

FINANCIAL INCLUSION IN BURUNDI: THE DETERMINANTS OF LOAN-TAKING MOTIVATION IN SEMI-RURAL AREAS

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Abstract

The use of financial services is the most concrete way of analyzing financial inclusion on the demand side. The objective of this paper is therefore to investigate the determinants of loan-taking motivation in semi- rural areas in Burundi. It also aims at establishing a link between the socio-economic development of low-income microcredit beneficiaries through the assessment of cause and effect relationships between various individual characteristics and motivation for borrowing. After data analysis with STATA software using logistic regressions (logit) to perform estimations, we came to the conclusion that microfinance institutions contribute to the socioeconomic development of individuals living in semi-rural areas because of the determinants that motivate low-income households to resort to credit in MFIs. The estimates have significantly reached the conclusion that three reasons motivate recourse to borrowing, namely: (i) acquisition of equipment, (ii) development of income-generating activities like agribusiness and (3) quite unexpectedly financing better education for higherincome level individuals. However, this research makes it clear that Burundian microfinance institutions which are essential elements in the extension of access to formal financial services must still make efforts to be more inclusive by facilitating conditions for both individual as well as collective credits.

Keywords: Finance, Financial inclusion, loan-taking motivation, microfinance institutions, semi-rural areas, Burundi

Introduction

Inclusiveness of the socioeconomic development of a country is strongly linked to the level of accessibility of its population to banking and financial services. As economic growth is strongly related to the level of economic activity, this requires availabil ity of financial means for consumers, through various services and financial products offered by the formal and/or informal financial sectors. The provision of banking and financial services to individuals, households, farmers or small traders to enable them to fully participate in the economic activity of the country embraces the concept of

financial inclusion.

Limited access to financial services stemming mainly from structural, economic and cultural access restrictions increases the financial vulnerability of the poorest. This inability to fully benefit from the basic financial services that most often strikes lowincome people is known as financial exclusion. Financial exclusion is a global issue and is specifically prevalent in developing economies where, according to the report of the World Bank on inclusion, only 41% of adult individuals own a bank account in a conventional financial institution (Demirgüç-Kunt and Klapper 2012).

Combating financial exclusion to fulfil the objectives of socio-economic development is the guiding idea of financial inclusion. Financial inclusion may then be defined as the process of ensuring easy access to appropriate financial products and services needed by marginalized vulnerable low-income groups at an affordable cost in a fair and transparent manner. More generally, financial inclusion can be defined as the level of access to and usage of basic financial services through formal financial institutions (Allen et al. 2016; Fungáčová and Weill 2015; Prior and Argandoña 2008). Therefore, financial inclusion is so important in improving living conditions of low-income populations like peasants, farmers, small traders and other vulnerable populations (Mahendra Dev 2006), who constitute a great part of the active population in sub-Saharan Africa and more particularly in Burundi.

The lack of literature on financial inclusion in Burundi constitutes a

handicap to the understanding of financial exclusion mechanics to adapt the inclusive model to specific features of the country and optimize accessibility to financial services for less fortunate populations. In countries like Burundi, the poor who are most often excluded from the formal financial system are individuals living in rural or semi-rural areas. For these populations, access to financial services and products via the formal financial channel (Banks and microfinance institutions in the case of Burundi), is a real problem and a major challenge to break the vicious cycle of poverty.

Accessibility to funding to undertake income-generating activities for the poorest is a major obstacle to the socio-economic development of rural or semi-rural communities because the general conditions of access to bank loans constitute a real handicap for low-income individuals with no guarantees or sufficient startup funds. One of the alternatives to get funds through the formal financial system in Burundi is the use of services offered by microfinance institutions (MFIs) which provide short and medium-term micro-credits with less exclusive borrowing procedures than traditional banks.

The use of loans provided by MFIs being fairly widespread in Burundi, the question of their effectiveness in reducing financial exclusion and their impact on the poor's living conditions is put forward. For this reason, the purpose of using microfinancing by low-income individuals via MFIs is an important factor to assess their contribution to the socioeconomic development of the beneficiaries. This article on financial inclusion

in Burundi fits well in this context. It aims to highlight and analyze factors behind the use of loans from MFIs in semi-rural environments, i.e., in the countryside. It also contributes to the development of financial literacy in Burundi knowing that currently there is no study on financial inclusion on the demand side in the country both in rural or semi-rural as well as in urban areas except the financial inclusion report produced by the Bank of the Republic of Burundi (BRB) in 2012.

