

Online Appendix

Is It Who You Are or What You Get? Comparing the Impacts of Loans and Grants on Microenterprise Development

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Appendix 1: Additional Tables and Figures

Table A1: Baseline Balance (Women)

	Treatment Status			
	Control (1)	Microcredit (2)	In-Kind Grant (3)	Cash Grant (4)
Age	29.73 {6.99}	-0.27 (0.440)	-0.19 (0.480)	-0.08 (0.475)
College Education	0.09 {0.29}	-0.01 (0.016)	0.02 (0.020)	-0.02 (0.017)
High School Education	0.55 {0.5}	0.04 (0.028)	-0.02 (0.032)	0.00 (0.031)
Less than High School	0.32 {0.47}	-0.02 (0.025)	0.01 (0.029)	0.02 (0.029)
Worked Before	0.18 {0.38}	0.03 (0.020)	-0.01 (0.023)	0.02 (0.022)
Has a Business	0.08 {0.28}	0.02 (0.015)	0.00 (0.018)	0.00 (0.017)
Single	0.26 {0.44}	-0.05 (0.024)	0.01 (0.029)	-0.02 (0.027)
Married	0.67 {0.47}	0.08 (0.026)	0.00 (0.031)	0.02 (0.029)
Has Kids	0.63 {0.48}	0.06 (0.027)	0.02 (0.031)	0.02 (0.030)
Low Family Income	0.33 {0.47}	-0.01 (0.021)	-0.03 (0.025)	-0.04 (0.025)
Has Previous Borrowing	0.12 {0.32}	-0.03 (0.017)	0.00 (0.021)	-0.02 (0.019)
External Pressure to Share Funds	-0.07 {1.09}	0.08 (0.055)	0.09 (0.067)	0.05 (0.064)
Received Training		0.84 {0.36}	0.87 (0.014)	0.84 (0.014)
Global test P-Value	0.301			
N	622	578	358	386

Notes: Control group means are listed in column 1, with standard deviations in brackets. Differences between the control group and each individual group are found in subsequent columns. The final row includes the mean and standard deviation of the microcredit group in column 2 and reports the difference between that group and the other treatment groups in columns 3 and 4 (since no one in control got training). The joint p-value comes from a multinomial logistic regression that tries to predict treatment assignment using the baseline characteristics. The number of observations reflect the size of the sample in that particular treatment arm. Heteroskedasticity-robust standard errors in parentheses. Regressions include cohort fixed effects.

Table A2: Baseline Balance (Men)

	Treatment Status			
	Control (1)	Microcredit (2)	In-Kind Grant (3)	Cash Grant (4)
Age	28.21 {4.37}	-0.73 (0.373)	-0.54 (0.410)	-0.52 (0.433)
College Education	0.11 {0.32}	0.03 (0.023)	0.03 (0.027)	-0.02 (0.025)
High School Education	0.65 {0.48}	0.00 (0.033)	-0.04 (0.039)	0.05 (0.039)
Less than High School	0.21 {0.41}	-0.03 (0.028)	0.00 (0.032)	-0.02 (0.033)
Worked Before	0.49 {0.5}	-0.03 (0.027)	0.00 (0.030)	-0.07 (0.033)
Has a Business	0.16 {0.37}	-0.02 (0.023)	-0.05 (0.025)	-0.03 (0.026)
Single	0.6 {0.49}	0.01 (0.034)	0.02 (0.038)	0.00 (0.039)
Married	0.38 {0.48}	0.01 (0.034)	-0.02 (0.037)	0.02 (0.038)
Has Kids	0.31 {0.46}	0.01 (0.032)	-0.01 (0.036)	-0.04 (0.037)
Low Family Income	0.27 {0.44}	-0.02 (0.023)	-0.02 (0.026)	-0.03 (0.028)
Has Previous Borrowing	0.1 {0.30}	0.00 (0.019)	-0.01 (0.023)	0.00 (0.023)
External Pressure to Share Funds	-0.09 {1.12}	0.02 (0.068)	0.05 (0.078)	0.09 (0.076)
Received Training		0.80 {0.36}	0.84 (0.018)	0.80 (0.018)
Global test P-Value	0.134			
N	426	426	259	238

Notes: Control group means are listed in column 1, with standard deviations in brackets. Differences between the control group and each individual group are found in subsequent columns. The final row includes the mean and standard deviation of the microcredit group in column 2 and reports the difference between that group and the other treatment groups in columns 3 and 4 (since no one in control got training). The joint p-value comes from a multinomial logistic regression that tries to predict treatment assignment using the baseline characteristics. The number of observations reflect the size of the sample in that particular treatment arm. Heteroskedasticity-robust standard errors in parentheses. Regressions include cohort fixed effects.

Table A3: Comparison to ELMPS Sample

	ELMPS 2018 (1)	Baseline (2)	Difference (3)
Panel A: Female Participants			
Age	27.56 (4.42)	27.98 (4.20)	0.42** (0.20)
Less than High School	0.42 (0.49)	0.30 (0.49)	-0.13*** (0.02)
High School Education	0.41 (0.49)	0.57 (0.49)	0.17*** (0.02)
Some College Education	0.03 (0.17)	0.03 (0.18)	0.00 (0.01)
College Education	0.14 (0.34)	0.10 (0.30)	-0.04*** (0.02)
Married	0.79 (0.41)	0.70 (0.46)	-0.09*** (0.02)
Has Kids	0.67 (0.47)	0.64 (0.48)	-0.02 (0.022)
Works at All	0.05 (0.22)	0.16 (0.36)	0.11*** (0.012)
Has a Business	0.01 (0.11)	0.10 (0.30)	0.08*** (0.01)
Has Previously Borrowed	0.10 (0.31)	0.09 (0.29)	-0.01 (0.01)
N	632	1740	
Panel B: Male Participants			
Age	27.50 (4.60)	27.63 (3.98)	0.13 (0.22)
Less than High School	0.20 (0.40)	0.21 (0.40)	0.01 (0.02)
High School Education	0.62 (0.49)	0.64 (0.48)	0.02 (0.02)
Some College Education	0.03 (0.16)	0.03 (0.17)	0.00 (0.01)
College Education	0.15 (0.36)	0.12 (0.33)	-0.03 (0.02)
Married	0.47 (0.50)	0.38 (0.49)	-0.10*** (0.02)
Works at All	0.77 (0.42)	0.47 (0.50)	-0.31*** (0.02)
Has a Business	0.10 (0.30)	0.15 (0.36)	0.05*** (0.02)
Has Previously Borrowed	0.19 (0.39)	0.10 (0.30)	-0.09*** (0.02)
N	578	1275	

Notes: Column 1 represents the average young person in Qena using the Egypt Labor Market Panel Survey. We restrict the sample from the ELMPS to individuals between the ages of 21-35 and Column 2 reproduces our summary statistics while also restricting to this age threshold. Column 3 reports the difference between the two samples. Heteroskedasticity-robust standard errors in parentheses. Significance * .10; ** .05; *** .01.

Table A4: Determinants of Not Taking Up the Treatment

	All (1)	Microcredit (2)	In-Kind Grant (3)	Cash Grant (4)
Age	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Female	-0.01 (0.02)	-0.02 (0.03)	0.02 (0.04)	-0.00 (0.03)
College Education	0.03 (0.07)	0.08 (0.09)	0.01 (0.10)	-0.02 (0.10)
High School Education	0.04 (0.06)	0.08 (0.09)	-0.01 (0.09)	0.04 (0.09)
Less than High School Education	0.05 (0.07)	0.04 (0.09)	0.04 (0.09)	0.08 (0.09)
Worked Before	-0.06 (0.03)	-0.09* (0.04)	0.03 (0.04)	-0.12** (0.04)
Single	0.01 (0.06)	0.03 (0.09)	0.07 (0.09)	-0.12 (0.09)
Married	0.01 (0.05)	0.06 (0.07)	0.00 (0.08)	-0.04 (0.07)
Low Family Income	-0.03 (0.02)	0.00 (0.03)	-0.03 (0.03)	-0.09** (0.03)
Has a Business	0.05 (0.04)	0.06 (0.06)	-0.06 (0.07)	0.15* (0.06)
Has Previous Borrowing	-0.03 (0.03)	-0.04 (0.04)	-0.02 (0.04)	-0.05 (0.04)
External Pressure to Share Funds	-0.01 (0.01)	-0.03* (0.02)	0.01 (0.02)	0.01 (0.02)
Has Kids	0.03 (0.04)	0.06 (0.05)	0.06 (0.05)	-0.04 (0.05)
Constant	0.73*** (0.11)	0.45** (0.15)	0.37* (0.16)	0.56*** (0.16)
Observations	2118	1310	1066	1072

Notes: This table reports the results of 4 separate regressions of a binary on if they took up the treatment on the characteristics listed in the rows of the tables. The number of observations reflect the size of the sample in that particular treatment arm. Heteroskedasticity-robust standard errors in parentheses. Regressions include cohort fixed effects. Significance * .10; ** .05; *** .01.

Table A5: Baseline Balance (Non-attriters)

	Treatment Status			
	Control (1)	Microcredit (2)	In-Kind Grant (3)	Cash Grant (4)
Age	28.9 {5.4}	-0.324 (0.240)	-0.314 (0.263)	-0.312 (0.265)
Gender (Male)	0.4 {0.5}	0.023 (0.022)	0.023 (0.026)	0.001 (0.025)
College Education	0.1 {0.3}	-0.002 (0.014)	0.025 (0.017)	-0.020 (0.014)
High School Education	0.6 {0.5}	0.021 (0.022)	-0.023 (0.025)	0.011 (0.025)
Less than High School Education	0.3 {0.5}	-0.014 (0.020)	0.002 (0.023)	0.012 (0.023)
Worked Before	0.3 {0.5}	0.007 (0.019)	0.012 (0.021)	-0.030 (0.021)
Has a business	0.1 {0.3}	0.008 (0.014)	-0.013 (0.015)	-0.003 (0.015)
Single	0.4 {0.5}	-0.015 (0.022)	0.028 (0.025)	-0.011 (0.025)
Married	0.6 {0.5}	0.040 (0.023)	-0.015 (0.026)	0.022 (0.025)
Has Kids	0.5 {0.5}	0.027 (0.023)	-0.014 (0.026)	-0.004 (0.025)
Low Family Income	0.3 {0.5}	-0.018 (0.017)	-0.025 (0.019)	-0.039 (0.019)
Any Borrowing	0.1 {0.3}	-0.016 (0.014)	-0.004 (0.016)	-0.014 (0.015)
External Pressure to Share Funds	-0.1 {1.1}	0.064 (0.045)	0.082 (0.052)	0.088 (0.050)
Received Training		0.8 {0.4}	0.020 (0.010)	-0.005 (0.010)
Global test P-Value	0.820			
N	903	942	582	597

Notes: Control group means are listed in column 1, with standard deviations in brackets. Differences between the control group and each individual group are found in subsequent columns. The joint p-value comes from a multinomial logistic regression that tries to predict treatment assignment using the baseline characteristics. The number of observations reflect the size of the sample in that particular treatment arm. Heteroskedasticity-robust standard errors in parentheses. Regressions include cohort fixed effects. Significance * .10; ** .05; *** .01.

