

## Online Appendix

Microcredit Impacts: Evidence from a Randomized Microcredit Program  
Placement Experiment by Compartamos Banco

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**Appendix Table 1: Attrition**

	Balance Tests for Panel Sample			Predicting Attrition		
	Mean	Difference: Treatment -	Balance Test	Outcome:	Outcome:	Outcome:
		Control		Not attrited	Not attrited	Not attrited
(1)	(2)	(3)	(4)	(5)	(6)	
Treatment Assignment				-0.010 (0.029)	-0.002 (0.031)	0.049 (0.080)
Female	1	0				
Age	39.345 (0.254)	0.711 (0.805)	0.001 (0.002)	0.004*** (0.001)		0.005*** (0.001)
Primary school or none (omitted: above high school)	0.324 (0.011)	0.014 (0.033)	-0.051 (0.090)			
Middle school	0.378 (0.011)	0.012 (0.026)	-0.030 (0.066)			
High school	0.210 (0.010)	-0.034 (0.027)	-0.063 (0.078)			
Prior business owner	0.479 (0.012)	-0.015 (0.030)	-0.008 (0.029)	0.050** (0.021)		0.059** (0.028)
Married (omitted: single)	0.767 (0.010)	-0.023 (0.027)	-0.036 (0.034)	0.055** (0.022)		0.055** (0.025)
Separated	0.082 (0.006)	0.005 (0.017)	-0.036 (0.053)	-0.047 (0.048)		-0.076 (0.067)
Household income per adult in the last month (000s)	1.572 (0.043)	-0.065 (0.103)	-0.002 (0.007)	-0.020*** (0.003)		-0.022*** (0.003)
High risk aversion	0.716 (0.011)	-0.042 (0.026)	-0.053* (0.031)	-0.006 (0.020)		-0.001 (0.017)
High formal credit experience	0.315 (0.011)	-0.045* (0.025)	-0.044 (0.028)	0.003 (0.018)		0.018 (0.023)
Impatient now	0.445 (0.012)	0.018 (0.026)	0.032 (0.024)	0.014 (0.020)		0.003 (0.027)
Present bias	0.300 (0.011)	-0.057** (0.022)	-0.062** (0.027)	-0.027 (0.022)		-0.021 (0.028)
Has had a formal account	0.198 (0.009)	-0.012 (0.026)	-0.008 (0.031)	-0.093*** (0.018)		-0.109*** (0.020)
Has been a member of an informal savings group	0.238 (0.010)	-0.034 (0.022)	-0.026 (0.029)	-0.017 (0.018)		-0.010 (0.022)
N	1823	1823	1750	2807	2912	2807
Number of clusters	33	33	33	33	33	33
Share of sample in treatment group			0.375			
pvalue of F test of joint significance of explanatory variables			0.268	0.000	0.954	0.000
Above variables interacted with Treatment				No	No	Yes
Outcome mean				0.623	0.626	0.623
p-value from test that Treatment and all other variables above interacted with Treatment are jointly 0						0.179

\* p<0.10, \*\* p<0.05, \*\*\* p<0.01. Respondents are Mexican women aged 18-60 and all reside in outlying areas of Nogales. Column 2 reports the coefficient on treatment assignment (1=Treatment, 0=Control) when the variable in the row is regressed on treatment assignment. Column 3 reports the results of balance tests. The cells show the coefficient for each variable when they are all included in one regression with treatment assignment as the dependent variable. Column 4 reports the coefficient on each variable in the row when they are all included in one regression with a binary variable for survey response (1=yes, 0=no) as the outcome variable. Column 5 reports the coefficient on treatment assignment when it is included in a regression with survey response as the outcome. Column 6 reports the results of the test for unbalanced attrition between treatment and control groups. The cells show the coefficient for each variable when they are all included in one regression along with each of their interactions with treatment, with survey response as the outcome. The coefficients on the interaction terms (not shown) are each not significant. Standard errors, clustered by the unit of randomization, are in parentheses below the coefficients.