Bujumbura, the capital city of Burundi, is the only fully urban city in the country. All the other provinces fall into the semi-rural category. This study mainly analyses the use of financial services through the assessment of credit end-use offered by MFIs. It therefore aims not only to understand causality mechanics between individual characteristics and motivation behind the use of loans, improvement of semi-rural or rural populations' living conditions but also to enrich financial inclusion literacy in Burundi.

This article aims to evaluate the contribution of MFIs to the socioeconomic development of low-income populations living in Burundi and more specifically to analyze determinants that motivate the use of loans in the countryside with regard to individual, social, economic and demographic characteristics.

This paper is structured as follows. It starts in the second section with a review of related literature on the concept of microfinance and the notion of financial inclusion. The third section briefly describes methods and data. The fourth section presents the

results of estimations and the fifth section concludes.

Literature Review

In this section we provide the review of existing literature on key concepts on Financial Inclusion and Microfinance. We also present an overview of access barriers to Financial Inclusion and reasons that motivate people to use credit services.

Significance of Microfinance

Microfinance institutions (MFIs) play an important role in the economies of developing countries like Burundi by allowing low-income populations to easily access credit through collective loans with no requirement of personal guarantee deposits or collaterals. MFIs differ from banks by their social and financial operation mode, enabling them to provide small loans and basic financial services to people experiencing difficulties in access to the traditional financial system. Microfinance is one of the many aspects and deployment tools of an inclusive financial system in developing countries.

Microfinance is the provision of financial services like credit and savings, money transfer and insurance to poor and low-income households who lack access to formal financial institutions. Microfinance aims to meet the needs of low-income people by implementing mechanisms for the allocation of resources in terms of small amount loans to individuals or groups of people who do not normally have access to conventional banking services to enable them to engage in small income-generating activities tailored to

their needs and adapted to their environment.

Most often, low-income people will use the services of microfinance institutions to obtain funds through micro-credits that allow them to invest individually or collectively in micro and small income-generating activities. Through the activity thus developed, micro-credits granted by MFIs create direct or indirect employment in the immediate surroundings of the beneficiaries, which positively impact the socio-economic development of the community (Sundaresan 2008; Yunus 2003).

Globally, microfinance institutions play an important social and economic role as they allow the underprivileged and low-income households, who have received short-term loans to actually participate to the local economy, increase their autonomy and strive for household financial stability (Robinson 2001).

Financial inclusion

There is no single vision of financial inclusion because of the multiplicity of definitions which vary according to different authors. However, all of them agree on the goal of reducing financial exclusion as a basis to define financial inclusion. We can simply consider financial inclusion as a process that aims to increase access to and usage of financial services in a formal framework (Hannig and Jansen 2010; Clamara et al. 2014) for all strata of the population and more specifically vulnerable and low-income households. Financial inclusion allows excluded people from the formal financial system to have universal access to

basic, quality financial services at a reasonable cost and tailored to their needs so that they can use them sustainably and regularly (Allen et al. 2016; Demirgüç-Kunt and Klapper 2013; Claessens 2006; Honohan 2008; Aggarwal 2014).

Financial inclusion is therefore unquestionably linked to the notion of financial exclusion of certain categories of the population who have no access to financial products and services offered by formal financial institutions. The causes of this exclusion constitute barriers to access the formal financial system. There are generally two types of exclusion according to individuals, namely (i) those who are involuntarily excluded from the financial system and (ii) those who can access the financial system but who voluntarily choose not to do so by excluding themselves (Allen et al. 2014; Fungáčová and Weill 2015).

Access barriers to the formal financial system can also be classified into two broad categories, namely, (i) barriers related to the supply side on one hand, and (ii) barriers related to the demand side on the other hand (Collins et al 2009). Supply side barriers are physical barriers to access like geographic distance, lack of suitable products and services, restrictive banks' regulations in terms of administrative documents. On the demand side, barriers include social, cultural and psychological barriers and also the lack of financial capability in terms of income.