Table A6: Impacts on Non-Business Outcomes

	Quality of Life (1)	Mental Health (2)	Physical Health (3)	Decision Power (4)	Consump- -tion (5)
Panel A: Female Participants					
Microcredit	0.33** (0.14)	-0.03 (0.06)	0.06 (0.06)	0.04 (0.05)	-29 (154)
In-kind grant	0.45*** (0.16)	-0.04 (0.07)	0.19*** (0.07)	0.09 (0.06)	62 (168)
Cash grant	0.01 (0.15)	0.05 (0.07)	0.18*** (0.07)	0.07 (0.06)	-102 (174)
Control Mean	3.38	0.00	3.06	2.08	3348
Joint significance of treatments	0.007	0.590	0.014	0.492	0.838
Same effect across treatments	0.030	0.390	0.111	0.680	0.664
N	1835	1835	1835	1835	1415
Panel B: Male Participants					
Microcredit	0.14 (0.16)	0.10 (0.07)	-0.02 (0.07)	0.03 (0.06)	320 (288)
In-kind grant	0.14 (0.18)	0.09 (0.08)	0.15* (0.09)	-0.13** (0.07)	917** (400)
Cash grant	0.22 (0.18)	0.11 (0.08)	-0.03 (0.09)	0.08 (0.07)	83 (320)
Control Mean	3.40	0.00	2.78	2.35	4233
Joint significance of treatments	0.648	0.424	0.220	0.025	0.135
Same effect across treatments	0.888	0.981	0.116	0.009	0.176
N	1240	1240	1240	1240	954

Notes: Column 1 is measured by asking participants to report on a scale, or “ladder steps”, from 1 to 10 which step they think they stand in terms of happiness with their current achievements in life, ten being the best. Column 2 is an index of questions on how often participants felt worried, tense, anxious or depressed. Column 3 is a self-reported score on physical health from 1 to 5 with 1 being poor health and 5 excellent health. Column 4 is an index using three separate questions about participants’ ability to take decision to work outside of home, ability to take decision on household purchases and ability to take financial decisions. Column 5 combines all reported consumption from a detailed consumption module. The number of observations is low because many people did not know their consumption on at least one item. A disaggregated consumption analysis can be found in the appendix. The "Joint" row reports the p-value for the test for joint significance of the three treatment coefficients. The "Same" row reports the p-value for testing the hypotheses that there is no difference in the treatment coefficients. Heteroskedasticity-robust standard errors in parentheses. Regressions include cohort fixed effects. Significance * .10; ** .05; *** .01.

Table A7: Baseline Characteristics of top 25% at Endline vs. Rest of Sample

	Women			Men		
	Top 25% (1)	Bot 75% (2)	Diff (3)	Top 25% (4)	Bot 75% (5)	Diff (6)
All Participants						
Age	29.88 (6.62)	29.16 (5.79)	0.06 (0.457)	28.39 (4.45)	27.89 (4.34)	0.64 (0.425)
College Education	0.11 (0.31)	0.07 (0.26)	0.02 (0.020)	0.14 (0.35)	0.11 (0.31)	0.03 (0.027)
High School Education	0.51 (0.50)	0.57 (0.49)	-0.05 (0.032)	0.64 (0.48)	0.64 (0.48)	0.01 (0.039)
Less than High School Education	0.36 (0.48)	0.32 (0.47)	0.03 (0.029)	0.18 (0.38)	0.22 (0.41)	-0.04 (0.032)
Worked Before	0.17 (0.37)	0.21 (0.41)	0.01 (0.023)	0.43 (0.50)	0.48 (0.50)	0.05 (0.030)
Has a business	0.07 (0.25)	0.10 (0.30)	-0.01 (0.018)	0.14 (0.34)	0.14 (0.35)	0.02 (0.027)
Single	0.19 (0.39)	0.26 (0.44)	-0.00 (0.028)	0.55 (0.50)	0.60 (0.49)	-0.02 (0.039)
Married	0.73 (0.44)	0.70 (0.46)	-0.02 (0.031)	0.44 (0.50)	0.40 (0.49)	0.01 (0.039)
Has kids	0.72 (0.45)	0.65 (0.48)	0.01 (0.032)	0.38 (0.49)	0.32 (0.47)	0.05 (0.038)
Low Family Income	0.37 (0.48)	0.31 (0.46)	-0.02 (0.026)	0.29 (0.46)	0.25 (0.43)	0.00 (0.027)
Has Previous Borrowing	0.14 (0.35)	0.10 (0.30)	0.03 (0.022)	0.13 (0.34)	0.10 (0.29)	0.04 (0.026)
External Pressure to Share Funds	0.08 (1.00)	0.00 (1.02)	0.003 (0.063)	0.00 (0.94)	0.02 (0.95)	-0.02 (0.069)
Joint P-val			0.306			0.000
N	467	1343		309	905	

Notes: Columns 1 and 4 represent the baseline characteristics of the people with the top 25% income at Endline. Columns 2 and 5 present the baseline characteristics for the rest of the sample. Columns 3 and 6 reports the difference between the two samples from a regression that includes cohort fixed effects. Heteroskedasticity-robust standard errors in parentheses. Significance * .10; ** .05; *** .01.

Table A8: Different Types of Work

	Neither Wage nor Self Employment		Just Self Employment		Just Wage Employment		Both Wage and Self Employment	
	Female (1)	Male (2)	Female (3)	Male (4)	Female (5)	Male (6)	Female (7)	Male (8)
Microcredit	-0.139*** (0.027)	0.006 (0.022)	0.121*** (0.023)	0.075** (0.031)	0.007 (0.017)	-0.144*** (0.036)	0.011* (0.006)	0.063*** (0.022)
In-kind grant	-0.202*** (0.031)	-0.015 (0.025)	0.217*** (0.028)	0.087** (0.035)	-0.029 (0.018)	-0.136*** (0.041)	0.014* (0.008)	0.065** (0.026)
Cash grant	-0.214*** (0.030)	0.000 (0.025)	0.193*** (0.027)	0.075** (0.036)	-0.004 (0.019)	-0.114*** (0.041)	0.025*** (0.009)	0.039 (0.025)
Mean	0.759	0.104	0.144	0.197	0.091	0.628	0.005	0.071
Joint significance of treatments	0.000	0.867	0.000	0.023	0.210	0.000	0.016	0.014
Same effect across treatments	0.035	0.699	0.003	0.941	0.121	0.765	0.377	0.593
N	1835	1240	1835	1240	1835	1240	1835	1240

Notes: This table reports the different type of working arrangements for participants in the sample split by gender. Each outcome is a binary indicator for if the person works in wage or self-employment, both, or neither. The "Joint" row reports the p-value for the test for joint significance of the three treatment coefficients. The "Same" row reports the p-value for testing the hypotheses that there is no difference in the treatment coefficients. Heteroskedasticity-robust standard errors in parentheses. Regressions include cohort fixed effects. Significance * .10; ** .05; *** .01.

Table A9: Testing Heterogeneity Within & Across Treatment Arms at Different Quantiles

	p-value
Panel A: Female Participants	
Quantile effects in each treatment arm are equal	<0.001
Quantile effects across treatment arms are equal	0.659
Panel B: Male Participants	
Quantile effects in each treatment arm are equal	0.501
Quantile effects across treatment arms are equal	0.448

Notes: This table reports p-values for three different types of test. The first is to test for heterogeneity within treatment arms. This is implemented by computing values $q \in \{.20, .30, .40, .50, .60, .70, .80, .90, .95\}$, and testing if $\beta_{.25,T} = \dots = \beta_{.95,T}$ using wald tests with 10,000 bootstrap replications. Next it tests if treatment effects across arms are equal by testing if $\beta_{q,L} = \beta_{q,IK} = \beta_{q,C}$ in a similar fashion. Finally it tests if distributions are equivalent across arms by computing the sum of the absolute value of the three 2x2 ranksum statistics and computing its p-value using randomization inference with 10,000 permutations.

Table A10: Balance among bottom 25% of participants in each treatment group

	Mean in assignment groups				p-values	
	Control (1)	Microcredit (2)	In-Kind (3)	Cash (4)	3 treatment groups (5)	4 assignment groups (6)
Panel A: Female Participants						
Age	29.03	29.3	29.15	28.22	0.93	0.97
College Education	0.07	0.05	0.1	0.08	0.01	0.03
High School Education	0.66	0.59	0.59	0.66	0.15	0.38
Less than High School Education	0.26	0.31	0.28	0.22	0.73	0.74
Worked Before	1.75	1.7	1.66	1.69	0.47	0.52
Single	0.28	0.2	0.25	0.3	0.36	0.63
Married	0.68	0.8	0.69	0.65	0.78	0.90
Low Family Income	0.23	0.17	0.14	0.21	0.92	0.45
Has a Business	0.14	0.16	0.21	0.14	0.32	0.43
Any Borrowing	0.09	0.06	0.1	0.04	0.40	0.74
External Pressure to Share Funds	-0.02	0.1	0.17	0.00	0.14	0.12
Has Kids	0.64	0.73	0.64	0.61	0.73	0.87
Balancing test p-values					0.822	0.874
Panel B: Male Participants						
Age	28.49	27.94	27.82	28.83	0.76	0.94
College Education	0.14	0.16	0.15	0.10	0.05	0.14
High School Education	0.66	0.63	0.60	0.67	0.27	0.17
Less than High School Education	0.15	0.17	0.18	0.22	0.96	0.38
Worked Before	1.54	2.55	1.46	1.65	0.68	0.62
Single	0.56	0.55	0.63	0.45	0.07	0.06
Married	0.43	0.44	0.35	0.53	0.17	0.06
Low Family Income	0.29	0.31	0.27	0.31	0.42	0.32
Has a Business	0.14	0.14	0.13	0.12	0.97	0.59
Any Borrowing	0.12	0.12	0.18	0.12	0.14	0.26
External Pressure to Share Funds	-0.02	-0.03	0.07	-0.06	0.56	0.86
Has Kids	0.36	0.41	0.30	0.43	0.49	0.28
Balancing test p-values					0.752	0.226

The table presents the average of each characteristics for individuals in the top 75-100th percentile of total income at endline in each assignment group. Column 5 presents the p-value of the test of equality of means among all three treatment groups. Column 6 presents the p-value of the test of equality of means among all four assignment groups. The group p-values are listed at the bottom of each panel and are presents the results of the joint balancing test by computing the test statistic outlined in Gagnon-Bartsch et al. (2019).

Table A11: Balance among 25-50th percentile participants in each treatment group

	Mean in assignment groups				p-values	
	Control (1)	Microcredit (2)	In-Kind (3)	Cash (4)	3 treatment groups (5)	4 assignment groups (6)
Panel A: Female Participants						
Age	28.79	28.95	28.67	28.94	0.68	0.83
College Education	0.06	0.08	0.13	0.07	0.02	0.10
High School Education	0.60	0.67	0.59	0.57	0.12	0.30
Less than High School Education	0.30	0.23	0.27	0.36	0.77	0.64
Worked Before	1.87	1.79	1.87	1.83	0.45	0.50
Single	0.40	0.29	0.35	0.26	0.24	0.50
Married	0.58	0.69	0.63	0.68	0.40	0.66
Low Family Income	0.35	0.39	0.4	0.32	0.46	0.61
Has a Business	0.06	0.07	0.06	0.07	0.45	0.55
Any Borrowing	0.10	0.1	0.11	0.09	0.85	1.00
External Pressure to Share Funds	0.02	0.02	-0.05	-0.01	0.79	0.33
Has Kids	0.53	0.64	0.59	0.62	0.82	0.47
Balancing test p-values					0.032	0.015
Panel B: Male Participants						
Age	28.49	28.24	27.71	27.7	0.78	0.79
College Education	0.12	0.11	0.14	0.07	0.04	0.11
High School Education	0.61	0.68	0.64	0.76	0.29	0.21
Less than High School Education	0.26	0.17	0.19	0.15	0.91	0.54
Worked Before	1.49	1.58	1.57	1.54	0.97	0.22
Single	0.61	0.57	0.61	0.59	0.37	0.15
Married	0.38	0.43	0.39	0.41	0.58	0.10
Low Family Income	0.2	0.21	0.22	0.23	0.42	0.48
Has a Business	0.15	0.11	0.10	0.14	0.70	0.71
Any Borrowing	0.11	0.09	0.09	0.08	0.29	0.55
External Pressure to Share Funds	0.02	0.00	-0.17	-0.01	0.96	1.00
Has Kids	0.31	0.38	0.30	0.32	0.82	0.26
Balancing test p-values					0.296	0.088

The table presents the average of each characteristics for individuals in the top 25-50th percentile of total income at endline in each assignment group. Column 5 presents the p-value of the test of equality of means among all three treatment groups. Column 6 presents the p-value of the test of equality of means among all four assignment groups. The group p-values are listed at the bottom of each panel and are presents the results of the joint balancing test by computing the test statistic outlined in Gagnon-Bartsch et al. (2019).

