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The contrasts of microcredit and some unresolved institutional challenges of microfinance: evidence from Mexico

Los contrastes de los microcréditos y algunos retos no resueltos en microfinanzas: evidencia de México

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- **Abstract:** This study analyzes the impact of microcredit on women's life. Until now, microfinance literature has described the benefits microcredits and how it helps women to improve their micro-firms. In this study we found that there is a contrast side of microcredit that needs to be addressed. This is, there is a negative side that includes women to be forced by their family to take credit, issues surrounding financial education, complaints about the Grameen model, marital disharmony, problems with children, etc. Additionally, benefits are kept mainly in the microfinance institutions due to the high interest rates they charge. To avoid this, we suggest to involve microfinance institutions in the community, or to commit the father or legal guardian of the children to act as bank guarantee, inter alia. We tested these ideas on a micro-entrepreneur's women sample of women, in Mexico.
- **Keywords:** Microfinance, regulation, women.
- JEL Classification: G21, G28, J16.
- **Resumen:** Este estudio analiza el impacto del microcrédito en la vida de las mujeres. Hasta ahora, la literatura de microfinancieras ha descrito los beneficios de los microcreditos, y el como estos ayudan a mejorar sus micro-empresa. En este estudio, encontramos que existe un lado contrastante de los microcréditos que requiere ser abordado. Es decir, existe un lado negativo en el que se incluye el hecho de que las mujeres son forzadas a tomar el crédito por su familia, temas relacionados con educación financiera, quejas acerca del modelo *Grameen*, desarmonía conyugal, problemas con los hijos, etc. Adicionalmente, los beneficios se quedan principalmente en las instituciones microfinancieras debido a las altas tasas de interés que

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cobran. A fin de evitar esto, sugerimos que las instituciones microfinancieras sean involucradas en la comunidad, o permitir que el padre o tutor legal de los hijos actúe como obligado solidario ante el banco, entre otros. Probamos estas ideas en una muestra de mujeres micro-empresarias en México.

Palabras clave: Microfinanzas, regulación, mujeres.

Clasificación JEL: G21, G28, J16.

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Introduction

Since the inception of the Grameen Bank in Bangladesh (Rahman A., 1999), microcredit have been an important tool for the alleviation of poverty in developing countries (Hulme & Mosley, 1996). Also, microcredits have been seen as an effective instrument to help women to improve their well being in the society. Group techniques implemented in Bangladesh, by Mohammed Yunus, have enabled small loans to be granted to those not normally regarded as creditworthy (Pitt & Khandker, 1998; Todd, 1996). Several authors have argued that women have proven to be good creditors, and with microcredit help, they obtain empowerment, generate profits and overcome cultural asymmetries (Cull, Demirgüc-Kunt, & Morduch, 2009; Hashemi, Schuler, & Riley, 1996; Kabeer, 2001; Pitt, Khandker & Cartwright, 2006). Also, numerous studies have found that group-microcredits granted to women improve the family income, employment and education, and also bring health in the community (Garikipati, 2008; Khandker, 1998; Morduch & Haley, 2002; Zaman, 2004).

However, the fact that microfinance institutions (MFIs) usually grant group-microcredits exclusively to women, may have as consequence to break social norms and consequently to have a negatively impact on social and family relationships, like marital relationship problems. Changing women's traditional role is not easy, and it must be undertaken with care. If woman ends up with financial control of a micro-firm, this may cause a dispute with her partner (due to gender sensitivities) and isolation from her family. If this happens, an additional problem emerges in terms of who will bear the brunt of childcare, and take responsibility for the children's education, which is a traditional woman role. With an absent father and a work absorbed mother, children might benefit from a higher family income, but other aspects of their wellbeing might be neglected.

In this study, we analyze microcredit impact on women. In particular, we are interested in answer the question: which are the advantages and disadvantages for women, involved in Grameen-model microcredit? For this purpose, we selected a 351 women sample with outstanding microcredits in the mexican state of Jalisco. We chose Mexico because many MFIs in Mexico are following the Grameen-model without

questioning if the model is really applicable to this specific cultural context. In addition, this sector has recently experienced changes in the regulations governing MFI's with the specific objective of facilitating the expansion of these types of organizations.

We found a significant degree of control by a women's partner or other male family member in the decision-making process. Another interesting finding is a lack of financial culture, specifically a significant lack of awareness regarding the interest rates associated with the loans, even when they are high. Although, the sample recognized an improvement of women's lives, due to their micro-firm's prosperity. Additionally, we found that 23 percent of the sample use personal income to make microcredit payments. However, we found that among microcredits benefits are an improvement in child nutrition. Almost all the sample reported a regular to excellent service from the Micro Finance Institution (MFI), but half of the sample complained about the Grameen model (they prefer individual microcredits). In addition, they complained about the significant amount of time involved in weekly meetings, in waiting to make weekly payments and the travel time involved. Finally, to a lesser degree, we found some evidence of marital problems, and child carelessness.