Access barriers to the traditional financial system may also be based either on geographical criteria (proximity to access points, number of branches in a sector etc.), or on socio-

economic criteria (level of income, social status, religious affiliation, ethnicity, etc.) according to the purpose of the analysis as stated by different authors (Hannig and Jansen 2010; Chen and Jin 2016).

Financial inclusion refers to the overall accessibility to the formal financial system in a country for all socio-economic strata of the population. In Burundi, the regulatory body classifies formal financial institutions into two main categories: (ii) banking institutions on one hand and (ii) microfinance institutions on the other hand. Microfinance institutions have a vital role in improving access opportunities to formal financial services for individuals who cannot access services offered by conventional banks.

Financial inclusion is of paramount importance in the vision of inclusive growth in developing countries' economies because it allows to effectively raise the participation level of low-income populations in economic growth. In fact, thanks to the provision of financial resources, such populations have more investment and/or consumption capacity and therefore a greater productive capacity. This active participation in the economic activity of low-income households thanks to financial inclusion leads to the improvement of human development indicators and mechanically to the reduction of poverty as stressed by different authors (Beck et al. 2004; Bruhn and Love 2014). In short, accessibility to the formal financial system allows to break the cycle of poverty by increasing households' income, thus allowing them to increase consumption as well as savings and investment

abilities (Ashraf et al. 2010; Beck et al 2007; Dupas and Robinson 2013).

Analysis of financial inclusion is multi-dimensional because it encompasses different aspects and/or dimensions such as access to financial services, their availability, their use, use motivation and barriers, or even the quality of such services as perceived by beneficiaries. These aspects can be analyzed in relation to consumers of financial services like households, businesses or individuals. There are different reasons that motivate people to use credit in general, and specifically micro-credits granted by microfinance institutions (MFIs). These reasons include, among other things, the purchase of equipment, access to medical care, access to education, launch of a project or an incomegenerating activity as a small business and micro-farms for agribusiness as well as acquisition of land or housing. To evaluate the purpose of credit services usage at the individual level, various researchers have used specific individual characteristics such as the level of education, age, gender, income, employment, marital status, religion, financial literacy or the place of residence (Allen et al., 2014; Kostov et al. 2015; Fungáčová and Weill 2015; Zins and Weill 2016).

This paper focuses on factors that count for individual financial inclusion through the use of financial services provided by microfinance institutions (MFIs) and more specifically the use of the credit service. It thus aims to examine the determinants of financial inclusion at the individual level through the analysis of reasons that motivate individuals to resort to

borrowing in microfinance institutions in semi-rural environments.

Methods and Data

In this section, we thus present the method, the empirical model and the variables, the data used and descriptive statistics of our sample.

Methodology

After a descriptive presentation of the data, our analysis will try to evaluate individual factors to determine the main characteristics that positively favour financial inclusion through credit services proposed by microfinance institutions (MFIs) on the one hand, and to determine the capacity of MFIs to limit barriers to financial inclusion on the other hand. We will then analyze the reasons and the use of funds obtained through MFIs services to determine the contribution of these formal institutions to the socioeconomic development of semi-rural populations.

To obtain significant results and their valid interpretation, a structured process of collection and analysis of numerical data is necessary. These data will be summarized and schematized in graphics and tables to facilitate their interpretation. Considering that the use of financial services by individuals is the most observable dimension of financial inclusion, we considered the probability of the use (dependent variable) of such services in a formal framework as the basis of analysis to determine individual characteristics that influence financial inclusion in Burundi semi-rural areas through formal financial services offered by microfinance institutions.

To be able to do this we use multiple logistic regressions in our analysis since we have a dichotomous dependent variable type that can take only two values 0 or 1. To carry out the estimates using the logistic model (logit), the following equation was used:

Ui = β 0 + β 1*Genderi + β 2*Incomei + β 3*Educationi

+ β 4*Employmenti + β 5*Maritali + ε i

The dependent variable U represents the use of formal financial services by an individual i which takes the value 1 in case of use and zero in case of non-use. Individual characteristics like Gender, Income, Education, Employment, and Marital Status constitute independent variables of the equation.