**Appendix Table 2: Data Appendix**

Variable	Description	Time of measurement
<b>Table 2a: Credit Access</b>		
Any loan from any MFI	Binary variable equal to 1 if the household has taken out a loan from any MFI; observed from among the 3 most recent loans belonging either to the respondent, or if she has had fewer than 3 loans in the last 2 years, belonging to her and other members of the household, at least one loan was from an MFI.	Last 2 years
Any loan from Compartamos - admin data	Binary variable equal to 1 if the respondent has taken out a loan from Compartamos.	April 2009 - February 2012
Any loan from Compartamos - survey data	Binary variable equal to 1 if the household has taken out a loan from Compartamos; observed from among the 3 most recent loans belonging either to the respondent, or if she has had fewer than 3 loans in the last 2 years, belonging to her and other members of the household, at least one loan was from Compartamos.	Last 2 years
Any loan from other MFI	Binary variable equal to 1 if the household has taken out a loan from other (non-Compartamos) MFI; observed from among the 3 most recent loans belonging either to the respondent, or if she has had fewer than 3 loans in the last 2 years, belonging to her and other members of the household, at least one loan was from a non-Compartamos MFI.	Last 2 years
Any loan from other bank	Binary variable equal to 1 if the household has taken out a loan from other (non-Compartamos, MFI) bank; observed from among the 3 most recent loans belonging either to the respondent, or if she has had fewer than 3 loans in the last 2 years, belonging to her and other members of the household, at least one loan was from a non-Compartamos bank.	Last 2 years
Any loan from other formal institution	Binary variable equal to 1 if the household has taken out a loan from other (non-Compartamos, MFI, or bank) formal institution; observed from among the 3 most recent loans belonging either to the respondent, or if she has had fewer than 3 loans in the last 2 years, belonging to her and other members of the household, at least one loan was from a formal institution other than an MFI or bank.	Last 2 years
Any loan from informal entity	Binary variable equal to 1 if the household has a loan from an informal entity (money lender, pawnshop, relative, or friend); observed from among the 3 most recent loans belonging either to the respondent, or if she has had fewer than 3 loans in the last 2 years, belonging to her and other members of the household. In order to maintain consistency between baseline and endline, we excluded "employer" from the definition of "informal entities."	Last 2 years
Any loan from other source	Binary variable equal to 1 if the household has trade credit or a loan from a source not listed above; observed from among the 3 most recent loans belonging either to the respondent, or if she has had fewer than 3 loans in the last 2 years, belonging to her and other members of the household, at least one loan was from a source not otherwise listed.	Last 2 years

Any loan	Binary variable equal to 1 if the respondent or a household member has taken out a loan in the last two years.	Last 2 years
Client was ever late on payments	Binary variable equal to 1 if the respondent was ever late on a payment for a Compartamos loan (admin data).	April 2009 - February 2012

**Table 2b: Credit Amount**

Amount from any MFI	The amount (in pesos) of loans taken from MFIs from among the 3 most recent loans belonging either to the respondent, or if she has had fewer than 3 loans in the last 2 years, belonging to her and other members of the household.	Last 2 years
Amount from Compartamos - survey data	The amount (in pesos) of loans taken from Compartamos from among the 3 most recent loans belonging either to the respondent, or if she has had fewer than 3 loans in the last 2 years, belonging to her and other members of the household.	Last 2 years
Amount from other MFI	The amount (in pesos) of loans taken from other (non-Compartamos) MFIs from among the 3 most recent loans belonging either to the respondent, or if she has had fewer than 3 loans in the last 2 years, belonging to her and other members of the household.	Last 2 years
Amount from other bank	The amount (in pesos) of loans taken from other (non-Compartamos, MFI) banks from among the 3 most recent loans belonging either to the respondent, or if she has had fewer than 3 loans in the last 2 years, belonging to her and other members of the household.	Last 2 years
Amount from other formal institution	The amount (in pesos) of loans taken from other (non-Compartamos, MFI, bank) formal institutions from among the 3 most recent loans belonging either to the respondent, or if she has had fewer than 3 loans in the last 2 years, belonging to her and other members of the household.	Last 2 years
Amount from informal entity	The amount (in pesos) of loans taken from informal entities (money lenders, pawnshops, relatives, and friends) from among the 3 most recent loans belonging either to the respondent, or if she has had fewer than 3 loans in the last 2 years, belonging to her and other members of the household. In order to maintain consistency between baseline and endline, we excluded "employer" from the definition of "informal entities".	Last 2 years
Amount from other source	The amount (in pesos) of trade credit and loans taken from sources not listed above from among the 3 most recent loans belonging either to the respondent, or if she has had fewer than 3 loans in the last 2 years, belonging to her and other members of the household.	Last 2 years
Total amount	The amount (in pesos) of the 3 most recent loans belonging either to the respondent, or if she has had fewer than 3 loans in the last 2 years, belonging to her and other members of the household.	Last 2 years