The main contribution of this paper are the following: the literature review that contrast the dark and bright side of microcredits for women involved in the Grameenmodel microcredit, and second, contribute to the literature at this regard, with a local study for one of the more important Mexican state, in size and population, Jalisco. The rest of the paper is organized as follows: in the following section, we make a microfinance literature review. Then we present the research design and results. Finally we conclude with contributions to the literature and future research.

Literature review

History of microcredit

Microcredit is a small loan typically ranging from 100 to 1,000 dollars and its main characteristic is that is granted to the poorest. Microcredit borrowers are considered "unbankable": they do not have steady employment, collateral or a verifiable credit history. For these reasons commercial banks do not lend them. The microcredits are granted by MFI's. MFI's are organizations devoted to supporting the poor through financial services, mainly lending microcredits, operating savings accounts, offering financial education and giving legal advice. This definition includes a wide range of institutions with different legal structures, missions and methodologies. Some are government development banks, others are non-governmental organizations (NGOs). credit unions or profit-maximizing shareholder banks, like Compartamos Bank, which has recently been listed on the Mexican stock exchange.

Zaman (2004) relates that the idea of alleviating poverty through microcredits began in the late 1970s, predominantly in Bangladesh, where various models were amalgamated to form what is known today as the "Grameen-model". The challenge was to provide credit to families considered unbankable by the financial system. Professor Yunus and some of his colleges at Chittangong University began experimenting with

different methodologies with poor families in a few villages. They formed "peer groups" of borrowers who were jointly responsible for the group-microcredit repayment. Several of these small groups (typically 5 persons) were organized in a large unit that met weekly. At the beginning, groups were formed by occupation and irrespective of gender, later they began to form groups by gender and village. The success of the experiment resulted in the government establishing the Grameen Bank under special ordinance in 1983. After several years of experimentation there was a "franchising approach" taken towards the Grameen-model that generated a rapid expansion of the project in the 1990's. Feedback from the field, as well as academic research and international experience contributed further to this rapid expansion.

In summary, their results were consistent with the view that women's participation in a microcredit program helped to increase female empowerment and family welfare (see Duflo, 2012).

Advantage and disadvantage of microfinance

Table 1 summarizes the differences fond In literature about two different perspectives of microfinance. On the bright side (advantage), the women, thanks to the support of the microcredit, experienced a rise in their level of collective consciousness as well as experiencing improved independence, empowerment, managerial skills, child nutrition and education and independence from their family/partner. On the dark side (disadvantage) the decision-making process was controlled by the woman's partner or family males and her empowerment provoked marital difficulties. Responsibility for the microcredit proved a heavy burden, with child neglect, marital problems, and damaged social relationships a direct result of the significant pressure to repay the loan.

Table 1 Advantages and disadvantages of microfinance

Concept	Advantage	Disadvantage
Decision	Autonomous decisions	Family /spousal abuse
Empowerment	Standing	Marital issues
Responsibility	Improved managerial skills	Overburdening
Children	Better nutrition	Child neglect/ gangs
Sentimental partner	Independence	Spousal abandonment
Social Relationships	Heightened collective conscious-	Distancing due to excessive de-
	ness	mands for repayment

Source: Own elavoration.

The positive side of microfinance and the benefits for MFIs have traditionally been highlighted in the literature. MFIs are supposed to help the poor through financial services. However, in the Cull, Demirgüc-Kunt & Morduch (2009) analysis of MFI financial data, they found that in general significant profits were made by lending to the

poorest. The study showed that contrary to expectations, the repayment rate worldwide is very high. They found that many MFIs that report to be non-profit, in fact have total revenues exceeding total cost.

Morduch & Haley (2002) contend that microfinance has proved to be an effective and powerful tool for poverty reduction. Zaman (2004) reports that in 2004 the four big MFIs in Bangladesh (Grameen Bank, BRAC, ASA, Proshika) helped 13.7 million families, loaning 7.458 million dollars (an average microcredit amount of 808.3 dollars).

Pitt & Khander (1998) found that microcredits have a significant effect on the well-being of poor families and they argued that this effect is greater when women are the program participants. They contend that group lending schemes may have an informational advantage compared with individual credits, obtaining information about the actions of each member of a group in a low-cost way. They provided separate estimates of borrowing influence by both men and women on six behaviors (family expenditure, non-land assets held by women, male and female labor supply and boy's and girl's schooling), finding that credit is a determining factor in many of these outcomes, and that credit provided to women was more likely to influence these behaviors than credit provided to men.

