

Estimating the impact of microcredit on those who take it up: Evidence from a randomized experiment in Morocco

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Online Appendix

Table B1. Summary Statistics

| | Obs | Control Group | | | Treatment - Control | |
|--|-------|---------------|-------|----------|---------------------|----------------|
| | | Obs | Mean | St. Dev. | Coeff. | <i>p-value</i> |
| <i>Panel A. Endline sample</i> | | | | | | |
| # members | 5,898 | 2,965 | 6.13 | 3.07 | 0.05 | 0.627 |
| # members older than 18 | 5,898 | 2,965 | 3.60 | 2.10 | 0.04 | 0.570 |
| # self-employment activities | 5,898 | 2,965 | 1.41 | 0.99 | 0.02 | 0.573 |
| # members with trading, services or handicraft as main activity | 5,898 | 2,965 | 0.299 | 0.627 | -0.037 * | 0.061 |
| Gets a pension | 5,898 | 2,965 | 0.15 | 0.35 | 0.00 | 0.833 |
| Distance to souk (in km) | 5,898 | 2,965 | 11 | 9 | 0 | 0.398 |
| Does trading as self-employment activity | 5,898 | 2,965 | 0.139 | 0.346 | -0.045 *** | 0.003 |
| Has a fiber mat | 5,898 | 2,965 | 0.817 | 0.387 | -0.012 | 0.290 |
| Has a radio | 5,898 | 2,965 | 0.778 | 0.415 | 0.020 * | 0.090 |
| Owns land | 5,898 | 2,965 | 0.623 | 0.485 | 0.010 | 0.540 |
| Rents land | 5,898 | 2,965 | 0.171 | 0.376 | 0.002 | 0.828 |
| Does crop-sharing | 5,898 | 2,965 | 0.137 | 0.344 | -0.008 | 0.435 |
| # of olive and argan trees | 5,898 | 2,965 | 36 | 131 | -4 | 0.154 |
| Bought agriculture productive assets over the past 12 months | 5,898 | 2,965 | 0.240 | 0.427 | 0.034 ** | 0.029 |
| Uses sickle (in agriculture) | 5,898 | 2,965 | 0.626 | 0.484 | -0.006 | 0.739 |
| Uses rake (in agriculture) | 5,898 | 2,965 | 0.556 | 0.497 | -0.009 | 0.587 |
| # of cows bought over the past 12 months | 5,898 | 2,965 | 0.2 | 5.7 | 0.2 | 0.112 |
| Phone expenses over the past month (in MAD) | 5,898 | 2,965 | 40 | 100 | -1 | 0.780 |
| Clothes expenses over the past month (in MAD) | 5,898 | 2,965 | 512 | 925 | -36 | 0.131 |
| Had an outstanding formal loan over the past 12 months | 5,898 | 2,965 | 0.227 | 0.419 | 0.012 | 0.604 |
| Would be ready to form a 4-person group and guarantee a loan mutually | 5,898 | 2,965 | 0.644 | 0.479 | 0.040 *** | 0.009 |
| Amount that would be able to reimburse monthly (in MAD) | 5,898 | 2,965 | 181 | 433 | 0 | 0.994 |
| Would uptake a loan of 3,000 MAD to be repaid in 9 monthly installments of 400 MAD | 5,898 | 2,965 | 0.139 | 0.346 | 0.012 | 0.270 |
| <i>Panel B. Attrition</i> | | | | | | |
| Not surveyed at endline | 5,898 | 2,965 | 0.052 | 0.223 | 0.013 ** | 0.017 |
| Not surveyed at endline and trimmed obs | 5,898 | 2,965 | 0.058 | 0.233 | 0.012 ** | 0.038 |

Notes: Data source: Mini-Survey. Unit of observation: household. Sample includes all households surveyed at baseline, plus all households only surveyed at endline (4,465 households who were surveyed at baseline, plus an additional of 1,433 households surveyed only at endline). ***, **, * indicate significance at 1, 5 and 10%.

