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# Short-Term and Long-Term Effects of Cash for Work

Evidence from a Randomized Controlled Trial in Tunisia

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# Short-term and long-term effects of cash for work: Evidence from a randomized controlled trial in Tunisia

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#### Abstract

While a growing literature analyzes the economic effects of cash for work programs in developing countries, there remains little evidence about the longer-term effects of these interventions. This paper presents findings from a randomized controlled trial evaluating a three month intervention providing public works employment in rural Tunisia. The evaluation design incorporates two dimensions of randomization — community-level randomization to treatment and control, and individual-level randomization among eligible individuals — and a sample of 2,718 individuals was tracked over five years. The findings suggest that cash for work leads to significant increases in labor market engagement, assets, consumption, financial inclusion, civic engagement, psychological well being, and women's empowerment one-year post-treatment; however, these effects have largely attenuated to zero five years post-treatment, with the exception of a positive effect on assets. There is also evidence of positive spillover effects within treatment communities, but these effects similarly attenuate over time. JEL codes: O12, O15.

# 1 Introduction

Workfare or public works employment programs have long been prominent in many developing countries, and form an important part of the social safety net in contexts such as India (the National Rural Employment Guarantee Scheme) and Ethiopia (the Productive Safety Net Program). These programs typically have some of the same advantages as large-scale cash transfers — namely, they are a simple strategy to directly boost consumption and reduce poverty among the poorest households — but the additional requirement for employment can have several positive effects. First, public employment may be effectively self-targeting to those who do not have other higher-return opportunities. Second, work can offer the opportunity for participants to build skills and thus have long-term positive effects on employment trajectories. Third, employment activities can be directed to facilitate the construction and/or maintenance of local assets that may have positive externalities.

In practice, however, the latter channels can be hard to substantiate, and workfare programs often center around low-skilled manual maintenance labor that is unlikely to result in any skills transfer and may not have high returns in terms of asset creation (Murgai et al. 2016). Recent reviews of primarily quasi-experimental evidence have suggested that public works programs generally do not seem to boost employability

or enhance skills, and as such, it may be challenging to justify the higher costs of implementing such programs vis-a-vis simpler direct cash transfer interventions (Gehrke and Hartwig 2018).

This paper presents findings from a randomized controlled trial in Tunisia designed to evaluate the short- and long-term effects of the Community Works and Local Participation (CWLP) pilot, a program that provided short-term paid employment to unemployed workers for three months. Compensation provided was around \$200 per month or \$610, relative to average monthly consumption per capita in the control arm of \$245; thus this was a proportionally large transfer, providing around 2.5 months allocation of consumption expenditure.<sup>1</sup> (The compensation of \$200 monthly was also above the minimum wage, at that time around \$178 per month.)<sup>2</sup> Individuals were eligible if they were aged 18 to 60, had been unemployed for at least 12 months, and were not enrolled in secondary or tertiary education.

The evaluation employs a novel design in order to estimate treatment effects along multiple dimensions: first, a community-level randomization assigned 80 rural villages (imadas) to either treatment or control status. Second, in each community, non-governmental organization leaders or local leaders identified individuals who were eligible for the program based on the stated criteria, and in treatment communities, a random subset of these eligible individuals were offered employment.<sup>3</sup> There are thus three samples of interest that are observed: the eligible and treated individuals in treatment communities; and the eligible and untreated individuals in control communities. This design allows us to generate high-quality estimates of both the direct and the spillover effects of the intervention by comparing eligible individuals in treatment communities to untreated counterparts in control communities.

The primary sample includes 2,718 individuals who were sampled from the list of eligible individuals constructed at the community level; no baseline survey was conducted, though pre-treatment data at the locality level from the 2014 census is available and is used to verify balance in the village-level randomization. The intervention and associated public works activities were rolled out between April and September

<sup>&</sup>lt;sup>1</sup>Note that consumption in the control arm was measured around one year following the implementation of the intervention itself.

<sup>&</sup>lt;sup>2</sup>Minimum wage data for 2015 is retrieved from https://tradingeconomics.com/tunisia/minimumwages and converted to purchasing power-adjusted US dollars using exchange rates reported by the World Bank.

<sup>&</sup>lt;sup>3</sup>The timing of the identification of eligibility did, however, differ across treatment and control communities; the implications of this difference will be discussed further below in the empirical design.