**Table 3: Self-Employment Activities**

Revenues in the last 2 weeks	Total revenues (pesos) from all of the respondent's businesses	Last 2 weeks
Expenditures in the last 2 weeks	Total expenditures (pesos) from all of the respondent's businesses	Last 2 weeks

Profits in the last 2 weeks	Total profits (pesos), calculated as total revenues minus total expenditures from all of the respondent's businesses.	Last 2 weeks
Has a business	Binary variable equal to 1 if the respondent has a business.	At survey
# of businesses	Number of businesses or economic activities that the respondent currently has.	At survey
Has a business that was started in the last 12 months	Binary variable equal to 1 if the respondent has a business that she started in the last 12 months.	At survey
No longer has a business	Binary variable equal to 1 if the respondent used to have a business but no longer has one.	Ever

**Table 4: Income**

Household business income last month	Total household income (pesos) from business or productive activity, asked as an independent question.	Last month
Household income from salaried and non-salaried jobs last month	Total household income (pesos) from salaried and non-salaried jobs.	Last month
Monthly household income from remittances and other transfers	Household income (pesos) from remittances and other transfers, including gifts or help in the last month from a family member, neighbor, or friend that is not a member of the household; as well as remittances in the last 6 months, divided by 6 to adjust to monthly values.	Last month; last 6 months
Monthly household income from government subsidies or aid	Household income from government subsidies or aid in the last 2 months, divided by 2 to adjust to monthly values.	Last 2 months

**Table 5: Labor Supply**

Participated in an economic activity	Binary variable equal to 1 if the respondent had a business at the time of the survey or worked in the last 30 days.	At survey; last 30 days
Fraction of children 4-17 working	The fraction of children in the household aged 4-17 who the respondent says are working.	At survey
# of family members employed by respondent's business	Number of family member employees for all of the respondent's businesses.	At survey

**Table 6: Assets and Weekly Expenditures**

# of asset categories bought item from	The number of asset categories from which the household bought an item. Asset categories include furniture or appliances, electronics, motorized vehicles, jewelry, property, and other items valued at more than 2,000 pesos.	Last 2 years
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Value of assets	Approximate total value of assets purchased (pesos). The survey instrument did not include details about the value of assets bought and sold unless they were bought or sold in relation to a loan. Thus, to estimate asset value, we first find the mean value of assets bought with a loan in each of six asset categories. We then sum across these category means (excluding categories in which the respondent has no purchases) to find total value of assets. The estimate assumes that no more than one asset was purchased from each category and that transactions do not fundamentally differ depending on the use of borrowed vs. non-borrowed funds.	Last 2 years
Amount spent on nondurable items other than food	Weekly household spending (pesos) on nondurable items other than food, including cigarettes and transportation in the last week; as well as electricity, water, gas, phone, cable, and internet in the last month, adjusted to weekly values.	Last week; last month
Amount spent on food	Weekly household spending (pesos) on food, including amount spent on food eaten out in the last week and amount spent on groceries in the last 2 weeks divided by 2.	Last week; last 2 weeks
Amount spent on medical expenses	Weekly household spending (pesos) on medical expenses. Total yearly spending adjusted to weekly values.	Last year
Amount spent on school expenses	Weekly household spending (pesos) on school expenses. Total yearly spending adjusted to weekly values.	Last year
Amount spent on temptation goods	Weekly household spending (pesos) on sweets, soda, and cigarettes.	Last week
Amount spent on family events	Weekly household spending (pesos) on important family events such as weddings, funerals, graduations, baptisms, or birthdays. Total yearly spending adjusted to weekly values.	Last year