Table B2. Summary Statistics

| | Obs | Control Group | | | Treatment - Control | |
|--|-------|---------------|-------|----------|---------------------|----------------|
| | | Obs | Mean | St. Dev. | Coeff. | <i>p-value</i> |
| <i>Post-attrition endline sample: HHs with high probability-to-borrow score</i> | | | | | | |
| # members | 4,934 | 2,486 | 6.28 | 3.10 | 0.07 | 0.512 |
| # members older than 18 | 4,934 | 2,486 | 3.68 | 2.10 | 0.05 | 0.470 |
| # self-employment activities | 4,934 | 2,486 | 1.42 | 0.98 | 0.02 | 0.543 |
| # members with trading, services or handicraft as main activity | 4,934 | 2,486 | 0.320 | 0.654 | -0.047 ** | 0.027 |
| Gets a pension | 4,934 | 2,486 | 0.15 | 0.36 | 0.00 | 0.995 |
| Distance to souk (in km) | 4,934 | 2,486 | 11 | 9 | -1 | 0.287 |
| Does trading as self-employment activity | 4,934 | 2,486 | 0.146 | 0.354 | -0.046 *** | 0.003 |
| Has a fiber mat | 4,934 | 2,486 | 0.830 | 0.375 | -0.015 | 0.205 |
| Has a radio | 4,934 | 2,486 | 0.798 | 0.402 | 0.023 * | 0.062 |
| Owns land | 4,934 | 2,486 | 0.623 | 0.485 | 0.017 | 0.344 |
| Rents land | 4,934 | 2,486 | 0.173 | 0.378 | -0.002 | 0.870 |
| Does crop-sharing | 4,934 | 2,486 | 0.137 | 0.344 | -0.009 | 0.406 |
| # of olive and argan trees | 4,934 | 2,486 | 38 | 135 | -3 | 0.254 |
| Bought agriculture productive assets over the past 12 months | 4,934 | 2,486 | 0.251 | 0.433 | 0.040 ** | 0.021 |
| Uses sickle (in agriculture) | 4,934 | 2,486 | 0.630 | 0.483 | -0.005 | 0.781 |
| Uses rake (in agriculture) | 4,934 | 2,486 | 0.558 | 0.497 | -0.001 | 0.976 |
| # of cows bought over the past 12 months | 4,934 | 2,486 | 0.3 | 6.2 | 0.2 | 0.249 |
| Phone expenses over the past month (in MAD) | 4,934 | 2,486 | 41 | 102 | -1 | 0.637 |
| Clothes expenses over the past month (in MAD) | 4,934 | 2,486 | 544 | 960 | -48 * | 0.063 |
| Had an outstanding formal loan over the past 12 months | 4,934 | 2,486 | 0.236 | 0.425 | 0.012 | 0.630 |
| Would be ready to form a 4-person group and guarantee a loan mutually | 4,934 | 2,486 | 0.677 | 0.468 | 0.040 ** | 0.012 |
| Amount that would be able to reimburse monthly (in MAD) | 4,934 | 2,486 | 191 | 428 | 1 | 0.963 |
| Would uptake a loan of 3,000 MAD to be repaid in 9 monthly installments of 400 MAD | 4,934 | 2,486 | 0.152 | 0.360 | 0.004 | 0.738 |

Notes: Data source: Mini-Survey. Unit of observation: households. Sample includes households with high probability-to-borrow score surveyed at endline after trimming 0.5% of observations (3,525 who got both a full baseline and endline household survey administered, plus an additional 1,409 households who got only the full endline survey administered). ***, **, * indicate significance at 1, 5 and 10%.