The negative side, analyzing the problems that microfinance generates, has received less attention. Goetz and Gupta (1996) demonstrated that targeting microcredits at women to foster self-employment increased the productivity of women's domestic labor. Improvements were observed in family health, child education, economic empowerment and women's self-confidence and status within the family. Many MFIs choose to work exclusively with women, because women invest the grant differently from men (De Mei, MacKenzie and Woodruf, 2009) but they do not question the way in which women's access to microcredit, which could have an affected a woman's personal life, and her social and family relations. Women consistently have better repayment rates than men, making them a priority target group for many MFI's worldwide. However, in many cases the credit is used by male relatives, being women who have the repayment responsibility.

When a woman is unsuccessful in obtaining a microcredit, they may be target of domestic abuse, and if the male invests the credit badly or spends profits, all the pressure falls upon the female borrower. She is required to do other home-based activities in order to keep up the repayments.

Garikipati (2012) contends that lending to women benefits their families but not necessarily the women concerned; she argues that this paradox is because viewing women's empowerment as outcome alone and ignoring the processes is a mistake. She recognizes that families and communities have benefited, and women also gain confidence, run successful businesses and make timely weekly payments. However, Garikipati (2012) also reports collateral effects:

Rahman, A. (1999) has a special term, "dark side", to explain how the Grameenmodel evolves. He says that the public philosophy behind the Grameen-model, the "bright side", is justified as women's priority is family necessities, mainly child nutrition and education.

The objectives of the women microcredit model are: to give credit directly to women, in order to improve the family's economic situation, to organize women into groups to raise collective consciousness, to increase group responsibility for each other through weekly meetings, and to assist the MFI advisor at the meetings to promote financial education and women's social empowerment. However, Rahman (1999) argues that MFI advisors have a lot of pressure to increase the amount of their portfolio microcredits, to increase the number of borrowers, and to obtain high recovery rates. MFI advisors and peer group-members create great pressure on borrowers for punctual repayment; borrowers frequently find it necessary to maintain regular repayments through a process of microcredit recycling (making a repayment by asking for another credit). This recycling process increase the borrower's debt-liability and contributes to tension among family members. Rahman reports frequents problems between MFI advisors and male borrowers, even threats and physical violence.

Goetz & Gupta (1996) formulated a range of questions about women's control over the productive process. They interviewed 253 women, and after reviewing all the responses received they discovered that only 17.8 percent had full control, 19.4 percent significant control, 24.1 partial control, 17 percent very limited and 21.7 percent declared that they had no control over the process.

Garikipati (2012) carried out research in rural India with 397 married women. In her survey, she examined the process of microcredit use in order to better understand the relationship between the use of microcredit and women's empowerment. She divided the process into three stages: who decides on microcredit uses; what the microcredit is used for and who is responsible for repayments. In her sample 57 percent used the credit for family farms or businesses, 21 percent used the credit for their own business or a business that they help manage, 12 percent used the credit to help maintain the family and 10 percent used it to purchase or improve family land. This suggests that nearly 80 percent of women questioned use the microcredit for family requirements.

Rahman (1999) said that even when banks are aware that family male controls the microcredit, they still grant loans to women. He conducted a survey of 295 families in Bangladesh. When questioned about who had asked the women borrowers to join a microcredit group, he found that in 60 percent of cases it was the woman's husband, in 13.3 percent of cases it was family members, in 11.7 percent of cases it was other males, in 4.7 percent of cases the woman was contacted directly by the MFI advisor, and in only 10.8 percent of cases was it the woman' own decision to take out the loan. Furthermore, he reported that the responsibility of the group for the microcredit increased violence in the village. Seventy percent of the respondents reported an increase in domestic violence because of involvement with the bank, and 13.3 percent declared suffering physical assault due to problems related with the microcredit.

Pitt, Khandker, Cartwright (2006) carried out in-depth research in rural areas of Bangladesh (1991-92 with 2,074 surveys and 1998-99 with 1,798 surveys). They found that only 5% of women who had taken out microcredit reported having control of the funds: 56 percent reported sharing control with their husbands, and 38 percent reported that their husbands had total control. Seventy eight percent of women reported not

having independent income that they could use without permission of their husbands. Although 42 percent of the women reported having independent savings, 85 percent were not able to utilize them without permission of their husbands. Fifteen percent declared receiving some money from their family but within this group only 17 percent said that they had full control of this money. Seventy-eight percent reported that they had been forced to cede money to their husbands and 56 percent reported being forced to work at home in order to make repayments

Microfinance institutions in Mexico

"In April 2007, Banco Compartamos of Mexico held an initial public offering of its stock in which insiders sold 30 percent of their holdings. The sale was oversubscribed by 13 times. The bank describes them as low-income women, taking loans to support tiny enterprises like neighborhood shops or tortilla-making businesses. The loans the women seek are small; typically, hundreds of dollars rather than many thousands, and the bank requires no collateral. It is a version of "microfinance," the idea associated with Muhammad Yunus, For Yunus, microfinance can unleash the productivity of cashstarved entrepreneurs and raise their incomes above poverty lines. It is a vision of poverty reduction that centers on self-help rather than direct income redistribution". (Cull, Demirgüc-Kunt, & Morduch, 2009). But, Yunus (2007) declare, "I am shocked by the news about the Compartamos IPO," he consider this as a backlash in microfinance, he does not agree with the high interest rates they charge and with its big profits coming from the poorest of the society.

