Determinants and Barriers to Financial Inclusion in the Informal Sector : An Examination of Access to Saving and Credit Products in Myanmar

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Extended Abstract:

Research shows that lack of access to financial services, especially formal financial services, can expose individuals to risks and high costs. Access to formal financial products, on the other hand, can lead to increased savings, productivity, consumption and female empowerment. Nonetheless, financial inclusion remains a challenge for many low-income developing countries. For Myanmar, the country of study, financial inclusion is limited. Consumer survey data shows that for the country, 30 percent of adults have access to formal financial services, and another 31 percent rely solely on informal financial services.

Given the positive benefits of financial access, and the attempts by the Myanmar government to promote financial inclusion, especially to low-income individuals and households, this paper addresses the issue of access to formal saving and credit products. More specifically, the paper aims to determine the factors that affect uptake of formal financial products for those working in the informal sector (but excluding the farming sector). The paper addresses the issue from the individual perspective, and draws on a unique demand-side dataset of 5100 individuals across Myanmar conducted in 2013. Maximum likelihood estimation (MLE) methods are applied to provide answers as to what determine uptake of financial saving and credit products. Factors examined include socio-economic information such as income, age, gender, education, etc. Furthermore, the location of the respondent, as well as their attitudes toward saving and borrowing are examined.

Results indicate that, contrary to expectation, attitudes and behaviour such as feeling stressed when dealing with finances, keeping a budget, and thinking carefully before spending do not contribute significantly to uptake of financial services. Instead, socio-economic factors of the individual dominate the results. One key determinant of uptake is income, those with a steady income stream and those with their own money to spend have a greater likelihood of saving formally. Examination of the cited reason for not saving corroborates with this finding, with the majority of respondents reporting that they do not save because there is not enough money after household expenses have been paid. Education is also positively associated with formal saving, with those who have higher education more likely to formally save. The same is true for women and older individuals.

For credit products, the only attitudinal factor that is important is the belief that loans are only for emergency situations. People who have such attitudes are less likely use formal

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credit products. Being near banks and public transportation positively contribute to formal loan uptake. However, those in urban areas are less likely to have formal financial products. This could be because there is less penetration of regulated providers in urban areas compared with rural areas. Socio-economic factors such as age, gender, education and marital status all contribute positively to formal credit uptake.

These results suggest that different policies should be used in order to promote usage of formal saving and credit products. In order to increase formal saving, products that allow small amounts of savings and incentives could be provided as one main barrier to saving is the fact that people feel they do not have enough income left to save after household expenses have been paid. To promote formal credit usage, it is important to promote the provision of financial service outlets in urban areas.

Keywords: Financial Inclusion, Savings, Credit

JEL Classification Codes: D14, G21

1. Introduction

Formal financial inclusion has been found to have many positive benefits, especially in developing economies. At the economy-wide level, financial deepening in a country has been linked to poverty reduction, reduced income inequality, improved economic growth, and faster growth in sectors where firms have more need for external sources of financing (see, e.g., Rajan and Zingales 1998, Beck, Demirguc-Kunt, and Levine 2007, Levine 2005). At the microeconomic level, access to finance has been found to bring positive benefits in terms of increases in income, consumption, and well-being (see, e.g., Attanasio et al. 2011, Dupas and Robinson 2013). Furthermore, households and enterprises with access to finance have also been found to make more efficient production and employment choices (Morduch 1995) as formal financial access helps firms to become less averse to risks when making financial decisions.

While financial inclusion has been shown to have many positive benefits, financial inclusion is not the norm in most of the developing world. The Global Financial Inclusion (Global Findex) survey of 148 industrialized and industrializing economies worldwide show that only about fifty percent of adults have an account at formal financial institutions (Demirguc-Kunt and Klapper 2012). The survey also finds that the ratio adults with formal financial access in developed economies of more than twice the share in low income countries. For Myanmar, the country of study, financial inclusion is limited. Consumer survey data (FinScope Myanmar) shows that 30 percent of adults have access to formal financial services, another 31 percent rely solely on informal financial services, and 39 percent are financially excluded[2].