Table A12: Balance among 50-75th percentile participants in each treatment group

	Mean in assignment groups				p-values	
	Control (1)	Microcredit (2)	In-Kind (3)	Cash (4)	3 treatment groups (5)	4 assignment groups (6)
Panel A: Female Participants						
Age	28.30	29.42	29.34	30.20	0.53	0.50
College Education	0.10	0.09	0.04	0.03	0.06	0.07
High School Education	0.46	0.52	0.46	0.44	0.22	0.48
Less than High School Education	0.38	0.36	0.47	0.48	0.86	0.47
Worked Before	1.81	1.82	1.88	1.81	0.46	0.53
Single	0.20	0.14	0.26	0.18	0.30	0.36
Married	0.71	0.78	0.65	0.75	0.22	0.29
Low Family Income	0.39	0.42	0.43	0.32	0.13	0.22
Has a Business	0.08	0.06	0.04	0.11	0.10	0.21
Any Borrowing	0.13	0.07	0.11	0.18	0.47	0.28
External Pressure to Share Funds	-0.11	-0.07	-0.01	0.20	0.64	0.25
Has Kids	0.68	0.74	0.67	0.75	0.92	0.38
Balancing test p-values					0.892	0.782
Panel B: Male Participants						
Age	27.91	28.05	28.29	28.54	0.96	0.99
College Education	0.08	0.12	0.10	0.12	0.13	0.26
High School Education	0.71	0.60	0.67	0.58	0.97	0.29
Less than High School Education	0.16	0.24	0.18	0.29	0.43	0.32
Worked Before	1.47	1.56	1.35	1.56	0.63	0.52
Single	0.57	0.53	0.47	0.53	0.58	0.24
Married	0.43	0.47	0.53	0.47	0.87	0.14
Low Family Income	0.27	0.24	0.29	0.25	0.30	0.54
Has a Business	0.19	0.24	0.10	0.07	0.92	0.12
Any Borrowing	0.12	0.06	0.16	0.14	0.32	0.14
External Pressure to Share Funds	0.11	-0.12	0.10	0.24	1.00	0.68
Has Kids	0.38	0.36	0.41	0.32	0.70	0.36
Balancing test p-values					0.928	0.871

The table presents the average of each characteristics for individuals in the top 50-75th percentile of total income at endline in each assignment group. Column 5 presents the p-value of the test of equality of means among all three treatment groups. Column 6 presents the p-value of the test of equality of means among all four assignment groups. The group p-values are listed at the bottom of each panel and are presents the results of the joint balancing test by computing the test statistic outlined in Gagnon-Bartsch et al. (2019).

Table A13: Heterogeneity Effect on Total Income (Women)

Treatment Interacted With:	Has Business (1)	Wants Business (2)	Saves Regularly (3)	Has Children (4)	Borrowed Before (5)	Share Extra Profit (6)	External Pressure (7)
Panel A: Female Participants							
Microcredit							
Main	81.52** (38.18)	84.48 (52.35)	60.39 (50.73)	213.00*** (61.34)	69.43* (37.00)	84.12* (47.35)	86.22** (36.14)
Interaction	55.73 (118.69)	-12.90 (74.11)	26.59 (69.85)	-185.00** (74.43)	189.00* (146.00)	2.75 (71.60)	-35.25 (40.35)
In-Kind							
Main	145.00*** (47.10)	115.00* (62.30)	239.00* (85.67)	161.00** (66.00)	163.00*** (49.00)	96.48* (54.65)	154.00*** (45.00)
Interaction	147.00 (170.00)	56.36 (92.60)	-115.45 (103.00)	-2.86 (88.00)	-38.74 (144.00)	138.00 (94.38)	52.67 (41.74)
Cash							
Main	89.27*** (40.83)	114.00* (59.45)	95.31* (57.82)	192.00*** (67.82)	118.00*** (40.68)	17.29 (45.48)	93.60** (38.07)
Interaction	73.49 (115.00)	-28.00 (80.44)	14.88 (78.75)	-144.00 (82.52)	-217.11 (112.72)	192.00** (79.91)	44.62 (49.96)
Proportion with Interaction Variable	0.09	0.55	0.65	0.67	0.11	0.42	0.03
P-value of Main effect	0.00	0.01	0.01	0.00	0.00	0.07	0.00
P-value of Interaction effect	0.35	0.99	0.78	0.04	0.95	0.10	0.60
N	1809	1756	1729	1809	1809	1809	1809

Notes: This table reports the impact on total income for each of the three treatment arms interacted with the variable listed at the top of the column. Column 7 is an index of questions on whether the individual says there is pressure to share extra profits with others, that whenever there is money on hand others request it, that people who do well in business receive additional request for money, that machines and equipment are a good way to save money so others don't take it, household size and marital status. Reported p-values comes from testing if the main effect estimates are jointly equal to 0, and from testing if the interaction effects are jointly equal to 0. Total income is winsorized at the 99th percentile. Heteroskedasticity-robust standard errors in parentheses. Regressions include cohort fixed effects. Significance * .10; ** .05; *** .01.

Table A14: Heterogeneity Effect on Total Income (Men)

Treatment	Interacted With:	Has Business (1)	Wants Business (2)	Saves Regularly (3)	Has Children (4)	Borrowed Before (5)	Share Extra Profit (6)	External Pressure (7)
Panel B: Male Participants								
Microcredit	Main	84.47 (108.00)	-34.80 (137.00)	43.40 (177.00)	17.69 (130.00)	56.71 (112.12)	-32.50 (155.38)	50.10 (109.00)
	Interaction	-176.00 (367.00)	130.00 (216.57)	-14.40 (228.22)	74.81 (247.00)	2.13 (430.00)	169.00 (217.48)	85.40 (110.00)
In-Kind	Main	49.65 (120.55)	208.00 (198.00)	226.00 (227.47)	138.00 (163.00)	29.78 (132.63)	-191.00 (151.00)	31.71 (124.00)
	Interaction	33.75 (505.22)	-357.00 (252.00)	-355.00 (263.50)	-312.00 (242.00)	105.00 (365.30)	460.00* (245.00)	71.30 (134.56)
Cash	Main	79.63 (120.00)	170.00 (180.00)	51.14 (241.00)	-17.10 (146.77)	18.36 (123.47)	-74.30 (166.00)	-25.40 (116.00)
	Interaction	-739.00* (369.00)	-348.00 (243.00)	-133.00 (279.00)	-18.80 (246.14)	-381.00 (349.00)	96.83 (236.00)	-13.30 (111.59)
Proportion with Interaction Variable		0.14	0.51	0.64	0.34	0.10	0.48	0.00
P-value of Main effect		0.40	0.51	0.50	0.71	0.68	0.48	0.79
P-value of Interaction effect		0.41	0.48	0.42	0.79	0.82	0.19	0.55
N		1209	1181	1164	1209	1209	1209	1209

Notes: Table reports the impact on total income for each of the three treatment arms interacted with the variable listed at the top of the column. Column 7 is an index of questions on whether the individual says there is pressure to share extra profits with others, that whenever there is money on hand others request it, that people who do well in business receive additional request for money, that machines and equipment are a good way to save money so others don't take it, household size and marital status. Reported p-values comes from testing if the main effect estimates are jointly equal to 0, and from testing if the interaction effects are jointly equal to 0. Total income is winsorized at the 99th percentile. Heteroskedasticity-robust standard errors in parentheses. Regressions include cohort fixed effects. Significance * .10; ** .05; *** .01.

Table A15: Utilization of Financial Instruments

Appendix 1

	Borrowing Info Including Experiment Loan								
	Any External Loan (1)	Formal Loan (2)	Informal Loan (3)	Rosca Credit (4)	Total External Loans (5)	Total Loans (6)	Rosca Savings (7)	Personal Savings (8)	Financial Instruments (9)
Panel A: Female Participants									
Microcredit	0.216*** (0.029)	723.128*** (131.368)	6.071 (87.255)	43.846 (41.025)	773.045*** (167.609)	2837.235*** (175.362)	33.906 (37.522)	33.403 (24.681)	0.183 (0.0)
In-kind grant	0.021 (0.033)	82.890 (150.364)	219.232 (133.840)	-34.946 (29.688)	267.176 (218.465)	272.877 (218.981)	167.958** (71.727)	78.977** (33.741)	0.227 (0.0)
Cash grant	0.026 (0.032)	-90.080 (142.480)	249.513** (125.282)	-63.723** (27.063)	95.709 (201.591)	90.929 (201.690)	80.339 (54.720)	70.647** (29.215)	0.183 (0.0)
Mean	0.378	876.916	457.959	108.449	1443.324	1443.324	97.237	55.927	0.0
Joint significance of treatments	0.000	0.000	0.098	0.006	0.000	0.000	0.091	0.025	0.0
Same effect across treatments	0.000	0.000	0.087	0.009	0.002	0.000	0.182	0.344	0.0
N	1835	1835	1835	1835	1835	1835	1835	1834	1835
Panel B: Male Participants									
Microcredit	0.164*** (0.036)	280.424 (237.485)	-365.252 (240.210)	-150.627** (63.950)	-235.455 (356.526)	1878.747*** (360.381)	-53.414 (100.296)	201.524 (205.702)	-0.001 (0.0)
In-kind grant	0.037 (0.042)	-229.743 (265.855)	178.587 (346.094)	-8.029 (74.538)	-59.185 (442.935)	-62.152 (443.233)	-101.385 (85.756)	258.544 (261.106)	-0.001 (0.0)
Cash grant	-0.019 (0.042)	-218.746 (276.356)	-448.213* (258.286)	-45.383 (99.885)	-712.342* (402.127)	-712.696* (402.076)	6.944 (115.085)	337.228 (339.285)	-0.001 (0.0)
Mean	0.440	1591.530	1239.809	206.448	3037.787	3037.787	256.967	676.621	0.0
Joint significance of treatments	0.000	0.095	0.096	0.008	0.275	0.000	0.554	0.616	0.0
Same effect across treatments	0.000	0.041	0.130	0.014	0.241	0.000	0.526	0.916	0.0
N	1240	1240	1240	1240	1240	1240	1240	1230	1240

Notes: Column 1 is a binary variable that is equal to 1 if the individual took any loan from a bank, an MFI, family member or through ROSCA other than the experiment loan. Column 2 reports size of the loans taken from formal entities including the experiment loan that was wrongly reported as outside loans. Column 3 reports the loan family. Column 4 is the amount still left to be paid to a Rosca at the time of the survey. Column 5 is the total of loans taken from a bank, an MFI, family member or through ROSCA. Column 6 adds to the total to the experiment loan. Column 7 is the amount paid into Rosca's at the time of the survey. Column 9 is a standardized index of cash grants. Column 8 reports the p-value for testing the hypotheses that there is no difference in the treatment coefficients. Heteroskedasticity-robust standard errors in parentheses. Regression reports the p-value for testing the hypotheses that there is no difference in the treatment coefficients. Heteroskedasticity-robust standard errors in parentheses. Regression include cohort fixed effects. Significance * .10; ** .05; *** .01.