The Economist (2011), in the report "Global microscope on the microfinance business environment' reports that in Mexico the most important regulated microfinance vehicles are the "For-profit Financial Partnerships (Sociedades Financieras Populares, SOFIPOS,) and the "Non-profit Savings and Microcredit Co-operatives (Sociedades Cooperativas de Ahorro y Crédito, SOCAPS). Both SOFIPOS and SOCAPS are allowed to take deposits. There is also a large volume of non-regulated MFI's known as Multi-purpose Financial Companies (Sociedades Financieras de Objeto Múltiple, SOFOME-ENRs), as well as NGOs that offer microfinance, some of which may choose eventually to formalize into any of the aforementioned legal categories. Indeed, the country's leading microfinance bank, "Compartamos" (Latin-America's largest MFI), originally started as an NGO and is now a formal bank listed on the Mexican stock exchange.

There are two credit bureaus, which serve a large share of the adult population. However, many MFIs are reluctant to report information on their clients and such reporting is not legally required, although second-tier funders make such information a condition for granting the loan.

In addition, there has been an expansion of the banking arms of major retailers, such as "Banco Azteca", "BanCoppel" and "Banco Wal-Mart" into small-scale consumerlending over the past decade. This has raised concerns about the potential for excessive indebtedness owing to the lower rates and looser lending standards offered by these firms compared with MFIs.

Bank Compartamos is the leading MFI in the region. In 2010 it had 1,965,995 borrowers and was growing at 30 percent annually. The total amount of microcredits lent reached \$9,760 million pesos (\$539 million dollars).⁴ With annual growth at 27 percent, the return on assets, ROA, and the return on equity, ROE for 2010 was 18.45 percent and 39.1 percent respectively. The return on the stock market price for 2010 was 55.5 percent, with a write-off ratio of only 1.98 percent. These numbers provoke the envy of commercial banks that lend to AAA firms, and are particularly outstanding considering the economic situation of the customer base. The average microcredit amount is \$4,975 pesos (275 usd) and 98 percent of the borrowers are women. (Banco Compartamos Annual Report 2010, www.compartamos.com).

The interest rate that Bank Compartamos charged to economically-disadvantaged borrowers in the period 2007-2010 averaged 76 percent annually. (See Table 2).

Table 2 presents some relevant financial indicators of MFIs in Mexico. The data is for the period 2007-2010 and is classified into three categories. In the first panel is the data relating to Bank Compartamos, the biggest MFI in Mexico. In the second panel are the for-profit MFIs, and finally the third panel contains data relating to all Mexican MFI's.

Table 2
Main indicators of MFIs in Mexico in the period 2007-2010

	Year	Yield on gross portfolio	Operating expense/ assets	Write-off ratio	Administrative expense/ assets
		(nominal)			
Compartamos	2007	0.780	0.290	0.010	0.140
	2008	0.820	0.300	0.020	0.140
	2009	0.730	0.260	0.030	0.100
	2010	0.710	0.280	0.030	0.110
Profit-for:	2007	0.679	0.388	0.029	0.156
Mexican	2008	0.809	0.424	0.053	0.181
Average	2009	0.691	0.377	0.043	0.159
	2010	0.715	0.376	0.039	0.151
Mexican	2007	0.640	0.372	0.031	0.164
Average	2008	0.772	0.414	0.051	0.177
	2009	0.656	0.362	0.040	0.151
	2010	0.693	0.373	0.037	0.150

The sample includes 51 institutions. Data on Yield on gross portfolio are available for 47 institutions; on Operating expenses/assets for 45; on Write-off ratio for 47; on Administrative expense/assets for 45.

Source: Mix Market, 2010.

⁴ For comparison purpose, in this study we use the june 2017 exchange rate peso dollar of \$18.11

Methodology and results

Sample and survey design

We analyzed the advantages and disadvantages of Grameen-model microcredits with a sample of 351 women in Mexico. All of the respondents in our sample were women; we decided to conduct a survey specifically with women because, following the Grameen model, most of the MFI's in the region only lend to women. All respondents in the survey had outstanding microcredit at the time the interviews and survey were carried out. Respondents belonged to a microcredit group (minimum 12 members and maximum 20), and in addition were responsible for attending weekly meetings with an MFI advisor and making weekly payments. All the members of the group were responsible for each other. First, we conducted several personal interviews and convened two focus groups. Based on the information obtained, we designed a survey and tested it with 50 respondents; after some corrections we applied the survey to the entire group (see the entire survey in Appendix A.1). The size of the microcredits awarded within the group ranged from 150 dollars to 1,300 dollars. The survey was applied between January and March 2012. Accompanied by the MFI's we visited the group of women at their weekly meeting, explained to them the objectives of the research, and applied the survey. The survey was anonymous, only the respondents being present.