**Table 7: Social Effects**

Fraction of children 4-17 in school	The fraction of children in the household aged 4-17 who the respondent says attend school. Variable is only measured for households with children aged 4-17.	At survey
# of household issues she has a say on (of 4)	The number of household issues (of 4) in which the respondent reports having some decision power on, including always making the decision, making the decision for herself, or if she makes the decision with another person, having some role in deciding disagreements. The variable is only measured for married respondents living with another adult. The issues are: whether to buy an appliance or not for the home; in what way household members may work outside the home; whether to financially support family members; and whether to save for the future.	At survey
# of household issues in which conflict arises (of 4)	The number of household issues (of 4) in which the respondent reports making the decision with another person and at least sometimes having a disagreement. The variable is only measured for married respondents living with another adult. See above for the list of issues.	At survey

Participates in any financial decisions	Binary variable equal to 1 if the respondent reports participating in any financial decision-making, based on a question that asked for how many financial decisions she participates in the decision-making, allowing answers from "none" to "all" on a five point scale. The variable is only measured for married respondents living with another adult.	At survey
Trust in institutions index	An index of 3 questions that ask about trust in government workers, financial workers, and banks on a five point scale from "complete distrust" to "complete trust".	At survey
Trust in people index	An index of trust in family, neighbors, personal acquaintances, people just met, business acquaintances, people who borrow money and strangers on a five point scale from "complete distrust" to "complete trust" and a question about whether people would be generally fair.	At survey
Member of informal savings group	Binary variable equal to 1 if the respondent was a member of an informal savings group.	Last 2 years

**Table 8: Various Measures of Welfare**

Depression index (higher = happier)	An index of a standard battery of 20 questions that ask about the respondent's mood and thoughts over the last week. The feelings and thoughts include: being bothered by things that do not normally bother you, having a poor appetite, not being able to shake off the blues even with support from friends and family, feeling just as good as other people, having trouble focusing, feeling depressed, feeling like everything required extra effort, being hopeful about the future, thinking your life was a failure, feeling fearful, having restless sleep, feeling happy, talking less than usual, being lonely, thinking people were unfriendly, having crying spells, enjoying life, feeling sad, thinking people dislike you, feeling like you couldn't keep going on.	At survey
Job stress index (higher = less stress)	An index of three questions that ask about stress related to work over the last 30 days. The questions were answered on a five point scale. They included: Did you feel stressed by your job or economic activity? Did you find your job or economic activity prevented you from giving time to your partner or family? Did you feel too tired after work to enjoy the things you would like to do at home?	At survey

Locus of control index	An index of five questions that ask about the respondent's feelings of control. The first four questions presented respondents with two phrases and they were asked which one they agree with the most. The choices were: What happens to me is my own doing vs. sometimes I feel that I don't have enough control over the direction my life is taking; when I make plans, I am almost certain that I can make them work vs. it is not always wise to plan too far ahead, because many things turn out to be a matter of good or bad fortune anyhow; in my case, getting what I want has little or nothing to do with luck vs. many times we might just as well decide what to do by flipping a coin; many times I feel that I have little influence over the things that happen to me vs. it is impossible for me to believe that chance or luck plays an important role in my life. The fifth question asked respondents on a five point scale how much they agreed with the following phrase: In the long run, hard work will bring you a better life.	At survey
Satisfaction (life and harmony) index	An index of one question about satisfaction with life on a five point scale from "very unsatisfied" to "very satisfied" and another about harmony with others on a five point scale from "very unsatisfied" to "very satisfied".	At survey
Satisfied with economic situation	Binary variable equal to 1 if the respondent said she was either "very satisfied" or "satisfied" with her economic situation on a five point scale.	At survey
Good health status	A binary variable equal to 1 if the respondent said she her health was either "very good" or "good" on a five point scale.	At survey
Did not sell an asset to help pay for a loan	Binary variable equal to 1 if the respondent sold any asset to help pay off a loan.	Last 2 years
Did not sell an asset	Binary variable equal to 1 if someone in the household sold an asset.	Last 2 years