Figure A1: Why No Project Was Implemented

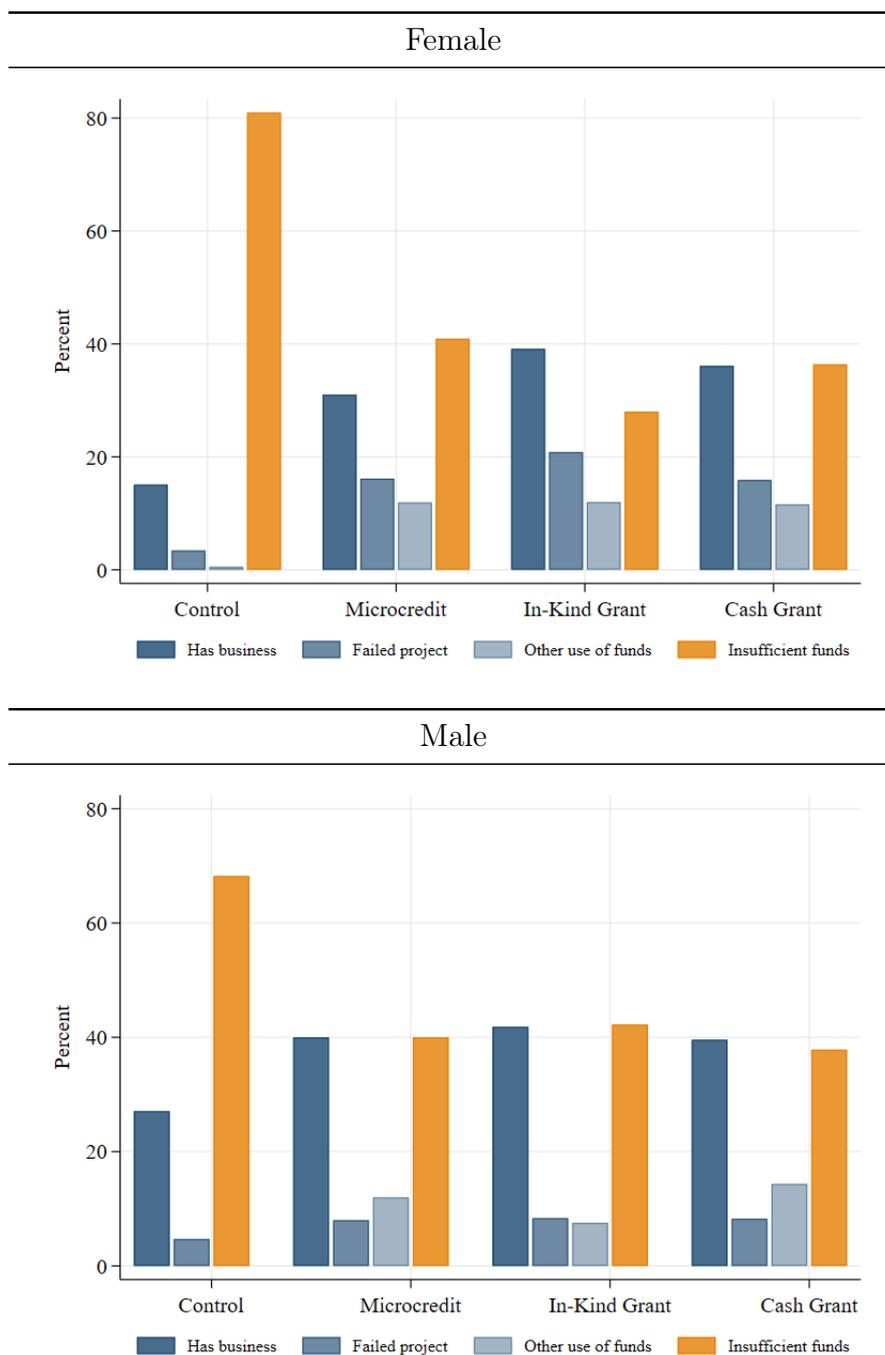
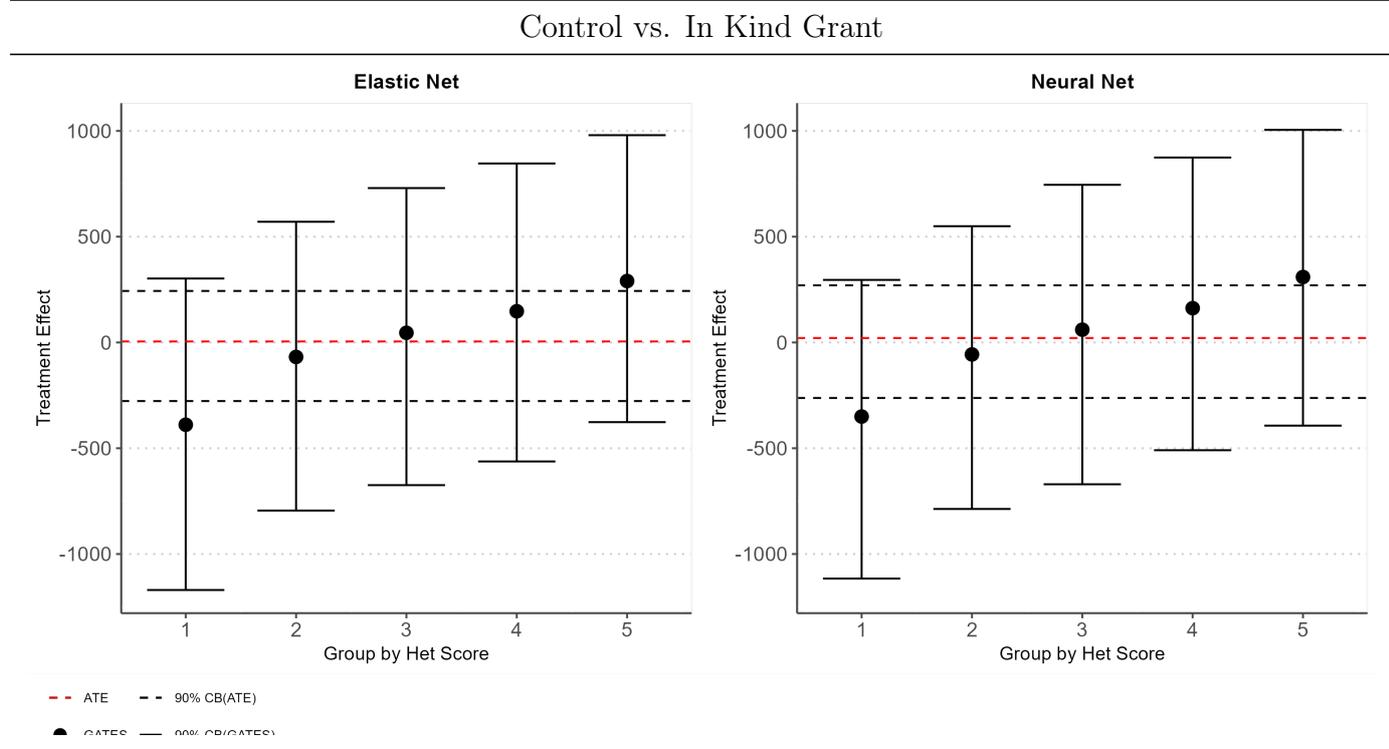
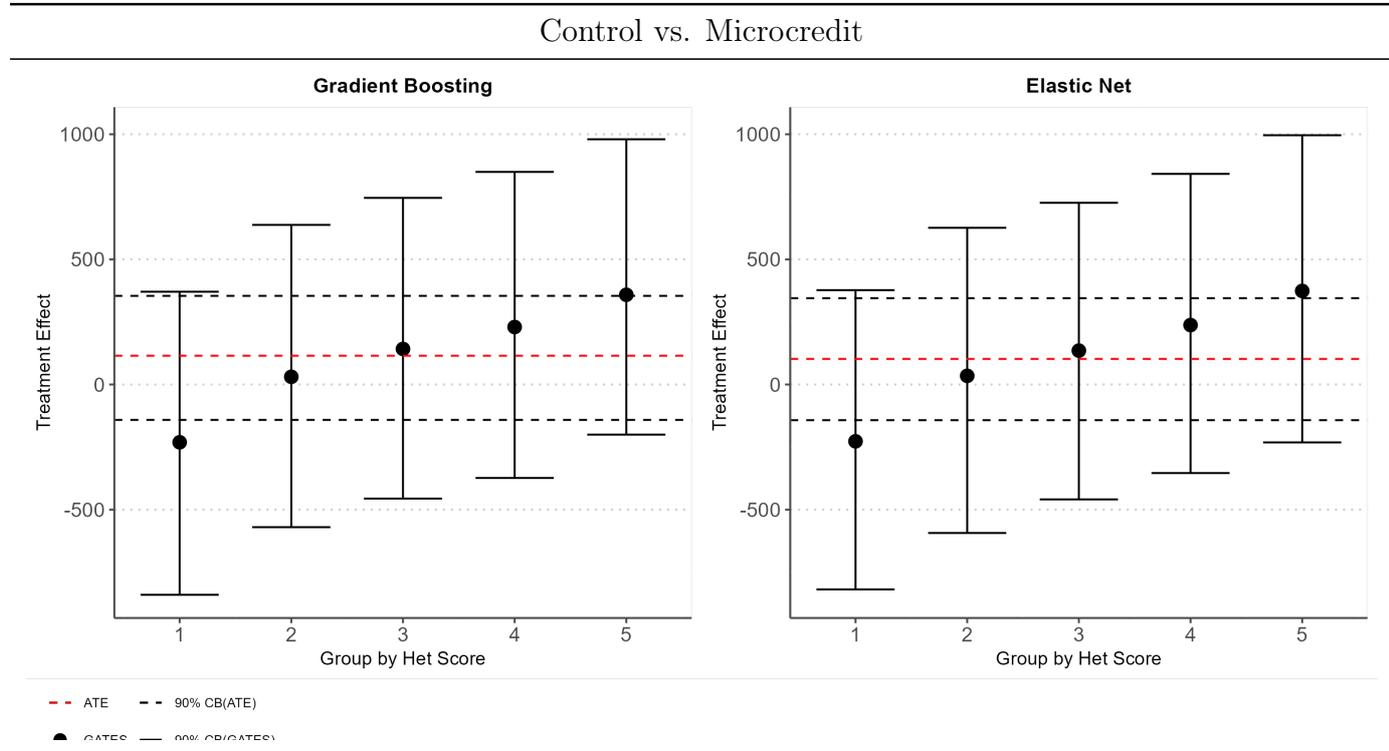
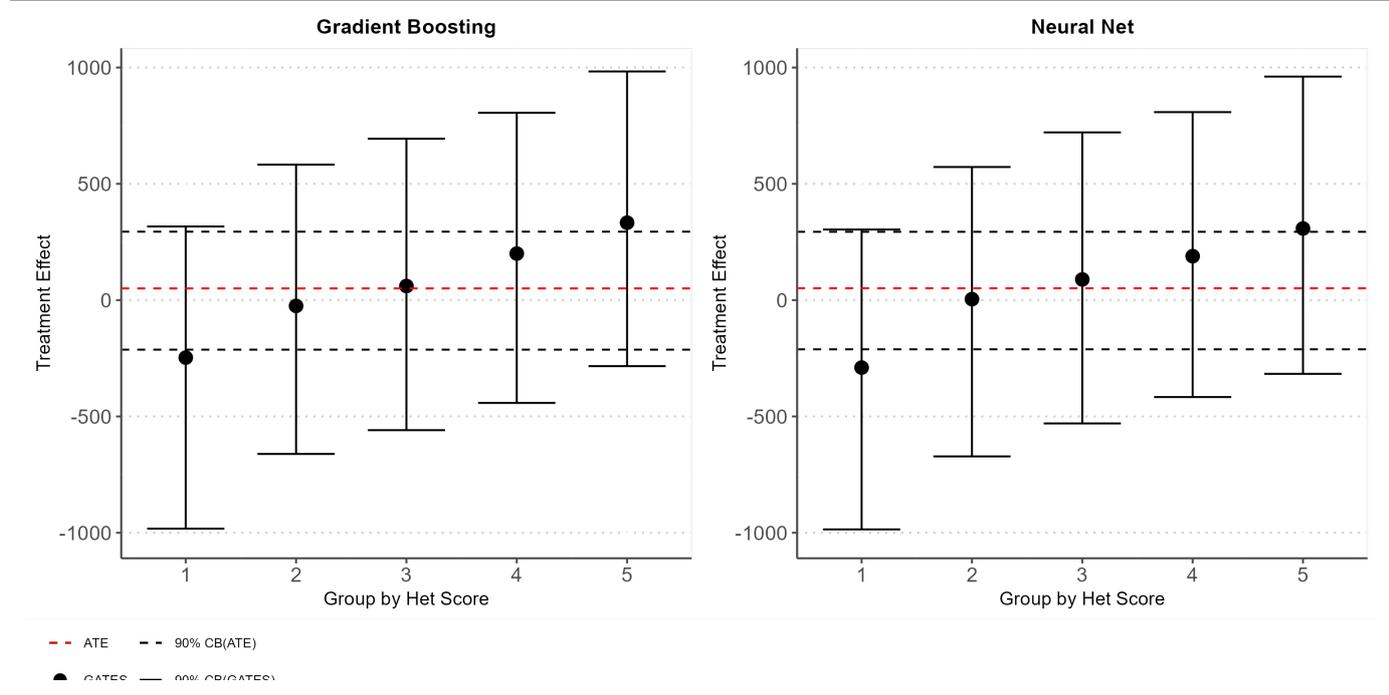