Table B3. Attrition

| Panel A. Attrition rate | | | | | | |
|---|-------|------------------------------------|-------|----------|----------------------------|----------------|
| | Obs | Control Group | | | Treatment - Control | |
| | | Obs | Mean | St. Dev. | Coeff. | <i>p-value</i> |
| Not surveyed at endline | 4,465 | 2,266 | 0.068 | 0.252 | 0.018 ** | 0.018 |
| Panel B. Attrition: household characteristics | | | | | | |
| | Obs | Surveyed at endline | | | Attrited - Surveyed | |
| | | Obs | Mean | St. Dev. | Coeff. | <i>p-value</i> |
| <i>Household composition</i> | | | | | | |
| # members | 4,465 | 4,118 | 5.22 | 2.71 | -0.87 *** | 0.000 |
| # adults (>=16 years old) | 4,465 | 4,118 | 3.505 | 2.01 | -0.54 *** | 0.000 |
| # children (<16 years old) | 4,465 | 4,118 | 1.71 | 1.64 | -0.32 *** | 0.000 |
| Male head | 4,465 | 4,118 | 0.942 | 0.233 | -0.076 *** | 0.000 |
| Head age | 4,465 | 4,118 | 48.4 | 15.9 | -2.4 ** | 0.021 |
| Head with no education | 4,465 | 4,118 | 0.615 | 0.487 | -0.086 *** | 0.003 |
| <i>Access to credit:</i> | | | | | | |
| Loan from Al Amana | 4,465 | 4,118 | 0.006 | 0.076 | 0.005 | 0.400 |
| Loan from other formal institution | 4,465 | 4,118 | 0.078 | 0.268 | 0.000 | 0.968 |
| Informal loan | 4,465 | 4,118 | 0.077 | 0.266 | 0.004 | 0.718 |
| Electricity or water connection loan | 4,465 | 4,118 | 0.162 | 0.368 | -0.006 | 0.637 |
| <i>Self-employment activities</i> | | | | | | |
| # activities | 4,465 | 4,118 | 1.588 | 1.21 | -0.34 *** | 0.000 |
| Farms | 4,465 | 4,118 | 0.614 | 0.487 | -0.140 *** | 0.000 |
| Does animal husbandry | 4,465 | 4,118 | 0.558 | 0.497 | -0.125 *** | 0.000 |
| Runs a non-farm business | 4,465 | 4,118 | 0.197 | 0.398 | -0.013 | 0.518 |
| # activities managed by women | 4,465 | 4,118 | 0.21 | 0.57 | -0.01 | 0.767 |
| Distance to souk | 4,125 | 3,778 | 20.04 | 25.27 | 1.39 | 0.224 |
| <i>Has income from:</i> | | | | | | |
| Self-employment activity | 4,465 | 4,118 | 0.778 | 0.416 | -0.100 *** | 0.000 |
| Day labor/salaried | 4,465 | 4,118 | 0.573 | 0.495 | 0.036 | 0.196 |
| <i>Consumption</i> | | | | | | |
| Consumption | 4,465 | 4,118 | 2300 | 1353 | -204 *** | 0.001 |
| HH is poor | 4,465 | 4,118 | 0.249 | 0.432 | -0.043 * | 0.059 |
| Panel C. Attrition: household characteristics by treatment group | | | | | | |
| | Obs | Surveyed at endline, control group | | | Attrited X Treated Village | |
| | | Obs | Mean | St. Dev. | Coeff. | <i>p-value</i> |
| <i>Household composition</i> | | | | | | |
| # members | 4,465 | 2,111 | 5.17 | 2.68 | 0.03 | 0.930 |
| # adults (>=16 years old) | 4,465 | 2,111 | 3.468 | 1.99 | 0.03 | 0.893 |
| # children (<16 years old) | 4,465 | 2,111 | 1.69 | 1.65 | 0.01 | 0.947 |
| Male head | 4,465 | 2,111 | 0.939 | 0.24 | -0.043 | 0.282 |
| Head age | 4,465 | 2,111 | 47.9 | 15.9 | -0.2 | 0.908 |
| Head with no education | 4,465 | 2,111 | 0.618 | 0.486 | 0.014 | 0.817 |
| <i>Access to credit:</i> | | | | | | |
| Loan from Al Amana | 4,465 | 2,111 | 0.006 | 0.078 | -0.014 | 0.280 |
| Loan from other formal institution | 4,465 | 2,111 | 0.060 | 0.237 | -0.067 ** | 0.010 |
| Informal loan | 4,465 | 2,111 | 0.069 | 0.253 | -0.002 | 0.922 |
| Electricity or water connection loan | 4,465 | 2,111 | 0.160 | 0.367 | 0.007 | 0.813 |
| <i>Self-employment activities</i> | | | | | | |
| # activities | 4,465 | 2,111 | 1.58 | 1.22 | 0.05 | 0.700 |
| Farms | 4,465 | 2,111 | 0.604 | 0.489 | 0.014 | 0.810 |
| Does animal husbandry | 4,465 | 2,111 | 0.538 | 0.499 | 0.039 | 0.496 |
| Runs a non-farm business | 4,465 | 2,111 | 0.218 | 0.413 | 0.023 | 0.561 |
| # activities managed by women | 4,465 | 2,111 | 0.22 | 0.58 | -0.02 | 0.713 |
| Distance to souk | 4,125 | 1,922 | 20.06 | 25.50 | 1.09 | 0.573 |
| <i>Has income from:</i> | | | | | | |
| Self-employment activity | 4,465 | 2,111 | 0.786 | 0.41 | 0.087 * | 0.079 |
| Day labor/salaried | 4,465 | 2,111 | 0.583 | 0.493 | -0.023 | 0.678 |
| <i>Consumption</i> | | | | | | |
| Consumption | 4,465 | 2,111 | 2277 | 1365 | -35 | 0.778 |
| HH is poor | 4,465 | 2,111 | 0.251 | 0.433 | 0.021 | 0.647 |

Notes: Data source: Baseline household survey. Unit of observation: household. Sample includes all households surveyed at baseline. Panel A: coefficients from an OLS regression of the variable on a treated village dummy, controlling for strata dummies (paired villages). Panel B: coefficients from an OLS regression of the variable on an attrited dummy, controlling for strata dummies (paired villages). Panel C: coefficients from an OLS regression of the variable on a treatment village dummy (not shown), attrited dummy (not shown) and a dummy of the interaction of treatment village dummy and attrited dummy, controlling for strata dummies (paired villages). Standard errors are clustered at the village level. ***, **, * indicate significance at 1, 5 and 10%.

Table B4. Attrition

| Panel A. Attrition rate | | | | | | |
|--------------------------------|-------|---------------|-------|----------|---------------------|----------------|
| | Obs | Control Group | | | Treatment - Control | |
| | | Obs | Mean | St. Dev. | Coeff. | <i>p-value</i> |
| Not surveyed at endline | 5,898 | 2,965 | 0.052 | 0.223 | 0.013 ** | 0.017 |