As shown in Table 1, dependent variables that correspond to motivation for borrowing by individuals surveyed are all dichotomous and represent the final use of the credit contracted.

Gender stands for male or female (0 = female, 1 = male). The level of education of the individuals surveyed is assessed in relation to whether they have completed secondary and university education or have no education level (0 = no level, 1 = less than high school, 2 = high school and above). Marital status stands for individuals being single, married or being in a relationship without being married (0 = single, 1 = married or being in a relationship without being married).

Table 1. The Description Of Variables

Variable	Description	Coding		
Equipment	Dependent variable that corresponds to the purchase of equipment as motivation for the use of credit by the respondent	0 = no use 1 = Final use of credit		
Agribusiness	Dependent variable that corresponds to financing a project or an income-generating activity as motivation for the use of credit by the respondent	0 = no use 1 = Final use of credit		
Medical pur- poses	Dependent variable that corresponds to access to medical care as motivation for the use of credit by the respondent	0 = no use 1 = Final use of credit		
Education	Dependent variable that corresponds to access to education as motivation for the use of credit by the respondent	0 = no use 1 = Final use of credit		
Land & Housing	Dependent variable that corresponds to the acquisition of land or housing as motivation for the use of credit by the respondent	0 = no use 1 = Final use of credit		
Gender	Variable that corresponds to the independent variable that represents the respondent's gender.	0 = female 1 = male		
Education (level)	Independent variable that represents the level of education completed by the respondent.	0 = no education level 1 = less than high school 2 = high school and above		
Marital status	Independent variable that represents the respondent's marital status.	0 = single 1 = married or in a relationship (cohab- ited)		
Employment	Independent variable that represents the employment situation for each respondent.	0 = employed 1 = unemployed		
Income	Independent variable corresponding to the respondent's individual income range	T1 = very low income T2 = low income T3 = high income		

This table presents the dependent and independent variables used in our estimates

The employment status of individuals considers whether they work for an employer or for themselves regardless of the type of activity they are involved in (0 = employed, 1 = unemployed). The monthly income of the

individuals surveyed is divided into three categories ranging from the extremely poor (T1), low-income individuals (T2), and above-average (the least poor) found in the third category (T3).

Data

This article uses secondary data collected by the Institute of Statistics and Economic Studies of Burundi (ISTEEBU) for the National Survey on Financial Inclusion carried out by the Bank of the Republic of Burundi (BRB), the Central Bank, in 2012. They were collected by interviewing 3220 individuals, but for semi-rural populations who in fact constitute the sample for this study, the number of persons surveyed comprises 2897 individuals only after removing the 323 people living in the city of Bujumbura who participated in the survey.

The socio-economic profile of the 2897 respondents who constitute the sample for this study is described in Table 2. The sample consists of individuals aged at least 18 years and living in semi-rural areas in different parts in the countryside. It should be noted that out of a total number of 2897 of the people surveyed, 52.23%, i.e., 1513 people are women while 47.77% are men. With regard to the marital status, 74.77% are married or in a relationship whereas 25.23% are single without any marital responsibilities. As far as the education level of the respondents is concerned, 43.04% have no education at all. The majority of those with a primary education level represent 45.43%, while only 11.53% have completed secondary and university education.

As for employment, only 251 (8.66%) respondents are employed whereas the remaining majority of 2646 of those surveyed, i.e. 91.34% are unemployed. Finally, concerning monthly income, we have three categories distributed as follows: (i) 84.71%

fall in the first income category T1, meaning that they are extremely poor; (ii) 9.22% of the respondents fall in the second category T2 that represents low-income populations; and (iii) the last category T3 representing the top remaining quarter, i.e., high-income groups which represent only 6.07% of the individuals surveyed. It should be noted that people living in the countryside are extremely poor in general.

Empirical Results

In this section, we estimate the determinants of loan-taking motivation. We analyse the use of credit services provided by microfinance institutions. This analysis is carried out through a model of logistic regressions (logit) which will be applied throughout this study. This section is devoted to the discussion of the results of the analysis.