2015, and the first follow-up survey was implemented approximately one year later between April 2016 and January 2017. This was followed by a second, long-term follow-up conducted between December 2020 and April 2021, approximately five and half years following program implementation. The measured outcomes include a range of variables capturing labor force participation by both the target beneficiary and other household members, economic welfare, investment in human capital, social and civic engagement, psychosocial well-being, and women's empowerment. All outcomes of interest were pre-specified, and treatment effects for outcome families were estimated following Kling et al. (2007). We also report p-values based on both traditional statistical inference and corrected for multiple hypothesis testing.

The primary findings based on the cross-village comparison of treated and untreated individuals suggest that the intervention had significant and large short-term effects on both primary economic outcomes and secondary psychosocial outcomes. We observe significant increases of between .2 and .4 standard deviations in indices of labor market participation, assets, consumption, and financial inclusion, as well as increases of comparable magnitude in civic engagement, psychosocial well-being, and women's empowerment. (Null effects are observed for outcomes linked to human capital investment, coping mechanisms conditional on shocks, and social cohesion.) These effects are driven by a large increase in the probability that the respondent as well as other household members report any income-generating activity, leading to an increase in expenditure particularly on housing costs, an increased stock of assets including livestock and consumer durables, and a substantial (proportional) increase in savings relative to a base of essentially zero.

By the five-year follow-up, however, the short-term positive effects have substantially attenuated. For economic outcomes, the positive effects on assets and consumption remain of comparable magnitude and are weakly statistically significant, but only the increase in assets remains significant when corrected for multiple hypothesis testing. The effects on the other indices are uniformly statistically insignificant, and the hypothesis that the effects in rounds one and two are consistent can be rejected for the labor market variables, financial inclusion, psychological well-being, and women's empowerment and agency. The estimated treatment effects for primary (economic) outcomes are also robust to any corrections for bias introduced by selection into the survey sample or attrition over time in both survey rounds, but the treatment effects for secondary outcomes are not robust to this correction.

The findings based on the cross-village comparison of untreated individuals in

treatment and control communities — allowing for estimates of local spillover effects of the intervention — suggest a largely similar pattern. In the short run, there are positive effects on the primary and secondary outcomes of similar magnitude (again around .3 standard deviations), other than financial inclusion. The effects on secondary outcomes are somewhat reduced, though the increases in civic engagement and psychosocial wellbeing remain statistically significant. In the long run, none of the estimated effects for the spillover sample remain statistically significant. (In addition, the estimated spillover effects in the short run are not robust to corrections for selection into the evaluation sample.)

Finally, we can evaluate the within-village comparison between individuals who are eligible and offered employment and eligible but not offered employment. This analysis shows a statistically insignificant difference in both the short and the long run, a finding that is unsurprising given that the effects on direct beneficiaries and eligible non-targeted individuals in treatment communities are largely parallel.

Our paper makes several contributions to the existing literature. First, we provide new evidence about the long-term effects of workfare or public works employment programs. We particularly contribute by tracking a wide range of both economic and psychosocial outcomes over a much longer time horizon (up to five years). Much of the existing literature analyzing the effects of public works employment has centered around two large, government-run programs, NREGA in India and the PSNP in Ethiopia, that can provide seasonal employment over a number of years. An extremely large literature has analyzed the effects of NREGA on labor market outcomes (Berg et al. 2018; Imbert and Papp 2015), poverty (Muralidharan et al. 2017; Ravi and Engler 2015), migration (Imbert and Papp 2019), conflict (Khanna and Zimmermann 2017; Fetzer 2020), education, child cognition, and child labor (Afridi et al. 2016; Mani et al. 2020; Li and Sekhri 2019; Shah and Steinberg 2021), and infant health (Chari et al. 2019). For the PSNP, evidence suggests impacts are limited on average due to low transfer levels, though there are some effects on food security and livestock assets (Gilligan et al. 2009; Berhane et al. 2014) as well as child nutrition (Porter and Goyal 2016). In urban areas, the rollout of PSNP leads to a shift from private to public employment, as well as enhanced local amenities (Abebe et al. 2021).