| Panel B. Attrition: household characteristics | | | | | | |
|--|-------|---------------------|-------|----------|---------------------|----------------|
| | Obs | Surveyed at endline | | | Attrited - Surveyed | |
| | | Obs | Mean | St. Dev. | Coeff. | <i>p-value</i> |
| # members | 5,898 | 5,551 | 6.24 | 3.04 | -1.36 *** | 0.000 |
| # members older than 18 | 5,898 | 5,551 | 3.67 | 2.08 | -0.75 *** | 0.000 |
| # self-employment activities | 5,898 | 5,551 | 1.44 | 0.99 | -0.42 *** | 0.000 |
| # members with trading, services or handicraft as main activity | 5,898 | 5,551 | 0.283 | 0.609 | -0.044 | 0.115 |
| Gets a pension | 5,898 | 5,551 | 0.15 | 0.35 | 0.02 | 0.347 |
| Distance to souk (in km) | 5,898 | 5,551 | 11 | 9 | -1 ** | 0.048 |
| Does trading as self-employment activity | 5,898 | 5,551 | 0.117 | 0.321 | -0.045 *** | 0.007 |
| Has a fiber mat | 5,898 | 5,551 | 0.814 | 0.389 | -0.046 ** | 0.042 |
| Has a radio | 5,898 | 5,551 | 0.792 | 0.406 | -0.046 * | 0.081 |
| Owens land | 5,898 | 5,551 | 0.635 | 0.481 | -0.174 *** | 0.000 |
| Rents land | 5,898 | 5,551 | 0.178 | 0.382 | -0.094 *** | 0.000 |
| Does crop-sharing | 5,898 | 5,551 | 0.138 | 0.345 | -0.078 *** | 0.000 |
| # of olive and argan trees | 5,898 | 5,551 | 35 | 124 | -14 *** | 0.007 |
| Bought agriculture productive assets over the past 12 months | 5,898 | 5,551 | 0.259 | 0.438 | -0.062 *** | 0.004 |
| Uses sickle (in agriculture) | 5,898 | 5,551 | 0.631 | 0.483 | -0.187 *** | 0.000 |
| Uses rake (in agriculture) | 5,898 | 5,551 | 0.559 | 0.497 | -0.188 *** | 0.000 |
| # of cows bought over the past 12 months | 5,898 | 5,551 | 0.3 | 6.7 | -0.3 | 0.121 |
| Phone expenses over the past month (in MAD) | 5,898 | 5,551 | 40 | 96 | -13 *** | 0.006 |
| Clothes expenses over the past month (in MAD) | 5,898 | 5,551 | 506 | 857 | -45 | 0.245 |
| Had an outstanding formal loan over the past 12 months | 5,898 | 5,551 | 0.238 | 0.426 | -0.006 | 0.700 |
| Would be ready to form a 4-person group and guarantee a loan mutually | 5,898 | 5,551 | 0.673 | 0.469 | -0.105 *** | 0.000 |
| Amount that would be able to reimburse monthly (in MAD) | 5,898 | 5,551 | 183 | 419 | -26 | 0.197 |
| Would uptake a loan of 3,000 MAD to be repaid in 9 monthly installments of 400 MAD | 5,898 | 5,551 | 0.145 | 0.353 | 0.018 | 0.404 |

| Panel C. Attrition: household characteristics by treatment group | | | | | | |
|--|-------|------------------------------------|-------|----------|----------------------------|----------------|
| | Obs | Surveyed at endline, control group | | | Attrited X Treated Village | |
| | | Obs | Mean | St. Dev. | Coeff. | <i>p-value</i> |
| # members | 5,898 | 2,810 | 6.20 | 3.07 | 0.05 | 0.879 |
| # members older than 18 | 5,898 | 2,810 | 3.64 | 2.08 | 0.19 | 0.507 |
| # self-employment activities | 5,898 | 2,810 | 1.43 | 0.99 | 0.27 ** | 0.039 |
| # members with trading, services or handicraft as main activity | 5,898 | 2,810 | 0.304 | 0.636 | 0.074 | 0.170 |
| Gets a pension | 5,898 | 2,810 | 0.15 | 0.35 | 0.00 | 0.955 |
| Distance to souk (in km) | 5,898 | 2,810 | 11 | 9 | 2 *** | 0.008 |
| Does trading as self-employment activity | 5,898 | 2,810 | 0.139 | 0.346 | -0.013 | 0.707 |
| Has a fiber mat | 5,898 | 2,810 | 0.822 | 0.383 | 0.045 | 0.314 |
| Has a radio | 5,898 | 2,810 | 0.780 | 0.414 | -0.043 | 0.410 |
| Owens land | 5,898 | 2,810 | 0.631 | 0.483 | 0.036 | 0.603 |
| Rents land | 5,898 | 2,810 | 0.177 | 0.382 | 0.073 ** | 0.044 |
| Does crop-sharing | 5,898 | 2,810 | 0.142 | 0.349 | 0.044 | 0.155 |
| # of olive and argan trees | 5,898 | 2,810 | 37 | 133 | 14 | 0.173 |
| Bought agriculture productive assets over the past 12 months | 5,898 | 2,810 | 0.243 | 0.429 | 0.036 | 0.411 |
| Uses sickle (in agriculture) | 5,898 | 2,810 | 0.636 | 0.481 | 0.128 ** | 0.049 |
| Uses rake (in agriculture) | 5,898 | 2,810 | 0.564 | 0.496 | 0.021 | 0.749 |
| # of cows bought over the past 12 months | 5,898 | 2,810 | 0.3 | 5.9 | 0.1 | 0.849 |
| Phone expenses over the past month (in MAD) | 5,898 | 2,810 | 41 | 101 | 0 | 0.988 |
| Clothes expenses over the past month (in MAD) | 5,898 | 2,810 | 521 | 922 | 34 | 0.667 |
| Had an outstanding formal loan over the past 12 months | 5,898 | 2,810 | 0.230 | 0.421 | -0.018 | 0.583 |
| Would be ready to form a 4-person group and guarantee a loan mutually | 5,898 | 2,810 | 0.653 | 0.476 | 0.067 | 0.222 |
| Amount that would be able to reimburse monthly (in MAD) | 5,898 | 2,810 | 183 | 439 | -17 | 0.658 |
| Would uptake a loan of 3,000 MAD to be repaid in 9 monthly installments of 400 MAD | 5,898 | 2,810 | 0.140 | 0.347 | 0.057 | 0.183 |