The present study investigated reasons why people use credit in semi-rural areas in Burundi. We estimated that there are five main reasons which motivate people to apply for credit in microfinance institutions (MFIs) with respect to different individual characteristics as shown in Table 3. Then, we used STATA software to perform multiple logistic regressions to determine Odds ratios to analyze the results. According to estimations reached, only three variables are significantly associated with individual characteristics, namely equipment, agribusiness and education.

In the first model we found that purchasing 'Equipment' as a reason for loan-taking in MFIs is positively associated with gender, marital status, education level (high school & above),

Table 2. Statistical Distribution Of The Sample At Individual Level

Variables	Number of respondents	Percentage
Gender		
Female	1513	52,23
Male	1384	47,77
Total	2897	100,00
Marital status		
Single	731	25,23
Married/cohabited	2166	74,77
Total	2897	100,00
Education		
No education level	1247	43,04
Less than high school	1316	45,43
High school & above	334	11,53
Total	2897	100,00
Income		
Less than 50000 BIF (T1)	2454	84,71
50000-100000 BIF (T2)	267	9,22
More than 100000 BIF (T3)	176	6,07
Total	2897	100,00
Employment		
Employed	251	8,66
Unemployed	2646	91,34
Total	2897	100,00

This Table Displays The Descriptive Statistics For The Independent Variables Studied In Our Estimations: Gender, Marital Status, Education, Employment And Income.

intermediate low level income category T2 as well as the high level income category T3. In the second model we found that 'Agribusiness' as a reason for loan-taking in MFIs is positively associated with the education level 'high school & above' and the high level income category T3 but negatively associated with unemployment.

Estimations show that as far as gender is concerned, being male significantly (more than twice) increases the likelihood of applying for credit in a microfinance institution (MFI) to purchase equipment. The fact that getting credit for capital goods is more associated with men than women indi

cates a significant gender difference in reasons for borrowing that motivate individuals to turn to MFIs.

Finally, the last significant model related to individual characteristics in this study is "Education". We thus found that "Education" as a reason for applying for credit in MFIs is only most likely to be associated with the high level of income category T3.

Estimations also show that being married or being in a relationship is significantly associated with a high likelihood of getting a credit to purchase equipment. It should be noted that being married increases the likelihood to apply for credit 4 times than

for single people. This situation may be explained by the weakness of lowincome households living in semi-rural areas in Burundi and more generally by the fact that the level of household income in developing countries is generally very low. It is therefore easier for low-income individuals to use credit to equip themselves without jeopardizing the fragile balance of the family budget.

With regard to the level of education, our estimates show that individuals with a high level of education (high school & above) are well over 9 times the probability of borrowing to equip themselves and 4 times more likely to resort to microcredit offered by microfinance institutions to develop activities like agribusiness than less educated individuals. Being educated is an undeniable advantage for people who want to develop income-generating activities like agribusiness. In fact, microfinance institutions in Burundi often condition the financing of small production units by presenting a motivated and explicit project, which is easier to do for more educated people than less educated individuals. This explains the high probability that educated people who subscribe to microinvestment loans in microfinance institutions generally obtain the requested loans.

We also found that the employment status of individuals is a determinant factor in the likelihood to borrow from a microfinance institution to launch an agro-industrial microproject. Indeed, our estimates revealed that for people living in semi-rural areas in Burundi, being unemployed significantly reduces the probability of contracting a micro-credit to finance an

investment project like an agribusiness income-generating activity. This suggests that employed people are most likely to have access to this type of investment credit. This situation may also be explained by the fact that unlike collective loans, for personal loans microfinance institutions (MFIs) in Burundi have the same type of requirements in terms of financial guarantees to access substantial loans needed for financing investments.

Among other things, having a stable source of income or a job is a prerequisite for contracting an investment loan in a microfinance institution.

As for the monthly income of individuals, our estimates revealed that people in the second income category T2 are 3 times more likely to use loans in a microfinance institution for acquiring property than extremely poor people in the first income category T1. This implies that low-income individuals in the intermediate income category T2 cannot easily acquire some type of equipment without using credit. The easiest way for them to borrow money from a formal financial institution is to use microcredit services via microfinance institutions (MFIs).