General characteristics of the respondents

Three hundred and fifty-one women answered the survey. We calculated the percentage over 351, with any differences due to some respondents not answering some questions.

The respondents were typically employed as domestic workers during the day and at night they ran micro-firms which for example included such occupations as setting up small food stalls on the sidewalk outside their homes or mending clothing or shoes. The MFI's grant microcredits exclusively for investment in a micro-firm, not to supplement income or other purposes.

The majority of the micro-firms already existed before the microcredit was granted (73.8 percent) and only 19.4 percent are new ventures. The average age of the microfirms is 5.8 years, with approximately 4.1 microcredits having been granted during this time. On average, each micro-firm was awarded their initial micro-credit 2.4 years ago.

The average age of respondents was 34.3 years, 65.7 percent are married, the rest are single (9.1), divorced (3.4), widowed (2.3) or cohabiting (13.1). At the time of the survey, 74.3 percent were living with a partner. On average 1.7 family members are involved in the micro-firm and 4.9 family members are living under the same roof. All the respondents are living in the Mexican state of Jalisco, in 21 different counties, the majority of those counties are part of the metropolitan area of Guadalajara city, with the most distant being approximately 80 km. from Guadalajara city.

Of the MFI advisors responsible for granting microcredits, attending the weekly meetings and collecting microcredit payments, 58.4 percent are men, 37.0 percent are women and 4.6 percent did not respond to this question: this could have been because their advisor has recently changed.

To evaluate wether the respondents are located at the base of the pyramid (BOP), we asked about their micro-firm and personal income (exclusive of the micro-firm income). See results in the following Table 3.

Table 3 Micro-firm income and personal income of the respondents by range

Range (US dollars)	Micro-firm Income	Personal Income	
	(percentage of responses)	(percentage of responses)	
0-\$156	32.3	28.2	
\$157-\$312	36.5	36.7	
\$313-\$625	16.0	17.9	
\$626-\$1,172	5.1	3.1	
More than \$1,172	0.3	1.4	

a Exchange rate used: 18.11 Mexican pesos/US dollar.

Source: Own elaboration.

We aggregated micro-firm income and personal income to locate each respondent within the equivalent level of the income pyramid. We used as references the income level pyramid (or income levels) proposed in the survey of the Mexican Association of Market Research Agencies ("Asociación Mexicana de Agencias de Investigación de Mercado y Opinión Pública A.C." AMAI). See results in the following Table 4.

Table 4 Socioeconomic levels in Mexico and level of the survey respondents

Class	Descriptions	Percentage of	Percentage
		the Mexican	of the survey
		population	respondents
A/B	Family income per month over MXN \$95,877 (\$5,294 dollars)	7	
	Checking account and more than 2 credit cards homes or apart-		
	ments with more than three or four bedrooms, and two or three		
	bathrooms, two or more luxury automobiles, two telephone lines,		
	two or more television sets and one computer.		
C+	Family income per month between MXN \$39,479 (\$2,180 dollars)	14	
	and MXN \$95,876 (\$5,294 dollars) One or two credit cards, homes		
	or apartments with two or three bedrooms and one or two bath-		
	rooms, one or two cars, two telephone lines, two television sets and		
	20% of this segment has a computer.		
C	Family income per month between MXN \$13,083 (\$772 dollars) and	18	2
	MXN \$39,478 (\$2,180 dollars), Some have a credit card, homes or		
	apartments with two bedrooms and one bathroom, one basic automo-		
	bile, one telephone line, two television sets and one radio.		

Class	Descriptions	Percentage of the Mexican population	Percentage of the survey respondents
D+	Family income per month between MXN \$7,671 (\$424 dollars) and MXN \$13,083 (\$722 dollars), no credit cards, homes or apartments with one or two bedrooms and one bathroom, no automobile, one telephone line and one radio.	36	18
D	Family income per month between MXN \$3,046 (\$168 dollars) and MXN \$7,670 (\$424 dollars), No credit card, homes or apartments with one bedroom and one bathroom, no telephone, one television set and one radio	25	48
Е	Family income per month under MXN \$3,045 (\$168 dollars), small homes, a third of which have a bathroom, but most do not have a connection to a municipal sewage system, no telephone, most have only one television set and one radio.	23	32

Source: Asociación Mexicana de Agencias de Investigación de Mercado y Opinión Pública A.C. (2008)

Eighty percent of the respondents belong to the lowest levels D/E, 18 percent to de D+ and only 2 percent to the C level. This showed us that a majority of the respondents of the survey belong to the BOP in Mexico.