Notes: Data source: Mini survey. Unit of observation: household. Sample includes all households surveyed at baseline, plus all households only surveyed at endline. Panel A: coefficients from an OLS regression of the variable on a treated village dummy, controlling for strata dummies (paired villages). Panel B: coefficients from an OLS regression of the variable on an attrited dummy, controlling for strata dummies (paired villages). Panel C: coefficients from an OLS regression of the variable on a treatment village dummy (not shown), attrited dummy (not shown) and a dummy of the interaction of treatment village dummy and attrited dummy, controlling for strata dummies (paired villages). Standard errors are clustered at the village level.***, **, * indicate significance at 1, 5 and 10%.

Table B5. Summary Statistics of Al Amana loans

| | Clients | | |
|---|---------|--------|----------|
| | Obs | Mean | St. Dev. |
| Time elapsed between start of microcredit distribution in the village and uptake (in months)† | 280 | 5.7 | 6.4 |
| Share of clients who took up their 1st loan within the first 6 months | 280 | 0.679 | 0.468 |
| Share of clients who took up their 1st loan within the 6th and 12th month | 280 | 0.157 | 0.365 |
| Share of clients who took up their 1st loan during the second year | 280 | 0.164 | 0.371 |
| All loans | | | |
| # of loans | 280 | 1.46 | 0.57 |
| Share of loans, by type: | | | |
| group-liability | 280 | 0.806 | 0.342 |
| individual | 280 | 0.177 | 0.337 |
| housing | 280 | 0.017 | 0.099 |
| Loan amount (in MAD) | 280 | 10,571 | 7,513 |
| Loan amount by type: | | | |
| group-liability loans (in MAD) | 248 | 8,615 | 5,996 |
| individual loans (in MAD) | 68 | 10,978 | 7,701 |
| housing loans (in MAD) | 9 | 8,556 | 1,810 |
| Repayment frequency (in days) | 280 | 30 | 2 |
| Repayment period (in months) | 280 | 16 | 4 |
| Share of loans, by client activity: | | | |
| Animal husbandry | 280 | 0.680 | 0.457 |
| Trading | 280 | 0.264 | 0.434 |
| Services | 280 | 0.032 | 0.172 |
| Handicraft | 280 | 0.023 | 0.142 |
| First loan | | | |
| Loan amount (in MAD) | 280 | 5,920 | 3,055 |
| Took a group-liability loan | 280 | 0.886 | 0.319 |
| Took an individual loan | 280 | 0.111 | 0.314 |
| Took a housing loan | 280 | 0.004 | 0.060 |
| Loans by year | | | |
| Share of clients who borrowed during the 1st year | 280 | 0.836 | 0.371 |
| Share of clients who borrowed during the 2nd year | 280 | 0.525 | 0.500 |
| Amount borrowed during the 1st year (in MAD) | 234 | 6,669 | 4,443 |
| Amount borrowed during the 2nd year (in MAD) | 147 | 9,520 | 6,323 |

Note: Source: Al Amana administrative data. Data corresponds to 68% of total clients in the household sample of borrowers.

Table B6. Self-employment activities

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|----------------|----------------------------|------------------|--------------------------------|----------------|-------------------|--------------------|------------------|
| | Assets | Sales and home consumption | Expenses | <i>Of which:</i> Investment | Profit | Does the activity | Activ. Diversif. | Ownes land |
| <i>Panel A: Agriculture</i> | | | | | | | | |
| Treated village | 312 (185)* | 2,026 (1,084)* | 947 (409)** | -478 (145)*** | 1,079 (951) | 0.009 (0.013) | 0.127 (0.080) | 0.000 (0.010) |
| Observations | 4,934 | 4,934 | 4,934 | 4,934 | 4,934 | 4,934 | 4,934 | 4,921 |
| Control mean | 1,140 | 10,938 | 5,526 | 573 | 5,412 | 0.644 | 2.608 | 0.640 |
| <i>Panel B: Livestock</i> | | | | | | | | |
| Treated village | 1053 (619)* | 1554 (607)** | 981 (487)** | 291 (195) | 574 (459) | -0.009 (0.011) | 0.208 (0.085)** | |
| Observations | 4,934 | 4,934 | 4,934 | 4,934 | 4,934 | 4,934 | 4,934 | |
| Control mean | 14,027 | 7,638 | 5,932 | 851 | 1,706 | 0.739 | 3.661 | |
| <i>Panel C: Non-agricultural businesses</i> | | | | | | | | |
| Treated village | 83 (139) | 2,482 (1,880) | 2,129 (1,747) | -37 (63) | 352 (628) | -0.005 (0.007) | -0.005 (0.007) | |
| Observations | 4,934 | 4,934 | 4,934 | 4,934 | 4,934 | 4,934 | 4,934 | |
| Control mean | 817 | 11,874 | 9,937 | 106 | 1,937 | 0.147 | 0.156 | |