Beyond these two large recurring programs, other papers have analyzed similar short-term public works employment programs. In Côte d'Ivoire, a randomized trial suggested that seven months of temporary employment in road maintenance had no persistent effects fifteen months later, other than possibly higher productivity in nonagricultural employment (Bertrand et al. 2017); similarly, in the Democratic Republic of Congo, there were minimal persistent effects of a four-month job offer 18 months later, other than modest effects on employment and savings (Brandily-Snyers et al. 2022). A randomized trial of workfare in Colombia found positive effects on consumption and labor supply that persisted up to a year (Alik-Lagrange et al. 2017). In Argentina, a public works employment project implemented in response to the 2002 economic crisis reduced unemployment and poverty (Galasso and Ravallion 2004). In Comoros, another randomized trial of a public works employment program found evidence of a significant increase in international migration (Gazeaud et al. 2021). In Yemen, public works employment increased labor supply and seemed to have a protective effect vis-a-vis adverse coping mechanisms during an economic downturn (Christian et al. 2015). In Malawi, however, a public works employment program had no effects on food security or use of fertilizer (Beegle et al. 2017).

Importantly, very few of the papers in the existing public works employment literature analyze effects on psychosocial or non-economic outcomes; and none, to our knowledge, report treatment effects for a horizon longer than about two years. We thus contribute by providing novel evidence around the effects of public works employment on civic engagement, social cohesion, psychological well being, and women's empowerment, and analyzing the effects on both economic and non-economic outcomes for a much longer follow-up period of five years.

Second, we contribute to a growing literature analyzing spillover effects of cash transfers or other cash benefit programs. Here, we benefit from a robust double-randomized design that allows us to rigorously estimate spillover effects on individuals who are eligible for the program and who report similar observable characteristics, but who are randomly not offered the program, and we find spillovers that are large, positive, and of equal magnitude to the effects for direct beneficiaries. (This design has previously been used by only two other papers to our knowledge, Egger et al. (2019) and Beegle et al. (2017).) In the existing literature, Angelucci and De Giorgi (2009) analyzes the effects of Progresa on local non-eligible households and finds evidence of significant positive spillovers in terms of consumption, and similar positive spillovers are reported in a large evaluation of unconditional cash transfers in Kenya (Egger et al. 2019). Large positive spillovers of BRAC's Targeting the Ultrapoor — a multifaceted graduation program that also encompasses cash transfers — are also documented for consumption and economic outcomes, as well as for nutritional outcomes (Bandiera et al. 2017; Raza et al. 2018). There is also evidence of positive spillovers from economic

aid provided to refugees (Taylor et al. 2016). By contrast, there has also been evidence of negative spillovers of cash transfers in some contexts, particularly in more remote communities (Beegle et al. 2017; Haushofer and Shapiro 2016; Filmer et al. 2021).

This paper proceeds as follows. Section 2 describes the context, the experimental design and the data collection. Section 3 presents the analytical strategy, the outcomes of interest, and the main results. Section 4 concludes.

# 2 Methodology

## 2.1 Setting and intervention

In the decade prior to the 2011 Jasmine revolution, Tunisia's economy showed consistent growth and was among the leading performers in the Middle East and North Africa (MENA) region, with average annual growth in gross domestic product of 4.2 percent (World Bank 2011). In subsequent years however, Tunisia's economic growth slowed. Higher food prices exacerbated economic woes and in January 2014 culminated in political unrest and the toppling of Zine Ben Ali, the country's long-time ruler (Campante and Chor 2012). Average annual GDP growth between 2011 and 2015, the year in which this project was launched, was only 1.7%.

In addition, the revolution substantially impacted access to basic services. In some localities, critical facilities such as clinics and hospitals were closed, while food supply routes were disrupted, thus making disadvantaged populations even more vulnerable. Existing plans to expand or improve health and education services especially in disadvantaged areas stalled (World Bank 2011).

Against this backdrop, the World Bank and the Tunisian Ministry of Vocational Training and Employment launched the Community Works and Local Participation (CWLP) project in Jendouba, a rural and underserved governorate. This pilot project sought to provide temporary employment opportunities to long-term unemployed men and women on local labor-intensive public works projects. The project's aims were to provide beneficiaries with immediate income support to help smooth consumption and to strengthen their future earning capacity (via the provision of skills development or work experience), while also improving productive infrastructure.