Advantages and disadvantages of microfinance: results

The main objective of this research is to evaluate the advantages and disadvantages of microfinance among poor women at the BOP following the Grameen-model in Jalisco, Mexico. Results support both effects (complete results of the survey are in appendix).

The first questions focused on measuring the independence of women during the decision-making process: application for credit, utilization of credit, and finally microcredit payment. Questions then focused on the main advantages and disadvantages of the microcredit on the women's lives. Finally, there are questions designed to evaluate other issues that appeared relevant for the respondents during the interviews and focus groups. The following table 5 shows results of the questions related to the decision process:

Table 5 Responses to questions about who takes the decision to apply for a microcredit, and utilization and repayment of this credit (percentages)

Who took the decision:	Microcredit application	Microcredit utilization	Microcredit repayment
Myself	56.7	55.6	54.7
My family	13.1	12.8	11.4
My sentimental partner	19.9	20.2	20.8
All of the above	6.6	6.6	8.3
Others	1.1	1.1	2.0

Almost half of the sample recognizes a sort of dependency or interference by the family (spouse, parents, siblings, cousins, etc.) in the decision about whether to apply for the microcredit, its use and responsibility for repayment the microcredit. The correlation between the question about who decides to apply for the microcredit and the question about who decides the use to which it is put is 0.697. The correlation between who decides to apply for the loan with responsibility for the microcredit repayment is 0.642, and finally the correlation between microcredit uses with repayment is 0.69. What we discovered was that respondents in the three steps of the microcredit process behave similarly but not identically.

The following Table 6 shows the results of the questions related to the main advantages and disadvantages of the microcredit on women's lives:

Table 6
Summary of main advantages and disadvantage of microcredit.
Percentage are calculated by number of answers over 351 respondents.
Respondents can choose more than one option (percentages)

Advantages	Disadvantage
Micro-firm growth 81.8	Waste of time in weekly payments 17.9
Better firm management 72.6	Excess of responsibility 15.4
Better money management 39.0	Neglect of children 6.6
Micro-firm productivity 38.5	Diseases because of stress 6.3
Better organization of my payment obligations 25.9	Problems with my family 2.3
Increase of family income 24.8	Problems with my couple 3.1
Better feeding for your children 13.7	Over-debt 1.7
The relationship with group members 10.3	Others 2.8
The relationship with my family 9.4	
The relationship with my couple 4.0	
Better relationship with your community 2.8	
Others 4.3	

When asked about the main purpose of the credit, 81.8 percent respondents indicated that it was for expanding their business. Only 24.4 percent declared the purpose of the credit was to increase their family income, 13.7 percent stated better nutrition for their children, 4.0 percent stated that it was for improving the relationship with their partner, 9.4 percent wanted to use it for improving their relationship with the family, 10.3 percent wanted to use it for improving their relationship with the credit group members and 2.8 percent wanted to use it to help build a better relationship with their community in general. An additional 39.0 percent wanted to use the loan to help build their money-management skills, 38.5 percent declared that the loan would improve the productivity of their micro-firm, and 25.9 percent needed extra finance to service debt.

When asked to specify how their micro-firm had grown since receiving the credit, 22.2 percent said significant growth had been experienced, 64.7 percent described

growth as regular, 4.6 said little growth had taken place and 2.0 percent reported no growth having takin place.

With regard of questions related to whether or not the credit had affected their relationship with a sentimental partner, 59.1 percent reported that it was not affected, 23.6 percent said had improved and only 1.1 percent declared that it had worsened. Seventy-two point six percent of the respondents answered that in general the credit helped them to manage their micro-firm more efficiently. Around 80 percent of the respondents reported growth in their micro-business and developing better moneymanagement skills thanks to the microcredit, and only 24 percent declared a positive income in their household income due to the microcredit. A slightly smaller proportion reported an improvement in child nutrition.

Related to the disadvantages or dark side of the microcredit, surprisingly, the main disadvantage seemed to be the amount of time involved making the microcredit payments. Payments are weekly and creditors have to make deposits with an MFI accountant; this requires the majority of respondents to make a lengthy journey (17.9 percent of respondents complained about this issue). Furthermore, respondents complained about other issues: too much responsibility (15.4), child neglect resulting from issues involving the loan (6.6), illness due to stress (6.3), problems with sentimental partners (3.1), problems with family (2.3), and problems related to the debt (1.7). The aforementioned are the most common issues raised. It is surprising that in the interviews, neither focus group members nor survey respondents complained about the high interest rates they pay (above 100 percent annually). They are not even are aware that this is a significant issue as their level of financial understanding and general educational level are very low.