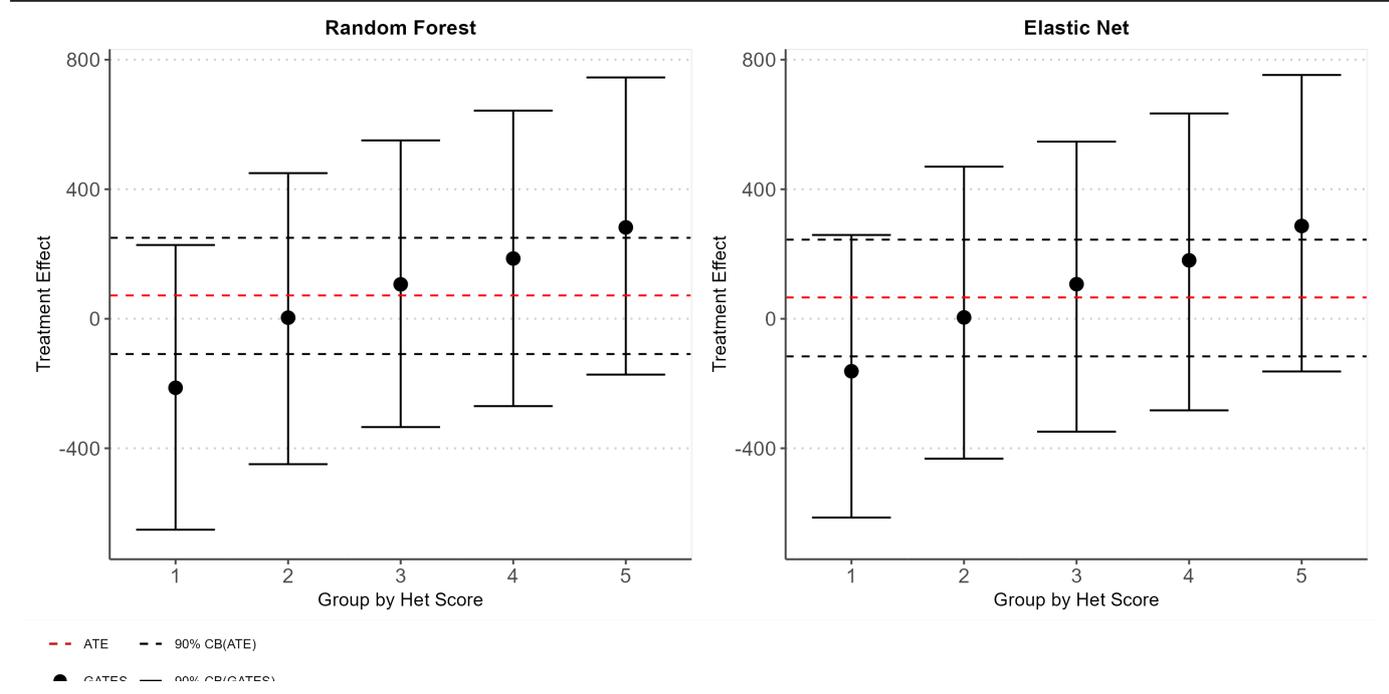
Figure A2: Heterogeneity Predicted Using Machine Learning Methods



Control vs. Cash Grant



Control vs. all



Appendix B: Robustness Checks

Table B1: Double Post Lasso on All Participants

	Has Business (1)	Profits (2)	Wage (3)	Has Work (4)	Labor Income (5)	Total Income (6)
Microcredit	0.117*** (0.027)	47.822 (56.088)	5.238 (39.767)	0.091*** (0.028)	59.031 (61.037)	44.400 (65.324)
In-kind grant	0.198*** (0.031)	58.870 (50.977)	-35.748 (45.664)	0.150*** (0.032)	25.473 (57.535)	76.655 (66.821)
Cash grant	0.232*** (0.031)	102.115** (49.494)	-49.121 (42.106)	0.156*** (0.030)	56.066 (53.998)	62.547 (59.857)
Baseline Variables Selected						
Household owns landline phone	-0.002*** (0.001)	-4.208*** (0.795)	-12.797*** (1.690)	-0.008*** (0.001)	-16.036*** (1.517)	-20.370*** (1.728)
Family Spending	0.008*** (0.002)	6.299 (4.277)	1.866 (2.663)	0.007*** (0.001)	8.302 (5.709)	11.299 (8.902)
Gender (Male)		406.226*** (80.398)	993.082*** (55.996)	0.508*** (0.023)	1413.113*** (72.780)	1256.306*** (74.106)
Husband with less than High School Education		-38.528 (49.653)				
Less than High School Education					-187.644*** (55.374)	-209.854*** (59.055)
Constant	0.176 (0.145)	-5.613 (111.655)	-12.807 (115.125)	0.263** (0.131)	-47.757 (78.339)	-0.690 (78.254)
N	1524	1522	1524	1524	1522	1522

Notes: This table replicates the regressions on key variables using a double-post-lasso procedure to choose control variables. The bottom panel shows which controls were chosen by the procedure. Standard errors in parentheses. Regressions include cohort fixed effects. Significance * .10; ** .05; *** .01.

Table B2: Double Post Lasso on Women

	Has Business (1)	Profits (2)	Wage (3)	Has Work (4)	Labor Income (5)	Total Income (6)
Microcredit	0.112*** (0.030)	27.842 (19.802)	-4.831 (17.306)	0.099*** (0.033)	23.362 (25.923)	5.896 (43.671)
In-kind grant	0.231*** (0.036)	101.908*** (32.507)	-19.127 (17.904)	0.196*** (0.038)	82.550** (36.568)	142.208** (62.172)
Cash grant	0.236*** (0.034)	68.161*** (20.225)	-1.500 (19.660)	0.199*** (0.037)	66.588** (29.704)	62.697 (47.451)
Baseline Variables Selected						
Family Spending	0.008*** (0.002)	2.128** (1.063)	1.438 (1.790)	0.008*** (0.002)	3.557 (2.494)	6.415 (5.951)
Highly Educated Spouse			1612.942*** (43.098)		1542.426*** (60.485)	
Constant	0.164 (0.185)	5.396 (43.415)	0.768 (12.875)	0.176 (0.183)	6.029 (44.778)	-1.905 (57.133)
N	1131	1131	1131	1131	1131	1131

Notes: This table replicates the regressions on key variables using a double-post-lasso procedure to choose control variables. The bottom panel shows which controls were chosen by the procedure. Standard errors in parentheses. Regressions include cohort fixed effects. Significance * .10; ** .05; *** .01.

Table B3: Double Post Lasso on Men

	Has Business (1)	Profits (2)	Wage (3)	Has Work (4)	Labor Income (5)	Total Income (6)
Micro credit	0.124** (0.057)	64.121 (206.278)	-65.593 (134.683)	-0.014 (0.037)	22.222 (213.420)	79.978 (207.658)
In kind grant	0.108 (0.067)	-112.295 (176.129)	-92.766 (159.600)	0.015 (0.044)	-223.369 (185.895)	-237.683 (180.696)
Cash grant	0.237*** (0.069)	185.359 (194.285)	-213.485 (153.040)	0.044 (0.038)	-36.145 (194.149)	37.445 (190.925)
Baseline Variables Selected						
Mother's Education	0.000*** (0.000)					
Highly Educated Spouse	0.812*** (0.087)		-1679.535*** (321.605)			
Household owns landline phone				-0.011*** (0.000)		
Household owns auto wash machine						-624.926*** (151.195)
Constant	0.212 (0.228)	316.840 (306.692)	959.693*** (341.695)	1.011*** (0.026)	1271.308*** (188.518)	2269.069*** (255.615)
N	393	391	393	393	391	391

Notes: This table replicates the regressions on key variables using a double-post-lasso procedure to choose control variables. The bottom panel shows which controls were chosen by the procedure. Standard errors in parentheses. Regressions include cohort fixed effects. Significance * .10; ** .05; *** .01.

Table B4: Lee Bounds for Primary Outcomes

	Total Loans (1)	Has Business (2)	New Assets (3)	Monthly Profits (4)	Has Work (5)	Labor Income (6)	Total Income (7)	Quality of Life (8)
All Participants								
Lower Bound	-909*** (164)	0.119*** (0.019)	-1106*** (304)	-123*** (32)	0.086*** (0.021)	-171*** (51)	-157*** (52)	-0.181* (0.098)
Upper Bound	42 (159)	0.202*** (0.018)	941** (378)	128*** (36)	0.169*** (0.022)	162*** (49)	183*** (50)	0.473*** (0.097)
N	3293	3293	3293	3293	3293	3293	3293	3293
Female Participants								
Lower Bound	-717*** (146)	0.108*** (0.026)	-199*** (50)	-22* (12)	0.111*** (0.027)	-48*** (17)	-92** (30)	-0.309** (0.127)
Upper Bound	391*** (143)	0.241*** (0.023)	536*** (90)	99*** (16)	0.244*** (0.026)	137*** (22)	175*** (34)	0.655*** (0.136)
N	2053	2053	2053	2053	2053	2053	2053	2053
Male Participants								
Lower Bound	-2132*** (328)	0.013 (0.037)	-3035*** (740)	-373*** (75)	-0.023 (0.021)	-458*** (91)	-444*** (91)	-0.429*** (0.144)
Upper Bound	-143 (346)	0.215*** (0.033)	2018** (971)	243*** (91)	0.104*** (0.016)	358*** (102)	364*** (100)	0.706*** (0.167)
N	1458	1458	1458	1458	1458	1458	1458	1458

Notes: This table replicates the regressions on key variables using a Lee bounds to account for attrition. Standard errors in parentheses. Regressions include cohort fixed effects. Significance * .10; ** .05; *** .01.

Appendix C: Estimating the Cost Effectiveness of the Interventions

To assess the cost effectiveness of the different interventions we collected detailed data on the actual costs incurred by the funder and implementers. We utilize those data with a simple framework detailed below to estimate the overall costs of each intervention and compare it to the benefits estimated from the experiment.

Loans

We consider a loan of size C . From the NGO side there are two costs, one corresponds to the capital cost $S(C)$. Because the loan is subsidized this cost can be written as

$$(C1) \quad S(C) = C - \sum_{k=0}^{T_L} \beta^k R_k(C) = s^L C$$

There is also the implementation, or management cost, $M(C) = mC$, corresponding to all effort and interactions with participants, from delivering the loan, to explaining the rules, efforts to get the loan repaid and losses in case of default.²⁷ Thus the total cost of the loan is

$$(C2) \quad Cost^L(C) = S(C) + M^L(C) = (s^L + m)C$$

The cost data (see table C1) shows that, aggregated over the three NGOs, the management cost of providing the capital assistance, including salaries of loan officers and administrative cost, assets and training is $m = 1238460/5046400 = 0.245$. This management cost is the same for loan and grants.

When considering impacts on income, a loan of size C generates a flow of additional income $\pi_k^L(C)$. It also requires from the participant to pay back the loan. This leads to reimbursement flows $R_k(C)$ which stops after the duration of the loan T_L . We consider that

²⁷Note that normally the cost of loans would include the cost of expected default. There was no loan default in our sample. Default is extremely rare in this context because Egypt's legal system allows creditors to send debtors who are unable to pay back their debt to prison. Before the start of this project we included in the agreement with the implementing partners that anyone who defaults on the loan would have their debt automatically forgiven. This was not communicated with the participants to avoid issues of moral hazard. In the end this clause did not have to be used. In other contexts where default is more common, the cost of the loan could increase by up to 0.1C (assuming 10% default), which would make a grant 2.8X more expensive than a loan instead of 3.65X more expensive.

the discounted rate is β and make the assumption that it is the same for the NGO and the borrower. The net value of the project for the participant over these T period is then

$$(C3) \quad V^L(C) = \sum_{k=0}^{\infty} \beta^k \pi_k^L(C) - \sum_{k=0}^{T_L} \beta^k R_k(C)$$

We consider $\beta = 1/(1+r)$ with r chosen so that the implied annual rate is 15% which leads to $r = 1.17\%$ and $\beta = 0.988$.