The CWLP program financed approximately 40 public works projects in Jendouba Province, for which workers were required to be between 18 and 60 years old, and to have been out of work for at least 12 months.<sup>4</sup> These local public works projects were chosen by local non-governmental organizations in conjunction with community leaders. Eligible projects all included the upgrading of local infrastructures and services, and a minimum of 70% of the budget was required to be devoted to labor costs.

A first round of CWLP projects was implemented between 2012 and 2014; our study focuses on the second round of projects, launched between April and September 2015 with an average duration of around three months.<sup>5</sup> In identifying eligible individuals, priority was given to the poorest households, women, at-risk youth, and heads of households. Those who completed the program received a wage of around \$10.18 (in purchasing power parity-adjusted dollars) daily, for an estimated total of 825 Tunisian dinars or approximately \$610 over three months. The wage provided was thus above the prevailing minimum daily wage at the time, \$8.88.

# 2.2 Experimental design

The second round of the CWLP evaluated in this paper was rolled out as a randomized controlled trial in 80 imadas, or villages, in the Jendouba governorate, the lowest level administrative unit in Tunisia.<sup>6</sup> We implemented the randomization in two steps in order to capture both direct and spillover effects of the CWLP. In the first step, the village-level randomization, we first stratified the 80 sample villages into three groups by population—less populated, moderately populated, and more populated.<sup>7</sup> Randomization was conducted within these three strata, assigning 40 villages to treatment and 40 villages to control.

In the second stage, the individual-level randomization, local NGOs in treatment villages compiled lists of around 60–65 poor unemployed residents eligible for employment in public work projects. We randomly selected around 42 of these eligible workers to participate in each village; the others were not offered employment. Among those who were offered employment, take-up of employment was around 80%, yield-ing around 34 participating workers in each village. Note that all individuals offered employment will be identified as treated individuals in treated communities for the

<sup>&</sup>lt;sup>4</sup>Households who were engaged in agricultural production were identified as participating in an economic activity and thus were not eligible for the intervention.

<sup>&</sup>lt;sup>5</sup>Figure A1 in the Appendix shows the timeline for the launch and conclusion of each project.

<sup>&</sup>lt;sup>6</sup>The Jendouba governorate comprises 95 imadas in total, 15 of which are classified as urban. These urban imadas were excluded from the evaluation, leading to a sample of 80 rural imadas.

<sup>&</sup>lt;sup>7</sup>Jendouba's rural villages range in size from 1,000 to 7,000 residents. We classified villages with fewer than 2,090 residents as less populated; between 2,095 and 4,156 residents as moderately populated; and more than 4,156 residents as more populated.

purposes of the intent-to-treat analysis conducted here.8

In addition, local leaders in the control villages also compiled lists of 40 village residents who would have been eligible for the program if their villages had been assigned to treatment, thus constituting the control sample. This selection of eligible individuals in control communities was conducted approximately a year following the selection of individuals in treatment communities, but leaders were advised to refer retrospectively to individuals' outcomes in selecting beneficiaries. Figure 1 depicts the experimental design, and Figure A1 shows a map of the project locations. All randomization procedures were conducted by the research team using Stata.

### 2.3 Data collection

The evaluation did not include a baseline survey, though baseline administrative data at the imada level is available drawing on the Tunisia population census from 2014. Instead, two rounds of follow-up surveys were conducted. The sampling frame is constituted by the beneficiary lists constructed in both treatment and control communities as described above. In treatment villages, the beneficiary list included an average of around 60–65 beneficiaries per village, for a total of 2,537 total respondents, and the entire beneficiary list was targeted for the survey. In the control villages, the survey firm randomly sampled 20 individuals out of the 40 individuals included on the constructed list of eligible individuals.

The total target sample was thus 2,537 individuals in the treatment villages and 800 individuals in the control villages; the realized evaluation sample, as captured in Figure 1, was 1924 individuals in the treatment villages (76% of the target sample), and 794 in the control villages, for a total of 2,718 individuals.<sup>9</sup>

We conducted the first round of data collection between April 2016 and January 2017, on average roughly 12 months after the end of the intervention in each treatment village (paid employment generally ended around August 2015).<sup>10</sup> The second round of data collection was conducted between December 2020 and March 2021, approximately

<sup>&</sup>lt;sup>8</sup>The randomization of individuals into an offer of employment was conducted in two phases; following the first round of employment offers and the response, in which around 20% of individuals declined to participate, additional replacements were randomly selected and offered employment in order to meet the target participant numbers. Again, all individual who received an offer are coded as treated.