Another hidden problem was that in many cases respondents could not definitively declare the source of loan repayments. A majority of the respondents (77.8 percent) said that their micro-firm itself generated funds sufficient for repayments, but the remaining respondents (24.2 percent) had to use other different sources of income to be able to meet credit obligations. For example their wages as employees or their partner's wages. This occurred because their micro-firm could not produce annual returns above 100 percent to cover their loan payment. This particular group of respondents will ultimately experience worse economic conditions, as they are in effect working only for the MFI's.

When questioned about the main use of the credit, 75.8 percent said their own microfirm was the beneficiary, 14.5 percent said that they had invested in their business or a family business and the rest was devoted to home improvements, household consumption, etc.

It is of particular interest that only 43.0 percent preferred a "Grameen-model" group credit instead of individual loans. In face-to-face interviews and focus groups respondents complained about the group model, indicating dissatisfaction with the requirement to take responsibility for the payments of other group members or, conversely, the significant pressure to which they were subjected when unable to make a weekly payment themselves.

Regarding the quality of the MFI's services, in general respondents reported receiving a good service: 25.4 percent considered it excellent, 59.7 percent good and 13.9 regular. There were no complaints about the very high interest rates (above 100 percent annually).

Concluding lessons and future challenge

Giving microcredit to the poor is a good business in Mexico, the sector is profitable and enjoys excellent growth. As a result of the success of the Compartamos Bank, the more for-profit MFIs will appear in the market, making research and regulation a priority for government regulators.

This study presents evidence that supports the findings of Pitt and Khander (1998), Hulme and Mosley (1996) Todd (1996), Kabeer (2001), Zaman (2004) and other authors about the benefits of microcredits which follow the Grameen-model: business creation, business growth, improvements in productivity, better child nutrition and general economic benefits. However, the study also reveals the negative side of microfinance.

The most significant issue uncovered by this study is the lack of financial culture and poor level of general education exhibited by creditors. For example, the sample proved to be unaware of the high interest rates that they are paying.

Another critical point is the control that sentimental partners and other family males exert over the women; almost half of the sample recognized a degree of male control in the decision-making process. This reflects the fact that the MFIs in the region follow the Grameen-model in only granting microcredit to women.

Although the sample recognized a positive effect in terms of the growth of their micro-company, the main benefit is reserved for the MFI due to the high interest rates; a smaller portion of the sample recognized benefits in family income, child nutrition, etc. Furthermore, 23 percent of the sample had to use personal income to meet microcredit repayments. The cash flow generated by their micro-firm was not enough to cover the microcredit payments.

Almost all the sample recognized a regular to excellent service from the MFI. However half the respondents complained about the group model (they preferred individual microcredits). They said that peer responsibility for the payments of cocreditors generated significant stress and ill-feeling. Respondents also complained about time lost due to the requirement to attend weekly meetings and make weekly payments. These points and the lack of complaints about the high interest rates demonstrates the lack of financial culture, resulting in a total lack of requests for better services (phone payments, lower interest rates, etc.).

Finally, to a lesser degree, evidence of marital problems and child neglect is apparent. A big future challenge for the sector is finding the best way to adapt methodologies developed in other countries to our own culture. As Zaman (2004) said, "Visionary leadership cannot simply be franchised. Client feedback and program monitoring is crucial for success; as MFI's grow, based on the feedback they should adapt and tailor products to their regions" (p. 1).

Another challenge for MFIs and regulators is the need to constantly monitor results in the field in order to improve their programs. Morduch & Haley (2002) argue that many MFIs focus on their own economic benefits and long-term survival, and are reluctant to invest in evaluations of the effectiveness of their programs in poverty reduction terms

In conclusion, microcredit will certainly generate economic progress and social empowerment for women, but also create additional responsibility, marital problems and child neglect, which in the medium term foster petty crime, antisocial behavior, gangs, and drug trafficking. To address the negative side, we suggest several areas that policy-makers should address. Women should not be required to take sole responsibility for the credit, but her sentimental partner or family should be required to act as bank guarantors. The government should regulate the maximum rate that MFI's can charge and foster competition in the sector to reduce interest rates. Credits for a woman with children should be granted only with the guardian of the children as co-signatory, and credit-monitoring clauses should be included that stipulate the requirement for children to achieve minimum grades. Furthermore, the government should create special programs to provide counseling for borrowers who are single mothers and have little or no family support.

Finally, it is very important understand the economics of microfinance and the reason why interest rates in Mexico are so high, and develop an adequate regulatory framework for MFI's that fosters competition in the sector and reduces interest rates. These are some of the future challenges that must be a priority for regulators in Mexico.

• Appendix A.1. Questioner used in this research

This survey is totally anonymous and confidential. DO NOT write down your name. All the results will be announced only in a statistical way. The only goal of this survey is to improve credit conditions in the country.

