor-friendly debt restructuring scheme be established.

Next, many of the requirements and conditions of formal financial institutions are the key obstacles that limit the access of low-income households to financial services. With this in mind, it is a matter of urgency to improve the financial institution's development plan to lessen or minimize the exclusion of low-income households from accessing credit. One of the measures to be revised is that concerning the issuance of new licenses for microfinance institutions.

Last but not least, we are all aware that elderly people are often excluded from accessing financial services, particularly credit, for some reasons. Based on general understanding, the elderly in general are experiencing a decline in physical capabilities and lower opportunity to earn and save for the future compared to what they used to do. In addition, those particularly from low-income families and the families with generation gap are normally considered to be at particular risk as they fail to accumulate wealth and assets that can generate them passive income upon retirement. With this problem in mind, it is important that there should be a good and reliable welfare scheme for elderly people or other disadvantaged groups to reduce their need to borrow from informal sources of credit. To help lessen the fiscal burden in the long-term, people should be educated starting at an early age about necessary financial-related matters, knowledge and skills to become financially independent and responsible adults.

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