Notes: Data source: Endline household survey. Observation unit: household. Coefficients and standard errors (in parentheses) from an OLS regression of the variable on a treated village dummy, controlling for strata dummies (paired villages) and variables specified below. Standard errors are clustered at the village level. ***, **, * indicate significance at 1, 5 and 10%. Same controls as in Table 2.

Same definitions as in Table 3.

Table B7. Robustness

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--|------------------------------------|-------------------|----------------------------------|---------------------|-------------------|---------------------------------------|---|------------------|---------------------------------------|
| | Client AI Amana - Admin data | Assets (stock) | Sales and home consumption | Expenses | Profit | Income from day labor/ salaried | Weekly hours worked by HH members aged 16-65 | | Monthly HH consumption (in MAD) |
| | | | | | | | self- employment | outside | |
| Panel A: without household controls | | | | | | | | | |
| Treated village | 0.167 (0.012)*** | 2,085 (693)*** | 6,232 (2,362)*** | 4,014 (1,855)** | 2,218 (1,234)* | -1,079 (507)** | 1.5 (1.5) | -2.9 (1.0)*** | -19 (49) |
| Panel B: same household controls as in Tables 2-9 | | | | | | | | | |
| Treated village | 0.167 (0.012)*** | 1,448 (658)** | 6,061 (2,167)*** | 4,057 (1,721)** | 2,005 (1,210)* | -1,050 (478)** | 0.6 (1.3) | -3.0 (1.0)*** | -46 (47) |
| Unclustered standard errors | (0.007)*** | (726)** | (2,511)** | (2,078)* | (1,343) | (558)* | (1.2) | (1.2)*** | (56) |
| Panel C: with extended set of household controls | | | | | | | | | |
| Treated village | 0.166 (0.012)*** | 1,380 (598)** | 6,842 (2,186)*** | 4,660 (1,668)*** | 2,018 (1,202)* | -1,073 (465)** | 1.0 (1.3) | -2.5 (0.9)*** | -45 (45) |
| Observations | 4,934 | 4,934 | 4,934 | 4,934 | 4,934 | 4,934 | 4,918 | 4,918 | 4,924 |
| Control mean | 0.000 | 15,984 | 30,450 | 21,394 | 9,056 | 15,748 | 40.6 | 30.4 | 3,057 |

Note: Data source: Endline household survey. Observation unit: household. Coefficients and standard errors (in parentheses) from an OLS regression of the variable on a treated village dummy, controlling for strata dummies (paired villages) and variables specified below. Standard errors are clustered at the village level. ***, **, * indicate significance at 1, 5 and 10%. Panel A: no control variables. Panel B: same controls as in Table 2. Panel C: controls include the lagged value of the dependent variable (at baseline), had a non AI Amana formal loan, had an informal loan, animal husbandry sales, animal husbandry savings, had lost any livestock over the past 12 months, share of self-activity income over total income, share of daily labor/salaried income over total income and ratio of consumption over total income. Same controls as in Table 2 are also included.

Table B8. Propensity to borrow

| Propensity to borrow, all household interviewed at endline in treatment villages | |
|---|---------------------|
| | Coef. |
| # members | 0.056 (0.030)* |
| # members older than 18 | -0.009 (0.042) |
| # self-employment activities | 0.187 (0.096)* |
| # members with trading, services or handicraft as main activity | -0.054 (0.122) |
| Gets a pension | 0.62 (0.242)** |
| Distance to souk (in km) | -0.094 (0.092) |
| Does trading as self-employment activity | 0.265 (0.231) |
| Has a fiber mat | -0.163 (0.187) |
| Has a radio | 0.048 (0.159) |
| Owns land | 0.177 (0.189) |
| Rents land | 0.346 (0.253) |
| Does crop-sharing | -0.428 (0.283) |
| # of olive and argan trees | -0.101 (0.097) |
| Bought agriculture productive assets over the past 12 months | -0.153 (0.164) |
| Uses sickle (in agriculture) | -0.304 (0.187) |
| Uses rake (in agriculture) | 0.054 (0.185) |
| Phone expenses over the past month (in MAD) | 0.018 (0.074) |
| Clothes expenses over the past month (in MAD) | 0.344 (0.122)*** |
| Had an outstanding formal loan over the past 12 months | 0.028 (0.176) |
| Would be ready to form a 4-person group and guarantee a loan mutually | -0.173 (0.161) |
| Amount that would be able to reimburse monthly (in MAD) | 0.25 (0.071)*** |
| Would uptake a loan of 3,000 MAD to be repaid in 9 monthly installments of 400 MAD | 0.186 (0.176) |
| Observations | 2,246 |
| Mean dependent variable | 0.158 |
| Pseudo R2 | 0.148 |
| Number of villages | 64 |

Notes: Data source: Mini survey. Unit of observation: household. Sample includes all households surveyed at endline in treatment villages. Coefficients and standard errors (in parenthesis) from a logit regression of the variable client on variables specified in the table and on village dummies. Client is a dummy variable equal to 1 if the household had taken up a microcredit within the two-year evaluation time frame. ***, **, * indicate significance at 1, 5 and 10%.