<sup>&</sup>lt;sup>9</sup>In addition, data was collected from a separate random sample of individuals in both treatment and control communities. This data is not employed in this analysis.

<sup>&</sup>lt;sup>10</sup>Data collection was contracted to a local professional team, under close supervision by the research team. The research team also developed all survey instruments and other research protocols as well as the training of field staff (i.e., data enumerators and supervisors).

five and a half years post-treatment, as depicted in Figure 2. From the evaluation sample of 2,718 individuals surveyed in the first follow-up survey, the second follow-up survey included 2,185 individuals for an attrition rate of 19.6 percent (22.5% in treatment villages and 12.6% in control villages); this difference is not statistically significant. Again, more details about potential bias induced by attrition between the first and second follow-up survey rounds will be provided in Section 3.5.

The survey instruments that were used in both survey rounds consisted of a questionnaire administered to the individual who was identified as eligible for cash for work.<sup>11</sup> The survey collected information on the composition of the household, the economic activities of its members, assets, consumption, the economic shocks faced by the household, social cohesion, civic participation, women's empowerment, and psychological well-being.

# 3 Empirical analysis

## 3.1 Outcomes of interest and conceptual framework

The outcomes of interest were pre-specified at the launch of the experiment and include six primary outcome families: labor market outcomes for the primary respondent, labor market outcomes for other household members, consumption, assets, financial inclusion, and human capital. The five secondary outcome families include coping mechanisms (vis-a-vis shocks experienced by the household), psychological well-being, social cohesion, civic engagement, and women's empowerment and agency.

Tables 1 and 2 summarize the variables included. The summary outcome measures are constructed following Kling et al. (2007) and are generally defined identically for the first and second rounds of follow-up. Details about the cases in which the outcome families were not defined identically, and about any deviations from the pre-analysis plan, are provided in Appendix A.<sup>12</sup>

Given a large existing literature analyzing the effect of public works employment on the outcomes of interest, we do not provide a full conceptual framework, but simply a brief overview of potentially relevant channels through which the intervention may

<sup>&</sup>lt;sup>11</sup>The two survey rounds were almost, but not entirely identical. The second round included some minor modifications to portions of survey questions used in the first round as well as a novel module on the COVID-19 pandemic, which did not exist at the time of the first endline survey round.

<sup>&</sup>lt;sup>12</sup>The pre-analysis plan was originally registered with EGAP and can be found on-line, https://osf.io/nd53a, EGAP registration ID 20170520AA.

shape these outcomes. For the economic outcomes of interest, there are two primary channels for effects. The first channel is the direct effect generated by the infusion of cash into the household that could be used to amass assets, invest in training, purchase goods, generate savings, or potentially invest in an income-generating activity (or fund a search for employment), either for the main respondent or another household member. The second channel is the indirect effect if respondents develop skills or amass experience in their period of public works employment that leads to an increased probability of an economic activity post-intervention; or, if respondents use the cash earned to fund the start-up or search costs associated with identifying a new economic activity. This increased level of economic activity and income may in turn may lead to positive effects on other economic variables.

For secondary outcomes of interest, we hypothesize that enhanced economic status through the direct and indirect channels may lead to a shift away from adverse coping mechanisms in the face of shocks (e.g., households who have more resources will not be required to disinvest in assets in response to a negative shock). We also hypothesize that enhanced economic status could lead to increased engagement in the community both socially and civically and enhanced psychological well-being. There is also the potential for enhanced female empowerment in the form of increased economic engagement or decision-making, though there could also be a backlash effect in response to the intervention that would lead to decreased economic empowerment for women.