We assume a “sudden death” model in which profits generated by the project are constant over time up to a period D where they become zero. We also assume a linear relation between profit and capital, so that $\pi_k^L(C) = \pi^L C 1(k \leq D)$. On reimbursement side, we assume that the loans are subsidized so that the discounted value of total reimbursement is $(1 - s^L)C$. Our discussions with the partner lead to consider that $s^L = 0.1$.

Given all these assumptions, the net value of the project for the borrower simply writes as

$$(C4) \quad V^L(C) = \left(\frac{1 - \beta^D}{1 - \beta} \pi^L - (1 - s^L) \right) C$$

The global value of the project aggregating borrower net present value and the partner’s cost is:

$$(C5) \quad V_G^L(C) = \left(\frac{1 - \beta^D}{1 - \beta} \pi^L - (1 + m) \right) C$$

To compute the break-even date, the duration impacts on income have to be sustained for the intervention to pay for itself, we calculate

$$(C6) \quad D = \log \left(1 - \frac{1 + m}{\pi^L} (1 - \beta) \right) / \log(\beta)$$

Next we compute the benefit to cost ratio assuming a specific duration D in months

$$(C7) \quad (B/Cost)_L = \frac{\frac{1 - \beta^D}{1 - \beta} \pi^L - (1 - s^L)}{s^L + m}$$

Grants

For the grants we have exactly the same types of equations except there is no reimbursement and there is a full subsidy: $s^G = 1$. This does not affect the expression of the break-even

date and gives for the benefit to cost ratio

$$(C8) \quad (B/Cost)_G = \frac{\frac{1-\beta^D}{1-\beta} \pi G}{1+m}$$

Length of Time Income Increases are Sustained

We only have one point of time in which we are able to estimate the impacts of income. For this reason, we need to assume that the income increases are generated at disbursement and stay constant until a specified date. As we describe in section 5 and Table C2 we find that the number of months that the income increase needs to be sustained to cover the costs of the program ranges from 17.8 to 26.9 for women.

Several papers in the literature are able to look at how income reacts over time in response to capital support. In De Mel et al. (2009) they collect data 2 years after the capital drop and find that the effects are sustained. Blattman et al. (2020) shows returns to grants being sustained at 4 years but then fading over a 9 year time horizon. This decrease is primarily due to the control group “catching up” as opposed to a drop back down from the treatment group. These estimates imply that we could expect that our impacts are sustained over the time range needed to achieve cost effectiveness.

Table C1: Management cost and disbursement

Management costs		Disbursement	
		Number	Amount
Salaries of project employees	477,200	Loan	1,004
Admin costs	83,000	Grants	1,241
Training and implementation	632,310		
Assets	45,950		
Total management cost	1,238,460	Total disbursement	2,245
			5,046,400

Notes: Values come directly from implementing partner.

Table C2: Elements of Cost Benefit Analysis

	$\frac{\partial TotalIncome}{\partial Capital}$	Months to cover cost	Benefit/Cost Ratio	
	(1)	(2)	30 months	40 months
			(3)	(4)
Panel A: Female Participants				
Microcredit	0.045*** (0.018)	32.96** (16.27)	0.62 (1.90)	1.85 (2.40)
In-Kind	0.077*** (0.021)	17.8*** (5.3)	1.58*** (0.42)	1.99*** (0.53)
Cash	0.047*** (0.017)	31.28** (13.72)	0.97*** (0.35)	1.22*** (0.44)
Joint significance of treatments	0.000	0.003	0.000	0.000
Same effect across treatments	0.322	0.460	0.400	0.420
N	1835	1835	1835	1835
Panel B: Male Participants				
Microcredit	0.034 (0.051)	46.62 (91.51)	-0.503 (5.28)	0.436 (6.67)
In-Kind	0.0196 (0.051)	114.2 (620.2)	0.401 (1.041)	0.506 (1.314)
Cash	-0.006 (0.049)	-109.6 (539.2)	-0.114 (0.994)	-0.144 (1.255)
Joint significance of treatments	0.872	0.925	0.970	0.975
Same effect across treatments	0.759	0.934	0.901	0.905
N	1240	1240	1240	1240

Notes: Column 1 reports the marginal impact of additional capital on labor income. Column 2 reports the months needed for additional earned income to equal cost of implementation. Columns 3 & 4 provide the benefit cost ratio assuming the impacts are sustained for 30 & 40 months respectively. The "Joint" row reports the p-value for the test for joint significance of the three treatment coefficients. The "Same" row reports the p-value for testing the hypotheses that there is no difference in the treatment coefficients. Heteroskedasticity-robust standard errors in parentheses. Regressions include cohort fixed effects. Significance * .10; ** .05; *** .01.

Appendix D: Combined Sample

Table D1: Compliance with the experimental protocol

	Amount	Received			Conditional
	Received	Micro Loan	In-Kind Grant	Cash Grant	Amount
	(1)	(2)	(3)	(4)	(5)
Microcredit	2036	0.874	0.000	0.000	2331
In-kind grant	2386	0.000	0.989	0.000	2414
Cash grant	2348	0.000	0.000	0.974	2410
Control	0.000	0.000	0.000	0.000	0.000
Observations	3293	3293	3293	3293	2116

Notes: The table uses administrative data received from implementing NGOs based on actual amounts disbursed to each individual in the study. Column 5 reports the amount of capital received conditional on receiving the loan/grant.

Table D2: Access to other financial instruments

	Borrowing Info Excluding Experiment Loan							Person Savin (8)
	Any External Loan (1)	Formal Loan (2)	Informal Loan (3)	Rosca Credit (4)	Total External Loans (5)	Total Loans (6)	Rosca Savings (7)	
All Participants								
Microcredit	0.192*** (0.022)	-125.600 (113.590)	-128.944 (110.920)	-39.204 (34.862)	-293.749* (168.944)	1791.024*** (171.761)	4.962 (45.800)	108.00 (87.333)
In-kind grant	0.020 (0.026)	-7.783 (136.672)	176.584 (158.360)	-25.240 (35.178)	143.561 (219.662)	146.750 (219.883)	64.252 (54.601)	153.66 (104.98)
Cash grant	0.003 (0.026)	-171.281 (131.209)	-44.409 (126.966)	-51.390 (41.353)	-267.080 (196.050)	-267.508 (196.165)	48.307 (56.914)	178.66 (131.8)
Mean	0.402	1114.833	766.650	147.141	2028.625	2028.625	160.302	300.1
Joint significance of treatments	0.000	0.458	0.176	0.594	0.081	0.000	0.570	0.31
Same effect across treatments	0.000	0.490	0.102	0.777	0.085	0.000	0.496	0.84
N	3075	3075	3075	3075	3075	3075	3075	306

Notes: Column 1 is a binary variable that is equal to 1 if the individual took any loan from a bank, an MFI, family member or through ROSCA (other than the experiment 2 and 3 report the size of the loans taken from formal entities or from family. Column 4 is the amount paid into Rosca's at the time of the survey. Column 5 is the total of a bank, an MFI, family member or through ROSCA. Column 6 is the total of loans taken from a bank, an MFI, family member or through ROSCA in addition to the Column 7 is the amount still left to be paid to a Rosca at the time of the survey. Column 9 is a standardized index of columns 2,3,4,7,8. Amounts are winsorized at the The "Joint" row reports the p-value for the test for joint significance of the three treatment coefficients. The "Same" row reports the p-value for testing the hypotheses difference in the treatment coefficients. Heteroskedasticity-robust standard errors in parentheses. Regressions include cohort fixed effects. Significance * .10; ** .05; *** .

Combined Sample

Table D3: Business activity

	Has Business (1)	New Asset (2)	Revenue (3)	Expenditure (4)	Profit (5)	Total External Funding (6)	Business Index (7)
Panel B: All Participants							
Microcredit	0.140*** (0.020)	935.821** (462.009)	660.043** (304.772)	451.618* (271.227)	110.837** (45.036)	1809.562*** (237.135)	0.290*** (0.059)
In-kind grant	0.204*** (0.023)	150.839 (381.376)	306.340 (219.814)	222.350 (197.400)	125.952*** (48.835)	2841.045*** (304.442)	0.423*** (0.074)
Cash grant	0.180*** (0.023)	921.872* (541.899)	225.217 (218.066)	6.495 (184.910)	60.327 (42.219)	2205.575*** (289.829)	0.311*** (0.061)
Mean	0.196	1453	1032	857	237	2785	0.000
Joint significance of treatments	0.000	0.092	0.165	0.233	0.025	0.000	0.000
Same effect across treatments	0.023	0.104	0.356	0.169	0.368	0.002	0.250
N	3075	3075	3071	3063	3070	3075	3075

Notes: Column 2 are assets bought during the year after randomization. Assets include business premises, land, furniture, equipment, and vehicles. Column 6 is the total of loans taken from a bank, an MFI, family member or through ROSCA in addition to the experiment loan or grant. Column 7 is an index of columns 1,2,3,4,5. Amounts are winsorized at the 99th percentile. The "Joint" row reports the p-value for the test for joint significance of the three treatment coefficients. The "Same" row reports the p-value for testing the hypotheses that there is no difference in the treatment coefficients. Heteroskedasticity-robust standard errors in parentheses. Regressions include cohort fixed effects. Significance * .10; ** .05; *** .01.

Table D4: Income

	Has Work (1)	Self Employment (2)	Wage Employment (3)	Labor Income (4)	Family Transfers (5)	Gov. Transfers (6)	Total Income (7)
All Participants							
Microcredit	0.098*** (0.022)	110.837** (45.036)	-7.393 (39.742)	110.542* (57.261)	-7.777 (15.300)	9.163 (8.729)	110.148* (57.089)
In-kind grant	0.141*** (0.025)	125.952*** (48.835)	-8.510 (45.997)	116.793* (64.079)	22.069 (20.564)	6.238 (10.058)	146.507** (63.949)
Cash grant	0.125*** (0.025)	60.327 (42.219)	-6.121 (45.079)	55.644 (59.489)	-3.108 (17.719)	13.890 (9.949)	48.974 (59.117)
Mean	0.499	237.398	491.095	729.194	111.640	105.576	839.102
Joint	0.000	0.025	0.997	0.161	0.532	0.524	0.081
Same	0.190	0.368	0.999	0.602	0.333	0.793	0.353
N	3075.000	3070.000	3074.000	3069.000	3075.000	3075.000	3069.000

Notes: Column 4 is the total of columns 2 and 3. Column 7 is the total of columns 2, 3, 5 and 6. Amounts are winsorized at the 99th percentile. The "Joint" row reports the p-value for the test for joint significance of the three treatment coefficients. The "Same" row reports the p-value for testing the hypotheses that there is no difference in the treatment coefficients. Heteroskedasticity-robust standard errors in parentheses. Regressions include cohort fixed effects. Significance * .10; ** .05; *** .01.

Table D5: Time Use

	Hours as					
	Employee (1)	Self-employee (2)	Home Agri. (3)	Childcare (4)	Household Chores (5)	Econ -use I (6)
All Participants						
Microcredit	-1.014 (1.090)	5.859*** (1.083)	0.412 (0.320)	-1.496 (0.914)	-3.531*** (1.225)	0.200 (0.000)
In-kind grant	-0.947 (1.250)	7.549*** (1.218)	0.592 (0.415)	-1.566 (1.037)	-4.729*** (1.354)	0.290 (0.000)
Cash grant	-1.416 (1.206)	6.986*** (1.220)	0.546 (0.382)	-1.697* (1.015)	-2.614* (1.377)	0.280 (0.000)
Mean	15.381	8.910	2.269	10.822	20.382	0.000
Joint significance of treatments	0.659	0.000	0.350	0.260	0.003	0.000
Same effect across treatments	0.926	0.402	0.880	0.979	0.334	0.300
N	3075	3075	2258	2260	3075	3075

Notes: This table reports weekly hours spent on each activity. Column 5 includes hours spent in the household on child maintenance and gathering water or fuel. Column 6 is an index of columns 1,2,3. Hours are winsorized at the 99th percentile. The "Joint" row reports the p-value for the test for joint significance of the three treatment coefficients. The "Same" row reports the p-value for testing the hypotheses that there is no difference in the treatment coefficients. Heteroskedasticity-robust standard errors in parentheses. Regressions include cohort fixed effects. Significance * .10; ** .05; *** .01.