Wai also found that being in the upper income category, T3 significantly increases the probability of acquiring a loan by more than 5 times. This may, for example, concern the purchase of non-essential or luxury equipment which significantly impacts the household budget. It should also be noted that there is a probability of 3 times higher for individuals in this category of income to contract a loan to finance agribusiness investment

activities. This correlates with the results obtained for the situation of employment because here too it is easier to obtain an investment micro-credit in a microfinance institution when there are sufficient financial guarantees.

Finally, there are particular results for individuals in the upper income category T3, with a 22 times higher increase in the probability of borrowing in a microfinance institution

to finance education. This remarkable achievement must be seen in the particular context of Burundi where access to public education is free and subsidized by the Government, while private education institutions are extremely expensive and popular with the most affluent individuals. The credit offered by most Burundian microfinance institutions is often used to guarantee family members the best possible education.

Table 3. Determinants of Loan-Taking Motivation¹

	Equipment	Agribusi- ness	Medical purposes	Education	Land & Housing
Gender					
Male	2.975^{*}	1.371	1.578	1	1
	(2.28)	(0.81)	(0.38)	(.)	(.)
Marital status					
Married/cohabited	4.063^{*}	1.254	0.764	1.872	0.357
	(2.17)	(0.50)	(-0.22)	(0.52)	(-1.19)
Education					
Less than high school	1.421	1.697	1	0.451	1
	(0.51)	(0.97)	(.)	(-0.55)	(.)
High school & above	9.678**	4.130 [*]	1	6.630	1
O	(3.19)	(2.35)	(.)	(1.48)	(.)
Employment	(=)	()	(1)	()	(-)
Unemployed	0.422	0.261^{**}	1	3.181	1
1 2	(-1.73)	(-2.70)	(.)	(1.13)	(.)
Income	,	` ,	· /	, ,	\
T2	3.579^{*}	1.765	0.485	10.20	0.439
	(2.18)	(1.02)	(-0.60)	(1.81)	(-0.89)
<i>T3</i>	5.983**	3.033*	1	22.02*	1
	(2.97)	(1.99)	(.)	(2.32)	(.)
Observations	2897	2897	96	1384	63
Pseudo R^2	0.318	0.165	0.017	0.218	0.041

Exponentiated coefficients; t statistics in parentheses

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^{*} *p* < 0.05, ** *p* < 0.01, *** *p* < 0.00

¹ Motivation at the top of each column represents dependent variables. Individual characteristics (gender, marital status, education, employment and income) are explanatory variables.

Conclusion

The aim of this study was to analyze determinants of the reasons for which people resort to credit in microfinance institutions as a source of financing by individuals living in semirural areas in Burundi and to evaluate the impact of the use of this type of borrowing on socio-economic development.

As for individual characteristics, the results highlighted the fact that the main reason for resorting to borrowing through MFIs services is motivated by the need to acquire equipment both for men, married people, highly educated individuals, intermediate lowincome individuals, and also for the most affluent people in the higherincome category T3. The second reason for applying for a loan in microfinance institutions (MFIs) is the use of such micro-credit loans to launch agribusiness-type income-generating activities by individuals living in semirural areas which are mainly composed of agricultural zones. Such credits have a direct impact on employment and contribute to the revitalization of economic activities for semi-rural communities. Finally, although Burundi is a country where basic education is free and access to higher education is subsidized in public institutions, the private education sector is seen by many as a sign of excellence but remains expensive even for people with jobs, hence the increasing use of school credits offered by microfinance institutions to finance education among individuals with guarantees and high income.

It can thus be concluded that the use of microfinance borrowing

services by individuals living in semirural areas

is guided by the willingness of credit grantors to improve their personal situation on a day-to-day basis as well as their well-being through the acquisition of capital goods or access to better education than at the economic level through the acquisition of investment capacity to finance income-generating activities. Borrowing in microfinance institutions therefore has a positive impact on socio-economic development.

However, it should be noted that Burundian microfinance institutions must improve the conditions of access to individual loans because although collective credits are inclusive and easy to obtain, at the level of individual loans, these institutions have the same policy as traditional banks with regard the guarantees required to access some individual credit, which effectively excludes certain categories of people such as unemployed individuals or low-income households.

References

Aggarwal, R. 2014. "Financial Inclusion in India: Challenges and Opportunities." *International Journal of Research* 1(4): 557-567.