**Appendix Table 3: Sample Sizes**

<b>Analysis</b>	<b>Location</b>	<b>Sample</b>	<b>Sample Size*</b>
Balance	Table 1	Endline	16,560
Average Intent-to-Treat Effects	Tables 2-8	Endline	16,560
Balance	Appendix Table 1	Panel	1,823
Attrition	Appendix Table 1	Baseline targeted for Endline	2,912
<b>Sample by Outcome</b>			
Fraction of children 4-17 working	Table 5, Col. 2	Endline respondents with children aged 4-17	12,305
Fraction of children 4-17 in school	Table 7, Col. 1	Endline respondents with children aged 4-17	12,305
Intra-household decision power variables	Table 7, Col. 2-4	Endline respondents who are married and live with another adult	12,196
Job stress	Table 8, Col. 2	Endline respondents with a business or job	7,772
All other outcomes		Endline	16,560

\* Sample sizes refer to the maximum possible number of respondents within the sample. In particular parts of the analysis, the sample size will be smaller than shown in this column because respondents may have answered "I don't know" or "No response" for the outcome in question.

**Appendix Table 4: Outcome Families for Adjusted Critical Values**

Variable	Table
<b>Family: Credit Access</b>	
Any loan from any MFI	Credit Access (2a)
Any loan from Compartamos - survey data	Credit Access (2a)
Any loan from other MFI	Credit Access (2a)
Any loan from other bank	Credit Access (2a)
Any loan from other formal institution	Credit Access (2a)
Any loan from informal entity	Credit Access (2a)
Any loan from other source	Credit Access (2a)
Any loan	Credit Access (2a)
Member of informal savings group	Social Effects (7)
<b>Family: Loan Amounts</b>	
Amount from any MFI	Loan Amounts (2b)
Amount from Compartamos - survey data	Loan Amounts (2b)
Amount from other MFI	Loan Amounts (2b)
Amount from other bank	Loan Amounts (2b)
Amount from other formal institution	Loan Amounts (2b)
Amount from informal entity	Loan Amounts (2b)
Amount from other source	Loan Amounts (2b)
Total amount	Loan Amounts (2b)
<b>Family: Business Profits</b>	
Revenues in the last 2 weeks	Self-Employment Activities (3)
Expenditures in the last 2 weeks	Self-Employment Activities (3)
Profits in the last 2 weeks	Self-Employment Activities (3)
<b>Family: Number of Businesses</b>	
Has a business	Self-Employment Activities (3)
# of businesses	Self-Employment Activities (3)
<b>Family: Business Ownership over Time</b>	
Has a business that was started in the last 12 months	Self-Employment Activities (3)
No longer has a business	Self-Employment Activities (3)
<b>Family: Income</b>	
Household business income last month	Income (4)
Household income from salaried and non-salaried jobs last month	Income (4)
Monthly household income from remittances and other transfers	Income (4)
Monthly household income from government subsidies or aid	Income (4)
<b>Family: Labor Supply</b>	
Participated in an economic activity	Labor Supply (5)
Fraction of children 4-17 working	Labor Supply (5)

# of family members employed by respondent's business	Labor Supply (5)
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**Family: Assets and Expenditures**

# of asset categories bought item from	Assets and Weekly Expenditures (6)
Value of assets	Assets and Weekly Expenditures (6)
Amount spent on nondurable items other than food	Assets and Weekly Expenditures (6)
Amount spent on food	Assets and Weekly Expenditures (6)
Amount spent on medical expenses	Assets and Weekly Expenditures (6)
Amount spent on school expenses	Assets and Weekly Expenditures (6)
Amount spent on temptation goods	Assets and Weekly Expenditures (6)
Amount spent on family events	Assets and Weekly Expenditures (6)
Did not sell an asset to help pay for a loan	Various Measures of Welfare (8)
Did not sell an asset	Various Measures of Welfare (8)

**Family: Female Intra-Household Decision Power**

# of household issues she has a say on (of 4)	Social Effects (7)
# of household issues in which conflict arises (of 4)	Social Effects (7)
Participates in any financial decisions	Social Effects (7)