Table D6: Kolmogorov Smirnov tests

	Test groups vs Control			Among test groups		
	Loan (1)	In-Kind (2)	Cash (3)	Loan/In-Kind (4)	In-Kind/Cash (5)	Cash/Loan (6)
Panel A: Monthly Income						
All participants	0.001	0.000	0.006	0.767	0.312	0.313
Female participants	0.000	0.000	0.000	0.293	0.858	0.873
Male participants	0.730	0.982	0.762	0.480	0.424	0.556
Panel B: Monthly Profit						
All participants	0.000	0.000	0.000	0.088	0.256	0.911
Female participants	0.000	0.000	0.000	0.040	0.320	0.569
Male participants	0.029	0.014	0.080	0.998	1.000	1.000

Table reports the p-value from Kolmogorov Smirnov distributional tests of monthly income in panel A and monthly profits in panel B. Columns 1, 2, and 3 compare the distribution of income in each treatment arm to control. Column 4 compares the loan group to the in-kind group, Column 5 compares the in-kind group to the cash group and Column 6 compares the cash group to the loan group.

Figure D1: Capital Assistance Received

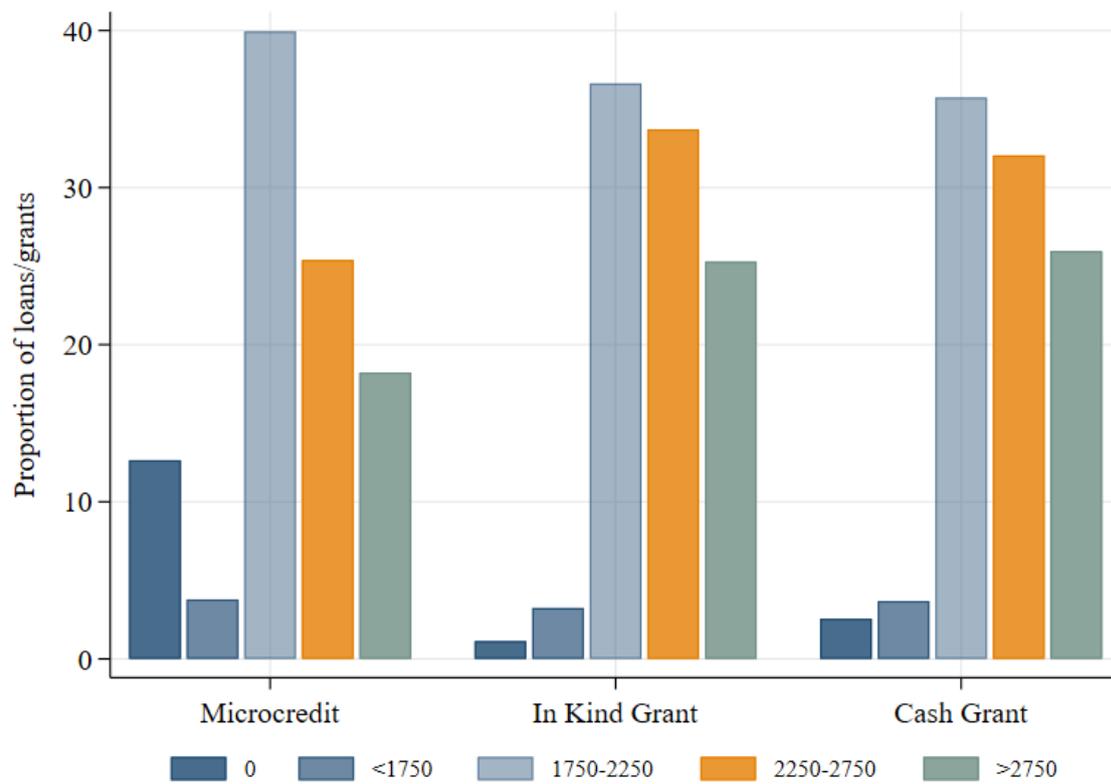


Figure D2: Why No Project Was Implemented

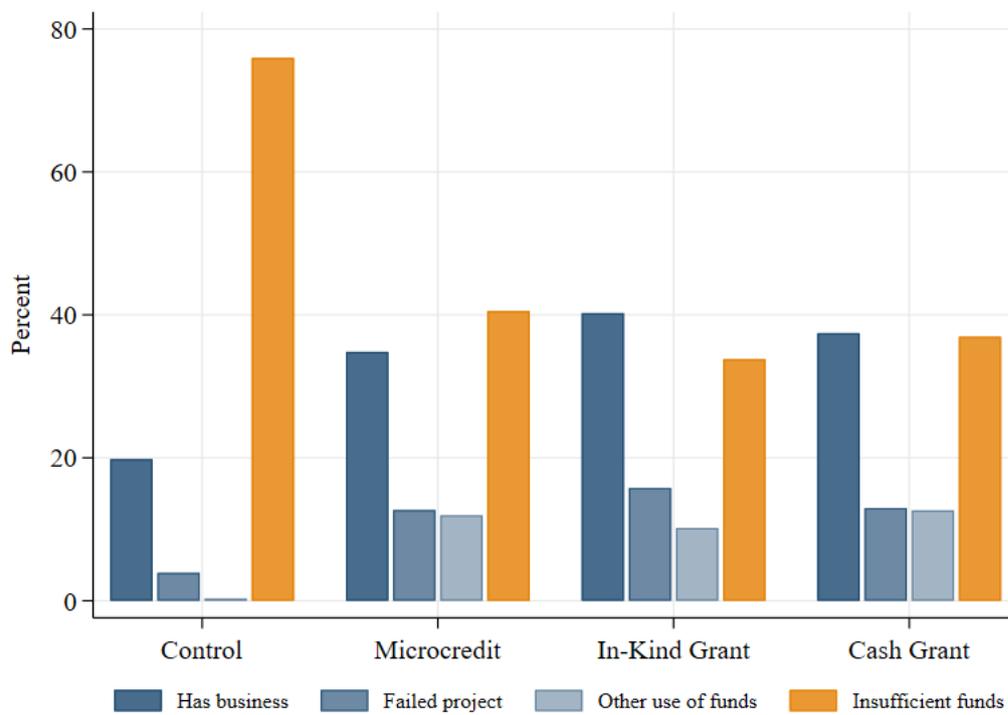
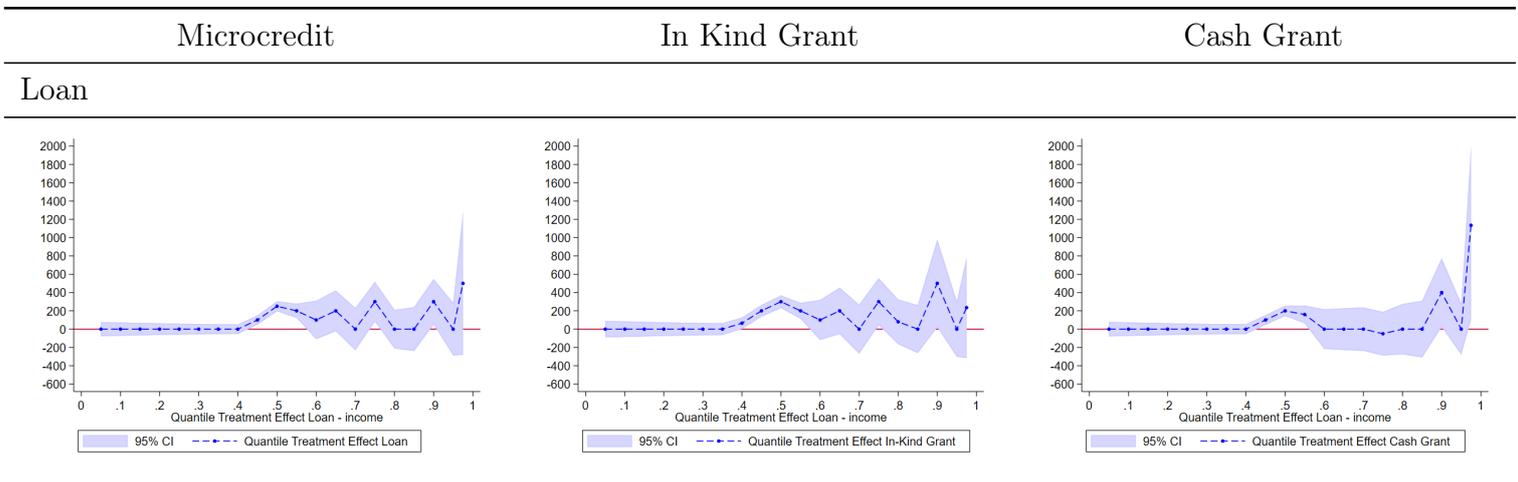


Figure D3: Quantile Treatment Effects for Total Income (All Participants)



Appendix E: Multiple Hypothesis Testing

In this Appendix section we recreate our main tables but include sharpened q-values for each of the estimated treatment effects following the method put forth in Benjamini et al. (2006), and the code shared from Anderson (2008).

Table E1: Utilization of Financial Instruments

	Any External Loan (1)	Total External Loans (2)	Total Funding (3)	Total Savings (4)
Panel A: Female Participants				
Microcredit	0.216*** (0.029) <0.001>	92.529 (156.532) <.407>	2244.872*** (207.106) <0.001>	67.349 (48.910) <0.169>
In-kind grant	0.021 (0.033) <0.407>	330.575 (214.354) <0.129>	3252.702*** (338.336) <0.001>	247.250*** (85.915) <0.011>
Cash grant	0.026 (0.032) <0.368>	101.575 (190.253) <0.407>	2668.871*** (271.595) <0.001>	150.977** (63.845) <0.028>
Mean	0.378	1370.241	1838.708	153.164
Joint significance of treatments	0.000	0.494	0.000	0.010
Same effect across treatments	0.000	0.537	0.012	0.102
N	1835	1835	1835	1834
Panel B: Male Participants				
Microcredit	0.164*** (0.036) <0.001>	-928.440*** (351.545) <0.017>	1160.151** (500.140) <0.029>	145.673 (248.617) <0.407>
In-kind grant	0.037 (0.042) <0.346>	-59.762 (441.790) <0.592>	2386.322*** (569.880) <0.001>	157.373 (282.742) <0.407>
Cash grant	-0.019 (0.042) <0.407>	-771.004* (400.313) <0.063>	1573.926*** (600.716) <0.017>	344.204 (386.943) <0.346>
Mean	0.440	3037.787	4237.623	935.000
Joint significance of treatments	0.000	0.018	0.000	0.819
Same effect across treatments	0.000	0.075	0.061	0.868
N	1240	1240	1240	1230
p -value: $\beta_{female} = \beta_{male}$	0.538	0.040	0.083	0.835

Notes: Column 1 is a binary variable that is equal to 1 if the individual took any loan from a bank, an MFI, family member or through ROSCA (other than the experiment loan). Column 2 is the total of loans taken from a bank, an MFI, family member or through ROSCA in addition to the experiment loan. Amounts are winsorized at the 99th percentile. The "Joint" row reports the p-value for the test for joint significance of the three treatment coefficients. The "Same" row reports the p-value for testing the hypotheses that there is no difference in the treatment coefficients. The final row reports the p-value from a test of equality of treatment coefficients by gender. Heteroskedasticity-robust standard errors in parentheses. Regressions include cohort fixed effects. Sharpened q-values that adjust for multiple hypothesis testing in angle brackets. Significance * .10; ** .05; *** .01.