Allen, F., A. Demirgüç-Kunt, L. Klapper, and M. S. M. Pería. 2016. "The Foundations of Financial Inclusion: Understanding Ownership and Use of Formal Accounts." *Journal of Financial Intermediation* 27: 1-30.

- Allen, F., E. Carletti, R. Cull, L. Senbet, and P. Valenzuela. 2014. "The African Financial Development and Financial Inclusion Gaps." *Journal of African Economies* 23 (5): 614-642.
- Ashraf, N., D. Karlan, and W. Yin. 2010. "Female empowerment: Further evidence from a commitment savings product in the Philippines." *World Development* 28(3): 333-344.
- Beck, T., A. Demirguc-Kunt, and I. Ross. 2004. "Finance inequality and poverty: Cross country evidence." World Bank Policy Research Working Paper, (3338). Washington, DC: Word Bank.
- Beck, T., A. Demirgüc-Kunt, and R. Levine. 2007. "Finance, Inequality and the Poor." *Journal of Economic Growth* 12: 27–49.
- Bruhn, M., and I. Love. 2014. "The real impact of improved access to finance: Evidence from Mexico." *The Journal of Finance 69*(3): 1347-1376.
- Chen, Z., and M. Jin. 2016. "Financial inclusion in China: Use of credit." *CSD Working Paper*, (16-24). St. Louis, MO: Washington University, Center for Social Development
- Claessens, S. 2006. "Access to Financial Services: A Review of the Issues and Public Policy Objectives." World Bank Research Observer 21(2): 207–240.

- Clamara, N., X. Pena, and D. Tuesta. 2014. "Factors that Matter for financial Inclusion: Evidence from Peru". *BBVA Research Working Paper*, (1409). Madrid: BBVA Research.
- Collins, D., J. Morduch, S. Rutherford, and O. Ruthven. 2009. *Portfolios of the Poor*. New Jersey: Princeton University Press.
- Demirgüç-Kunt, A., and L.F. Klapper. 2012. "Measuring Financial Inclusion: The Global Findex Database." *Policy Research Working Paper Series*, (6025). Washington, DC: Word Bank.
- Demirgüç-Kunt, A., and L.F. Klapper. 2013. "Measuring Financial Inclusion: Explaining Variation in the Use of Financial Services across and within Countries." *Brookings Papers on Economic Activity*, 279–340.
- Dupas, P., and J. Robinson. 2013. "Savings constraints and microenterprise development: Evidence from a field experiment in Kenya." *American Economic Journal: Applied Economics* 5(1): 163-92.
- Fungáčová, Z., and L. Weill. 2015. "Understanding Financial Inclusion in China." *China Economic Review* 34: 196–206.
- Hannig, A., & S. Jansen. 2010. "Financial Inclusion and Financial Stability: Current Policy Issues." *ADBI Working Paper*, (259). Tokyo: Asian Development Bank Institute.

- Honohan, P. 2008. "Cross Country Variation in Household Access to Financial Services." *Journal of Banking and Finance* 32: 2493-2500.
- in Africa." Review of Development Finance 6(1): 46-57.
- Kostov, P., T. Arun, and S. Annim. 2015. "Access to financial services: the case of the Mzansi account in South Africa." *Rev. Dev. Finance* 5: 34–42.
- Mahendra Dev, S. 2006. "Financial Inclusion: Issues and Challenges." *Economic and Political Weekly*, 41(41): 4310-4313.
- Prior, F., and A. Argandoña. 2008. "Best Practices in Credit Accessibility and Corporate Social Responsibility in Financial Institutions." *Journal of Business Ethics* 87(1): 251-265.
- Robinson, M.S. 2001. *The Micro Finance Revolution: Sustainable Finance for the Poor*. Washington DC: World Bank.
- Sundaresan, S. 2008. *Microfinance: Emerging Trends and Challenges*.
 Cheltenham: Edward Elgar Publishing Limited.
- Yunus, M. 2003. "Expending Microcredit Outreach to Reach the Millennium Development Goals." *International Seminar on Attacking Poverty with Microcredit*. Dhaka: Bangladesh.

Zins, A., and L. Weill. 2016. "The determinants of financial inclusion