Table B9. Summary Statistics of borrower households, by sample timing**Panel A. Household characteristics of those sampled at endline**

| | Obs | Control Group | | | Treatment-Control | |
|--|-------|---------------|-------|----------|-------------------|-----------------|
| | | Obs | Mean | St. Dev. | Coeff. | <i>p</i> -value |
| # members | 1,409 | 693 | 7.73 | 3.64 | -0.12 | 0.603 |
| # members older than 18 | 1,409 | 693 | 4.41 | 2.46 | -0.08 | 0.583 |
| # self-employment activities | 1,409 | 693 | 1.5 | 0.8 | 0.0 | 0.791 |
| # members with trading, services or handicraft as main activity | 1,409 | 693 | 0.3 | 0.6 | -0.1 *** | 0.001 |
| Gets a pension | 1,409 | 693 | 0.052 | 0.222 | -0.007 | 0.534 |
| Distance to souk (in km) | 1,409 | 693 | 11.1 | 8.7 | -1.1 | 0.196 |
| Does trading as self-employment activity | 1,409 | 693 | 0.152 | 0.359 | -0.058 *** | 0.002 |
| Has a fiber mat | 1,409 | 693 | 0.711 | 0.453 | -0.025 | 0.275 |
| Has a radio | 1,409 | 693 | 0.706 | 0.456 | -0.018 | 0.384 |
| Owns land | 1,409 | 693 | 0.752 | 0.432 | -0.006 | 0.829 |
| Rents land | 1,409 | 693 | 0.395 | 0.489 | -0.027 | 0.396 |
| Does crop-sharing | 1,409 | 693 | 0.323 | 0.468 | -0.046 | 0.138 |
| # of olive and argan trees | 1,409 | 693 | 35.6 | 186.7 | -8.9 * | 0.070 |
| Bought agriculture productive assets over the past 12 months | 1,409 | 693 | 0.245 | 0.431 | 0.076 ** | 0.013 |
| Uses sickle (in agriculture) | 1,409 | 693 | 0.786 | 0.410 | -0.036 | 0.192 |
| Uses rake (in agriculture) | 1,409 | 693 | 0.694 | 0.461 | -0.030 | 0.236 |
| # of cows bought over the past 12 months | 1,409 | 693 | 0.8 | 11.6 | 0.2 | 0.709 |
| Phone expenses over the past month (in MAD) | 1,409 | 693 | 87 | 170 | -1 | 0.896 |
| Clothes expenses over the past month (in MAD) | 1,409 | 693 | 713 | 1,212 | -102 * | 0.070 |
| Had an outstanding formal loan over the past 12 months | 1,409 | 693 | 0.203 | 0.403 | 0.018 | 0.567 |
| Would be ready to form a 4-person group and guarantee a loan mutually | 1,409 | 693 | 0.587 | 0.493 | 0.028 | 0.275 |
| Amount that would be able to reimburse monthly (in MAD) | 1,409 | 693 | 197 | 515 | 0.7 | 0.972 |
| Would uptake a loan of 3,000 MAD to be repaid in 9 monthly installments of 400 MAD | 1,409 | 693 | 0.177 | 0.382 | -0.018 | 0.336 |