Table E2: Impacts on Business Outcomes

	Has Business	New Asset	Monthly Revenue	Monthly Expenditure	Monthly Profit	B
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Female Participants						
Microcredit	0.14*** (0.024) <0.001>	362.52*** (106.210) <0.001>	205.10*** (77.271) <0.007>	152.67** (63.759) <0.014>	63.01*** (19.042) <0.002>	0.00 (0.00) <0.001>
In-kind grant	0.24*** (0.028) <0.001>	514.78*** (141.346) <0.001>	490.51*** (114.415) <0.001>	374.26*** (88.787) <0.001>	133.24*** (28.547) <0.001>	0.00 (0.00) <0.001>
Cash grant	0.22*** (0.028) <0.001>	470.71*** (142.833) <0.002>	272.61*** (79.047) <0.001>	202.57*** (66.725) <0.003>	60.11*** (16.314) <0.001>	0.00 (0.00) <0.001>
Mean	0.15	232.25	248.16	204.34	58.86	
Joint significance of treatments	0.00	0.00	0.00	0.00	0.00	
Same effect across treatments	0.00	0.61	0.06	0.06	0.04	
N	1835	1835	1834	1833	1834	
Panel B: Male Participants						
Microcredit	0.14*** (0.034) <0.001>	1832.62* (1084.290) <0.059>	1101.99 (708.533) <0.076>	707.91 (633.822) <0.147>	135.69 (102.971) <0.116>	0.00 (0.00) <0.001>
In-kind grant	0.16*** (0.038) <0.001>	-493.89 (914.807) <0.273>	-117.74 (523.582) <0.363>	-136.11 (475.835) <0.362>	94.76 (111.353) <0.207>	0.00 (0.00) <0.001>
Cash grant	0.12*** (0.038) <0.002>	1560.66 (1365.539) <0.147>	163.05 (550.227) <0.362>	-292.73 (476.543) <0.254>	63.63 (102.075) <0.254>	0.00 (0.00) <0.001>
Mean	0.27	3325.96	2234.18	1861.99	511.07	
Joint significance of treatments	0.00	0.08	0.37	0.42	0.59	
Same effect across treatments	0.73	0.04	0.23	0.25	0.80	
N	1240	1240	1237	1230	1236	
p -value: $\beta_{female} = \beta_{male}$	0.070	0.082	0.131	0.166	0.634	

Notes: Column 2 are assets bought during the year after randomization. Assets include business premises, land, equipment, and vehicles. Columns 3-5 are reported at the monthly level. Amounts are winsorized at the 99th percentile. "Joint" row reports the p-value for the test for joint significance of the three treatment coefficients. The "Same" row reports the p-value for testing the hypotheses that there is no difference in the treatment coefficients. The final row reports the p-value for testing the hypothesis of equality of treatment coefficients by gender. Heteroskedasticity-robust standard errors in parentheses. Regression model includes cohort fixed effects. Sharpened q-values that adjust for multiple hypothesis testing in angle brackets. Significance * .10; ** .05; *** .01.

Table E3: Impacts on Employment and Monthly Income

	Has Work (1)	Self Employment (2)	Wage Employment (3)	Labor Income (4)	Total Income (5)
Panel A: Female Participants					
Microcredit	0.142*** (0.027) <0.001>	63.010*** (19.042) <0.002>	30.561* (17.959) <0.121>	93.711*** (25.836) <0.001>	86.858** (35.730) <0.025>
In-kind grant	0.205*** (0.031) <0.001>	133.237*** (28.547) <0.001>	-14.632 (15.790) <0.460>	118.466*** (33.060) <0.001>	171.345*** (46.329) <0.001>
Cash grant	0.214*** (0.030) <0.001>	60.115*** (16.314) <0.001>	58.665** (24.525) <0.026>	119.070*** (29.320) <0.001>	103.726*** (38.236) <0.013>
Mean	0.241	58.856	67.647	126.592	302.679
Joint significance of treatments	0.000	0.000	0.006	0.000	0.001
Same effect across treatments	0.044	0.037	0.003	0.689	0.222
N	1835	1834	1835	1834	1834
Panel B: Male Participants					
Micro-credit	-0.006 (0.022) <0.697>	135.687 (102.971) <0.236>	-103.223 (76.493) <0.236>	53.123 (106.889) <0.566>	70.133 (106.362) <0.543>
In-kind grant	0.019 (0.025) <0.543>	94.760 (111.353) <0.499>	-46.684 (89.697) <0.566>	46.791 (120.944) <0.615>	45.248 (120.458) <0.615>
Cash grant	-0.000 (0.025) <0.855>	63.632 (102.075) <0.543>	-85.438 (90.166) <0.460>	-20.709 (114.267) <0.749>	-12.710 (113.443) <0.785>
Mean	0.896	511.066	1140.150	1652.855	1661.325
Joint significance of treatments	0.787	0.593	0.568	0.911	0.880
Same effect across treatments	0.595	0.799	0.824	0.808	0.785
N	1240	1236	1239	1235	1235
p -value: $\beta_{female} = \beta_{male}$	0.000	0.634	0.194	0.732	0.628

Notes: Column 2 reports income from self-employment and is the same as the "profits" column in Table 4. Column 4 is the total of columns 2 and 3. Column 5 is the total of columns 2, 3 and family and government transfers, but does not include the transfers from the experiment. Amounts are winsorized at the 99th percentile. The "Joint" row reports the p-value for the test for joint significance of the three treatment coefficients. The "Same" row reports the p-value for testing the hypotheses that there is no difference in the treatment coefficients. The final row reports the p-value from a test of equality of treatment coefficients by gender. Heteroskedasticity-robust standard errors in parentheses. Regressions include cohort fixed effects. Sharpened q-values that adjust for multiple hypothesis testing in angle brackets. Significance * .10; ** .05; *** .01.

Table E4: Time Use

	Hours Spent on:				
	Employment (1)	Self-Employment (2)	Home Agri. (3)	Household Chores (4)	Econ Time Use Index (5)
Panel A: Female Participants					
Microcredit	0.947 (0.705) <0.112>	5.012*** (1.166) <0.001>	0.165 (0.439) <0.235>	-5.543* (2.835) <0.065>	0.243*** (0.062) <0.001>
In-kind grant	0.110 (0.843) <0.286>	8.606*** (1.419) <0.001>	0.327 (0.564) <0.192>	-7.591** (3.300) <0.039>	0.342*** (0.076) <0.001>
Cash grant	1.481* (0.843) <0.007>	7.797*** (1.348) <0.001>	0.089 (0.501) <0.286>	-5.862* (3.078) <0.065>	0.365*** (0.073) <0.001>
Mean	3.381	5.615	2.969	56.427	0.000
Joint significance of treatments	0.237	0.000	0.948	0.070	0.000
Same effect across treatments	0.363	0.039	0.919	0.817	0.204
N	1835	1835	1366	1366	1835
Panel B: Male Participants					
Microcredit	-5.269*** (1.976) <0.023>	6.085*** (2.028) <0.010>	0.903** (0.429) <0.055>	0.056 (0.942) <0.286>	0.161* (0.088) <0.065>
In-kind grant	-4.184* (2.250) <0.065>	5.745*** (2.184) <0.023>	1.168* (0.633) <0.065>	2.441* (1.383) <0.070>	0.225* (0.116) <0.065>
Cash grant	-5.400** (2.258) <0.034>	5.730** (2.305) <0.030>	1.133* (0.614) <0.065>	0.087 (1.091) <0.286>	0.179 (0.116) <0.101>
Mean	33.773	13.962	1.147	5.452	-0.000
Joint significance of treatments	0.027	0.007	0.047	0.272	0.101
Same effect across treatments	0.861	0.984	0.890	0.153	0.876
N	1240	1240	892	894	1240
p -value: $\beta_{female} = \beta_{male}$	0.007	0.326	0.431	0.032	0.544

Notes: This table reports weekly hours spent on each activity. Column 4 includes hours spent in the household on cleaning, maintenance, gathering water or fuel and on childcare. Column 6 is an index of columns 1,2,3. Hours are winsorized at the 99th percentile. The "Joint" row reports the p-value for the test for joint significance of the three treatment coefficients. The "Same" row reports the p-value for testing the hypotheses that there is no difference in the treatment coefficients. The final row reports the p-value from a test of equality of treatment coefficients by gender. Heteroskedasticity-robust standard errors are in parentheses. Regressions include cohort fixed effects. Sharpened q-values that adjust for multiple hypothesis testing are in angle brackets. Significance * .10; ** .05; *** .01.

Appendix F: Description of Machine Learning Methods

In this appendix we describe in more detail the machine learning methods we utilize in section 4. We follow the method put forth in Chernozhukov et al. (2022). The intuition behind the method is that machine learning is really good at generating highly predictive models. The method generates models for the predicted outcome (in our case total income) using only baseline data. It produces one model for those in the control group and a separate model for those in the treatment group. The difference between these two predictions is the estimated individual treatment effect. It then groups people based on their predicted individual treatment effect, and estimates an interacted model for how the treatment effect differs for people in each group.

Critically it uses split sample validation and conservative inference procedures to ensure that these estimates are “honest”. It does this by first randomly splitting the sample into a “training set” and a “testing set”. It generates the models using data from the training set and then uses those models to predict for each person in the testing set what their income would have been if they were in the treatment group or in the control group. It then implements this procedure 100 times, each time randomly changing composition of the training testing sets, and then takes the median coefficients from the associated regressions.

In a bit more detail, to estimate heterogeneity in the treatment effect for income, first, using the training set only, we train a machine learning (ML) method to generate a “control” effect $B(Z_i)$ (i.e. the expected outcome for those with covariates Z if they were assigned to control) and predicted treatment effect $S(Z_i)$, where Z_i denotes the full set of covariates used to predict heterogeneity for subject i (in this case all of our relevant baseline data). Any machine learning methods could be used, but we use the four options included in the original code in Chernozhukov et al. (2022) (elastic net, neural net, random forest, and gradient boosting) and then take the one with the highest prediction score. This is defined as $|\hat{\beta}_2|^2 \widehat{Var}(S(Z))$ where β_2 is defined in equation (E1) below. Note that because we utilize all four ML methods and choose the one with the highest prediction score we utilize a conservative Bonferroni correction in our estimates and multiply all of the p-values by 4, in line with Chernozhukov et al. (2022). In all cases we use the implementation of these methods from the R package caret.

With the estimates $B(Z_i)$ and $S(Z_i)$ in hand we then undertake two analyses using only data from the testing set. First, we estimate the regression

$$(E1) \quad Y_i = \alpha * X_i + \beta_1 * T_i + \beta_2 * T_i * S(Z_i) + \epsilon_i$$

where X_i is a set of covariates that includes $B(Z_i)$ and T_i is an indicator for treatment group.²⁸ Our primary use for this specification is to test the null hypothesis of no heterogeneity $\beta_2 = 0$.²⁹ Second, we split the testing sample into quintiles of predicted treatment effect using $S(Z_i)$ and estimate the regression

$$(E2) \quad Y_i = \alpha * X_i + \sum_{j=1}^5 \gamma_j * T_i * 1(S_i \in I_j) + \eta_i$$

where I_j is the set of firms in the j th quintile.³⁰ γ_j measures the “sorted group average treatment effect” (GATES) for each quintile, and is the key measure that we use to understand how treatment effects differ across well defined groups.

The key contribution of Chernozhukov et al. (2022) is to show how to get theoretically correct inference for these analyses and, again, we follow their approach. We repeat the split into training and testing sets 100 times (each with a different randomly chosen split) and run the analyses in (E1) and (E2) for each split. This process produces estimates of the key parameters β_2 and γ_j for each of the 100 splits, as well as the associated confidence intervals, standard errors and p -values. For the parameter estimates we report the median from the 100 runs. For a $1 - \alpha$ confidence interval we report the median of each boundary of a $1 - \alpha/2$ confidence interval from each split. For hypothesis tests in equation (1), we state that a hypothesis is significant at the α level if the median p -value is less than $\alpha/2$. The use of $\alpha/2$ in the hypothesis tests and confidence intervals corrects for sample splitting. As mentioned above, due to the initial test of 4 machine learning prediction methods we implement a Bonferroni correction by multiplying p -values by four.

²⁸The treatment assignment is included as the treatment binary minus a propensity score associated with treatment assignment. The propensity score is constant due to the randomized treatment assignment. The individual treatment effect $S(Z_i)$ is included as a deviation from its mean.

²⁹ $\beta_2 = 0$ if there is no heterogeneity, or the ML prediction $S(Z_i)$ does not capture that heterogeneity. Hence, this test is of a joint hypothesis, that there is heterogeneity and that the ML methods can detect it using the covariates that we have.

³⁰Again, the treatment assignment is included as the treatment binary minus a propensity score associated with treatment assignment.