The statistics uncovered from the Global Findex and FinScope surveys, coupled with increasing evidence for the positive benefits of formal financial access, suggest that expanding financial inclusion is an important agenda in low income country settings. This view is shared by the Myanmar government, which sees promotion of financial access as a means to achieve greater social and economic development goals. The government has taken an active role in pushing forward the financial inclusion agenda, and a number of initiatives have been put in place to create an enabling environment for financial inclusion. (Chamberlain, et al., 2014).

With the associated benefits of formal financial inclusion, and the interest of the Myanmar and many other governments, one topic of interest is in understanding the determinants of formal financial access. This paper addresses this question from the demand side by using a country-wide survey of 5100 individuals in Myanmar. The paper focuses specifically on individuals working in the informal sector, as they would likely have a lot to gain from formal financial inclusion.

2. Literature Review

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[2] Formal financial inclusion is defined as using the services of financial service providers who are regulated. Financially excluded adults are those who do not use any financial products or services, formal or otherwise.

Factors that determine financial access can be divided into supply side factors that affect the availability of financial services, and demand side factors that determine individual decisions to use the provided services (Campero and Kaiser 2013). From the demand side, uptake of formal financial service could be affected by individual-specific characteristics such as income, education, and age. At the same time, the decision to use financial services could also be determined by behavioral traits and perceptions towards finance.

Individual-specific socio-economic characteristics which have been consistently found to have a positive association with formal financial access are income and educational attainment. Studies have found that the higher an individual's income and education, the higher the likelihood of having a formal account. Other factors such as marital status, gender, and living in urban locations have more mixed findings, and have been found to be significant determinants of formal financial access in some of the studies. (See, e.g., Honohan and King 2012, Fungacova and Weill 2014, Allen et al. 2012, Pena, Hoyo, and Tuesta 2014). Nonetheless, evidence using individual-level information across multiple across countries suggests that the effect of individual-specific factors on being formally banked varies from country to country (Allen et al. 2012, Honohan and King 2012).

In addition to socio-economic characteristics, attitudes and behavioral traits could also affect financial decisions (World Bank 2015). Douglas North (1995) posits that when individuals make choices, they make it based on their own mental models. Studies of financial decision-making by psychologists concur with this view, indicating that emotional impulses and a focus on short-term gains could drive decisions especially in low-income individuals (Baumeister, Vohs, and Tice 2007, Shah, Mullainathan, and Shafi 2012). Mullainathan and Shafi (2009) also finds that for those in poverty, small emotional factors could hamper prudent financial decisions such as product uptake. Attitudes are found to be one factor affecting the extent to which individuals save with individual development accounts in the U.S. (Han and Sherraden 2009).

In summary, the literature on financial inclusion shows that individual-specific socio-economic characteristics such as income, education, age and gender could be important factors that determine financial decision-making from the demand side. Furthermore, individual attitudes and perceptions may also influence the decision to use financial services. However, the extent to which individual-specific factors influence the decision to take up formal financial services could vary from country-to-country. As such, this study attempts to tease out the effects of such individual-specific factors in Myanmar.

3. Data and Methodology

To understand the determinants of formal financial inclusion in the Myanmar context, this study draws on a nationally-representative data from the FinScope Myanmar survey[3] implemented in 2013. The survey focuses on the demand side of financial inclusion,

[3] The FinScope survey is a tool developed by FinMark Trust. At the time of the Myanmar survey, FinScope has been conducted in 18 countries in Africa and Asia.

collecting information on the financial lives of adult individuals[4] in Myanmar. The survey was overseen by a national steering committee, chaired by the Myanmar Microfinance Supervisory Enterprise (MMSE). A total of 5,100 face-to-face interviews were conducted by Myanmar Survey Research (MSR) from July to August 2013. The interviews include individuals working in both the formal and informal sectors. Of the 5,100 individuals interviewed, 2,453 individuals work in the informal sector. This study focuses on this group of adults, and examines the factors that determine their decision to subscribe to formal saving and credit products.

In order to understand the determinants behind uptake of formal saving and credit products for those in the informal sector, this paper estimates two multivariate probit regressions. Model 1 looks at the factors that determine subscription to formal saving products. The dependent variable is equal to one if the individual has at least one formal saving product, and is zero otherwise. In Model 2, the dependent variable is uptake of formal credit product. The dependent variable is a dummy equal to one if the individual has at least one formal credit product, and is zero otherwise.