Panel B. Household characteristics by sample timing

| | Obs | Sampled at baseline | | | Sampled at endline - baseline | |
|--|-------|---------------------|-------|----------|-------------------------------|-----------------|
| | | Obs | Mean | St. Dev. | Coeff. | <i>p</i> -value |
| # members | 4,934 | 3,525 | 5.80 | 2.67 | 1.88 *** | 0.000 |
| # members older than 18 | 4,934 | 3,525 | 3.46 | 1.91 | 0.95 *** | 0.000 |
| # self-employment activities | 4,934 | 3,525 | 1.4 | 1.0 | 0.2 *** | 0.000 |
| # members with trading, services or handicraft as main activity | 4,934 | 3,525 | 0.3 | 0.7 | -0.1 *** | 0.000 |
| Gets a pension | 4,934 | 3,525 | 0.184 | 0.387 | -0.043 *** | 0.000 |
| Distance to souk (in km) | 4,934 | 3,525 | 11.2 | 8.8 | -0.5 *** | 0.002 |
| Does trading as self-employment activity | 4,934 | 3,525 | 0.124 | 0.330 | 0.010 | 0.424 |
| Has a fiber mat | 4,934 | 3,525 | 0.869 | 0.338 | -0.155 *** | 0.000 |
| Has a radio | 4,934 | 3,525 | 0.850 | 0.357 | -0.142 *** | 0.000 |
| Owns land | 4,934 | 3,525 | 0.586 | 0.493 | 0.196 *** | 0.000 |
| Rents land | 4,934 | 3,525 | 0.094 | 0.292 | 0.291 *** | 0.000 |
| Does crop-sharing | 4,934 | 3,525 | 0.070 | 0.254 | 0.225 *** | 0.000 |
| # of olive and argan trees | 4,934 | 3,525 | 39.3 | 121.2 | -7.0 | 0.146 |
| Bought agriculture productive assets over the past 12 months | 4,934 | 3,525 | 0.268 | 0.443 | 0.020 | 0.292 |
| Uses sickle (in agriculture) | 4,934 | 3,525 | 0.577 | 0.494 | 0.175 *** | 0.000 |
| Uses rake (in agriculture) | 4,934 | 3,525 | 0.512 | 0.500 | 0.173 *** | 0.000 |
| # of cows bought over the past 12 months | 4,934 | 3,525 | 0.1 | 5.1 | 0.8 ** | 0.012 |
| Phone expenses over the past month (in MAD) | 4,934 | 3,525 | 24 | 49 | 58 *** | 0.000 |
| Clothes expenses over the past month (in MAD) | 4,934 | 3,525 | 464 | 778 | 161 *** | 0.000 |
| Had an outstanding formal loan over the past 12 months | 4,934 | 3,525 | 0.251 | 0.434 | -0.016 | 0.268 |
| Would be ready to form a 4-person group and guarantee a loan mutually | 4,934 | 3,525 | 0.734 | 0.442 | -0.092 *** | 0.000 |
| Amount that would be able to reimburse monthly (in MAD) | 4,934 | 3,525 | 190 | 420 | 43.0 *** | 0.001 |
| Would uptake a loan of 3,000 MAD to be repaid in 9 monthly installments of 400 MAD | 4,934 | 3,525 | 0.153 | 0.360 | 0.026 * | 0.082 |

Notes: Data source: Mini survey. Unit of observation: household. Panel A: Sample includes households with high probability-to-borrow score sampled at endline. Panel B: Sample includes households with high probability-to-borrow score sampled at baseline and at endline. Panel A: coefficients from an OLS regression of the variable on a treated village dummy, controlling for strata dummies (paired villages). Panel B: coefficients from an OLS regression of the variable on a dummy equal to 1 if the borrower household was sampled at endline, controlling for strata dummies (paired villages). Standard errors are clustered at the village level.***, **, * indicate significance at 1, 5 and 10%.

Table B10: Impacts on borrowers, by sample

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--|------------------------------------|------------------|-----------------------------|--------------------|------------------|---------------------------------------|---|------------------|---------------------------------------|
| | Client AI Amana - Admin data | Assets (stock) | Sales + home consumption | Expenses | Profit | Income from day labor/ salaried | Weekly hours worked by HH members aged 16-65 | | Monthly HH consumption (in MAD) |
| | | | | | | | self- employment | outside | |
| Treated village X Endline sampled Borrower | 0.245 (0.018)*** | 362 (1,467) | 6,025 (5,455) | 2,589 (4,036) | 3,436 (2,963) | -1,446 (1105) | 1.8 (3.3) | -4.90 (2.2)** | -123 (112) |
| Treated village X Baseline Sampled Borrower | 0.136 (0.012)*** | 1,890 (828)** | 6,076 (2,838)** | 4,653 (2,317)** | 1,424 (1,424) | -889 (669) | 0.1 (1.4) | -2.30 (1.2)* | -14 (61) |
| Observations | 4,934 | 4,934 | 4,934 | 4,934 | 4,934 | 4,934 | 4,918 | 4,918 | 4,924 |
| Control mean | 0.000 | 15,984 | 30,450 | 21,394 | 9,056 | 15,748 | 40.6 | 30.4 | 3,057 |
| Control mean, endline sampled | 0.000 | 20,938 | 39,395 | 27,283 | 12,112 | 16,937 | 49.7 | 32.7 | 3,444 |
| Control mean, baseline sampled | 0.000 | 14,070 | 26,993 | 19,119 | 7,874 | 15,289 | 37.1 | 29.5 | 2,907 |
| F(T X endline = T X baseline) | 33.7 | 0.7 | 0.0 | 0.2 | 0.3 | 0.1 | 0.2 | 0.9 | 0.6 |
| p > F(T X endline = T X baseline) | 0.000 | 0.401 | 0.994 | 0.692 | 0.566 | 0.705 | 0.655 | 0.339 | 0.439 |

Notes: Data source: Endline household survey. Observation unit: household. Sample includes households with high probability-to-borrow score surveyed at endline, after trimming 0.5% of observations. Coefficients and standard errors (in parentheses) from an OLS regression of the variable on a treated village dummy interacted with a dummy equal to 1 if HH was sampled at baseline and on a treated village dummy interacted with a dummy equal to 1 if HH was sampled at endline. Standard errors are clustered at the village level. ***, **, * indicate significance at 1, 5 and 10%. Same controls as in Table 2.

Figure B1: Geographical distribution of Alamana branches included in the study sample



<http://www.alamana.org/reseau/carte V. asp>

07/10/2010

Source : Al Amana