1. Your micro-firm is: □ Newly created (19.4%) □ Existed before the granting of microcredit (73.8%)
2. If the micro-firm already exists please write down the age in years:(Average: 5.8 years)
3. So far, how many microcredits have you requested for your micro-firm?(Average: 4.1)
4. How many years have passed since you obtained your first microcredit?(Average: 2.4 years)
5. The decision to apply for a microcredit was made by: Myself (56.7%) My family (13.1%) My partner (19.9%) All of the preceding (6.6%) Others (1.1%)
6. The decision how to use the credit was made by: ☐ Myself (55.6%) ☐ My family (12.8%) ☐ My partner (20.2%) ☐ All of the preceding (6.6%) ☐ Others (1.1%)
7. Microcredit repayments are the responsibility of: ☐ Myself (54.7%) ☐ My family (11.4%) ☐ My partner (20.8%) ☐ All of the preceding (8.3%) ☐ Others (2.0%)
8. The money to make the microcredit repayments comes from: ☐ The micro-firm (77.8%) ☐ My own salary (6.3%)

□ My partner's salary (6.8%) □ Sale of Goods (1.1%) □ Others (4.8%)
9. What have you used the microcredit loan for? □ My own micro-firm (75.8%) □ Family's micro-firm (14.5%) □ House or improvements (3.1%) □ Consumption (1.7%) □ Others (1.1%)
10. What benefits have you derived from the credit granted? ☐ Micro-firm growth (81.8%) ☐ Increase of family income (24.8%) ☐ Better relationship with your partner (4.0%) ☐ Improved child nutrition (13.7%) ☐ Better relationship with your community (2.8%) ☐ Others (0.9%)
11. How has your micro-firm grown since you received the microcredit? □ A lot of growth (22.2%) □Regular growth (64.7%) □ A small amount of growth (4.6%) □ Zero growth (2.0%) □ The firm has become smaller (0.3%)
12. What have been the principal disadvantages of the microcredit? (You can choose more than one) □ Time required to make weekly payments (17.9%) □ Excessive responsibility (15.4%) □ Over-indebtedness (1.7%) □ Illness due to stress (6.3%) □ Problems with my partner (3.1%) □ Child neglect (6.6%) □ Problems with my family (parents, siblings, cousins, brothers in law, laws, etc (2.3%) □ Nothing (48.4%) □ Others (2.8%)
13. How has the credit affected the relationship with your partner? □ It hasn't been affected (59.0%) □ It's better (23.6%) □ It's worse (1.1%) □ I have no partner (2.3%)

14. In general, has the use of microcredits helped you to manage your micro-firm better? □ Yes (72.6%) □ No (2.8%)	m
15. Which of the following options have you improved because of microcredi received? □ Better money management (39%) □ Better organization of my payment obligations (25.9%) □ Micro-firm productivity (38.5%) □ The relationship with my family (9.4%) □ The relationship with my partner (4%) □ The relationship with group members (10.3%) □ Others (3.4%)	ts
16. Would you prefer an individual credit? □ Yes (46.4%) □ No (43.0%) Why?	_
17. How do you consider your MFI services? □ Excellent (25.1%) □ Good (59.5%) □ Regular (12.8%) □ Bad (0.3%) □ Lousy (0.3%)	
18. Your MFI advisor is a: □ Man (58.4%) □ Woman (37.0%)	
19. Approximate monthly micro-firm income is between: □ \$1 - \$2,000 (32.3%) □ \$2,001 - \$4,000 (36.5%) □ \$4,001 - \$8,000 (16%) □ \$8,001 - \$15,000 (5.1%) □ more than \$15,000 (0.3%)	
20. Approximate other monthly non-micro-firm income (personal salary, partner salary, others): □ \$1 - \$2,000 (28.2%) □ \$2,001 - \$4,000 (35.6%) □ \$4,001 - \$8,000 (17.9%) □ \$8,001 - \$15,000 (3.1%) □ more than \$15,000 (1.4%)	's

21. How old are you:
□ 18 - 25 (13.4%)
□ 26 - 35 (32.5%)
□ 36 - 45 (33.0%)
□ 46 - 55 (10.5%)
□ 56 - 65 (4.6%)
\Box more than 65 (0.3%)
22. What is your marital status?
□ Single (9.1%)
□ Married (65.5%)
□ Divorced (3.4%)
□ Widowed (2.3%)
□ Cohabiting (13.1%)
23. At this moment, is your partner (husband, boyfriend, etc.) living with you? □ Yes (74.1%) □ No (10.5%)
24. How many family members are involved in the family micro-firm?_(Average: 1.7 members)
25. How many people are living under the same roof? (Average: 4.9 people)
26. Municipality
27. State

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