The independent variables for both multivariate probit regression models can be classified into three groups; perceptions, geographical location, and socio-economic characteristics. For Model 1, there is an additional group of independent variables; behaviour. Results reported are grouped accordingly. Description of variables can be found in Table 1. Summary statistics is presented in Table 2, while results can be found in Table 3[5].

4. Results

In terms of uptake of formal saving products, summary statistics show that only a small proportion (5 percent) of those in the informal sector have formal savings products. Regression results indicate that the main determinants of using formal saving product are socio-economic characteristics, and whether or not the respondent lives in urban areas. Respondents who are female, older in age, and have their own income are more likely to have formal financial products. Educational attainment is also positively associated with uptake of formal saving products. On examining the marginal effect of education, it is found that the effect of education increases the higher the educational attainment. Being located in urban areas is also positively associated with uptake of formal saving products. However, other locational factors such as living near public transportation and living near bank branches are not statistically significant, suggesting that there are no effects on uptake of formal saving products for the informal sector group. Furthermore, for this group of workers in the informal sector, attitudes towards saving and behaviour that are deemed conducive to saving are not found to have any positive impacts towards increasing the likelihood of uptake of formal savings products.

[4] An adult is defined those of age18 or more.

[5] Multivariate probit regressions results are checked for model misspecification, of which no problems are found. The probit results are also compared with logistic regression results. Both results are consistent.

Summary statistics for formal credit products show that around 13 percent of those in the informal sector have formal credit, a larger number than formal saving uptake. In terms of using formal credit products, results from the multivariate probit regression indicate that socio-economic characteristics and geographical location are important determinants of formal credit uptake. Factors such as age, gender, marital status, and education are positively associated with usage of formal credit products. Older individuals who are female and are married are more likely to obtain credit from formal financial institutions. Geographical location also matters. Those who live near bank branches, and those within close proximity to public transportation are more likely to use formal credit product. However, those who live in urban areas, those who have regular monthly income are found to be less likely to take up formal credit products. The negative marginal effects of the urban area variable could be due to the limited availability of formal credit services in urban areas as the focus of previous government policy has been on expanding rural credit. In terms of perceptions, the variables for perceptions are mostly non-significant except for *emergency*, which is negative and statistically significant. This means that those who would only borrow when there are emergencies are less likely to use formal credit products.

5. Conclusion

On the whole, results from both regressions indicate that formal financial service uptake in the informal sector in Myanmar is not so much determined by attitudinal factors as by socio-economic factors. This is seen most strongly in the case of formal savings product uptake, which is mostly determined by socio-economic factors such as age, income, and education. Behavioral factors such as thinking carefully before spending, and keeping a budget have no impacts on formal saving product uptake. Attitudinal factors such as feeling stressed when dealing with finances, saving money for later use, etc. are also not significant. In terms of formal credit products, perceptions also do not affect uptake of formal services with the exception of those who would consider borrowing in emergencies, which is negatively associated with formal credit uptake. Also, for formal credit, socio-economic characteristics such as income, education, age, and gender are important determinants of formal credit uptake. However, being located in urban areas and having monthly income coming in decrease the likelihood of having formal credit products. This could be because those in urban areas have less access to formal credit providers, and those with their own regular monthly income are less likely to require formal credit products.

Table 1: Description of Variables

Variables	Description
Dependent Variables	
FSave	Dummy = 1 if respondent saves at a formal financial institution
FCredit	Dummy = 1 if respondent borrows from a formal financial institution
Financial Attitude : Saving	
finstress	Dummy = 1 if respondent agrees that dealing with finance is stressful or a burden
saverain	Dummy = 1 if they respondent agrees that he/she has to save for difficult times
safe	Dummy = 1 if respondent agrees that saving means putting money in a place to keep it safe
uselater	Dummy = 1 if respondent agrees that saving means putting money aside to use later for a specific purpose
increase	Dummy = 1 if respondent agrees that saving means putting money away so that the total increases over time as more is put away
Financial Attitude : Credit	
avoid	Dummy = 1 if respondent avoids borrowing if possible
embarass	Dummy = 1 if respondent finds borrowing to be embarrassing
badfuture	Dummy = 1 if respondent agrees that it is bad for his/her future life if he/she dies still owing money
debtforfam	Dummy = 1 if respondent agrees that he/she would not be able to feed his/her family if he/she does not borrow
emergency	Dummy = 1 if respondent would consider borrowing in an emergency
Financial Behavior	
trackfin	Dummy = 1 if respondent agrees when asked if he/she keeps track of his/her income and expenditures on a monthly basis
thinkspend	Dummy = 1 if respondent thinks carefully before making a spending decision
gowithout	Dummy = 1 if respondent agrees that he/she can go without certain things to be able to save
Location	
nearbank	Dummy = 1 if respondent lives within less than 1 hour of a bank branch
pubtrans	Dummy = 1 if respondent lives within less than 1 hour of public transportation access
Urban	Dummy = 1 if respondent lives in urban areas
Socio-economic Characteristics	
age	Respondent's age (in years)
gender	Dummy = 1 if respondent is female
maritalstatus	Dummy = 1 if respondent is married
mthlyinc	Dummy = 1 if respondent has regular monthly income
ownmoney	Dummy = 1 if respondent has money of his/her own to do as he/she wishes
primedu	Dummy = 1 if respondent's highest level of education is at the primary level
lowsecedu	Dummy = 1 if respondent's highest level of education is at the lower secondary level
hisecedu	Dummy = 1 if respondent's highest level of education is at the upper secondary level
higheredu	Dummy = 1 if respondent's highest level of education is higher than the upper secondary level

Table 2: Summary Statistics

Variable	Mean	Std.Dev.	Min	Max
FSave	0.05	0.21	0	1
FCredit	0.13	0.33	0	1
finstress	0.68	0.47	0	1
saverain	0.70	0.46	0	1
safe	0.05	0.22	0	1
uselater	0.55	0.50	0	1
increase	0.10	0.30	0	1
avoid	0.11	0.31	0	1
embarass	0.23	0.42	0	1
badfuture	0.04	0.19	0	1
debtforfam	0.71	0.45	0	1
emergency	0.68	0.47	0	1
trackfin	0.61	0.49	0	1
thinkspend	0.83	0.38	0	1
gowithout	0.44	0.50	0	1
nearbank	0.57	0.50	0	1
pubtrans	0.91	0.28	0	1
Urban	0.31	0.46	0	1
age	44.35	15.74	18	98
gender	0.69	0.46	0	1
maritalstatus	0.71	0.45	0	1
mthlyinc	0.45	0.50	0	1
ownmoney	0.26	0.44	0	1
primedu	0.47	0.50	0	1
lowsecedu	0.17	0.38	0	1
hisecedu	0.11	0.31	0	1
higheredu	0.04	0.20	0	1

Table 3: Results from Multivariate Probit Regressions

Model 1			Model 2		
Variables	Coefficients	Marginal Effects	Variables	Coefficients	Marginal Effects
finstress	-0.0716	-0.0053	*avoid*	0.1088	0.02
saverain	0.0399	0.0029	*embarass*	0.1260	0.0229
safe	0.0522	0.004	*badfuture*	-0.0505	-0.0085
uselater	-0.0160	-0.0012	*debtforfam*	0.0920	0.0156
increase	0.0809	0.0063	*emergency*	-0.6110***	-0.1229***
trackfin	0.0497	0.0036	*nearbank*	0.2531***	-0.0432***
thinkspend	0.1516	0.0101	*pubtrans*	0.2325	0.0357*
gowithout	-0.0695	-0.005	*Urban*	-0.7580***	-0.1126
nearbank	0.1112	0.008	*age*	0.0065***	0.0011***
pubtrans	0.1686	0.0108	*gender*	0.1687**	0.0282**
Urban	0.2319**	0.0183*	*maritalstatus*	0.2142***	0.0353***
age	0.0076**	0.0006**	*mthlyinc*	-0.1835**	-0.0317**
gender	0.2819**	0.0188***	*ownmoney*	-0.1168	-0.0196
maritalstatus	-0.0139	-0.001	*primedu*	0.1539	0.0270*
mthlyinc	0.2057**	0.0153*	*lowsecedu*	0.3879***	0.0790***
ownmoney	0.4569***	0.0411***	*hisecedu*	0.2100	0.0406
primedu	0.3743**	0.0282**	*higheredu*	0.1355	0.0255
lowsecedu	0.4692**	0.0456*	*Constant*	-1.6985***	
hisecedu	0.6585***	0.0766**			
higheredu	1.0960***	0.1837***			
Constant	-3.3573***				

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