## 3.2 Baseline balance

To assess balance across villages assigned to the treatment and control arms, Panel A of Table 3 reports results summarizing covariate balance at the village level using data from the 2014 population census. The villages in the sample are characterized by an average population size of around 1000 households or 4000 individuals; around 73% of the population is constituted by adults. Unemployment rates are high, averaging above 25% for individuals aged fifteen and above, and education rates are also notably low compared to national averages: more than half of heads of household report no education. We uniformly observe that there are no statistically different differences in these covariates comparing across the treatment and control villages. In addition, the magnitude of the differences is generally low in absolute terms: for example, the mean unemployment rate differs by only .9 percentage points comparing across the treatment and control arms, and the percentage of household heads reporting different levels of

education varies by between two and four percentage points.<sup>13</sup>

Panel B of Table 3 then reports balance using time-invariant covariates at the household level; these covariates were measured in the first follow-up survey, but are presumptively unchanged vis-a-vis baseline.<sup>14</sup> We report the mean for households randomly selected for an offer of employment in treatment villages in Column (1); for households randomly selected for a non-offer of employment in treatment villages in Column (2); and for households in control villages in Column (3). We then report the p-value corresponding to the pair-wise comparisons across each of these three samples (conditional on strata fixed effects). Again, we generally observe that there are no statistically significant differences in covariates comparing across these three sets of households, though two covariates differ at the ten percent level comparing across the treated and spillover samples within treatment communities. The average respondent identified as eligible for public works employment is around 40 years old; 55% are female, and 70% are married. A majority (around 60%) report no education. Engagement in the labor market is extremely low (fewer than 10% report working more than three months in 2013), consistent with the programmatic criteria targeting the long-term unemployed. The overwhelming majority were born locally.

A more detailed assessment of balance at the household level is unfortunately infeasible in this evaluation given the absence of a baseline survey (the only household-level covariates available are the time-invariant covariates described in the previous paragraph). This renders it challenging to assess whether the selection of eligible respondents in the treatment and control arms generated samples that are fully comparable. However, the available evidence at both the village and household levels does suggest that observable characteristics are generally parallel across arms.

We can also characterize the sample vis-a-vis the national poverty line by drawing on the estimated level of consumption subsequently measured for households in the control arm. The estimated level of consumption in the control arm in the follow-up survey conducted in 2016 was \$245 per month for the household, or around \$60 monthly per capita given a household size of four. This is broadly similar to an estimated national poverty line of around \$70 monthly (\$2.60 daily) as of 2010 (Molini 2019), but suggestive of a consumption level around 20% lower than this poverty line even six years later.

<sup>&</sup>lt;sup>13</sup>We also report the mean probability that the locality was included in a previous round of public works programming; this probability is between 35% and 48%. The difference is 12 percentage points, but this gap is not statistically significant.

<sup>&</sup>lt;sup>14</sup>Given the absence of a baseline survey, no other data on pre-treatment covariates is available. Marital status is not strictly time-invariant, but given low rates of divorce in rural Tunisia, it is unlikely to show meaningful shifts over time for a predominantly middle-aged population.

This low level of consumption relative to even the national poverty line in Tunisia is consistent with the hypothesis that the program's targeting criteria effectively identified the long-term unemployed or economically inactive. Among households who do report a primary income-generating activity (in the control arm) in the 2016 survey, one third report that their primary activity is agriculture; 25% construction; 12% government employment; and 20% other, generally petty trade or a semi-skilled occupation such as carpentry or mechanical work.

### 3.3 Results

Given the randomized design, the primary empirical specification is simple. Outcome variables of interest reported at the individual level  $Y_{iv}$  for individual *i* in village *v* are regressed on a binary variable for treatment assignment  $T_v$ . (Some, though not all of those variables are in fact reported by the individual for the whole household: i.e., household-level consumption and household ownership of assets.) In the first specification, we restrict the sample to those individuals sampled in treatment communities and offered treatment as well as those individuals sampled in control communities in order to measure direct intervention effects. We also include binary variables for the randomization strata,  $\lambda_v$ , and standard errors are clustered at the village level.

$$Y_{iv} = \beta_1 T_v + \lambda_v + \epsilon_{iv} \tag{1}$$

We also estimate a parallel specification identical to equation (1) including only those individuals in the treatment arm who were eligible for treatment but not offered treatment (as well as individuals in the control communities) in order to estimate local spillover effects.

The final specification of interest exploits the within-village randomization, using data from treatment villages only; outcomes are regressed on the individual-level variable for an offer of work  $WorkOffer_{vi}$ .

$$Y_{iv} = \beta_2 WorkOffer_{iv} + \epsilon_{iv} \tag{2}$$

We report both conventional p-values and q-values corrected for multiple inference, setting the rate of false discovery at q = 0.05 (Benjamini and Hochberg 1995). For a detailed description of calculation of q-values, see Anderson (2008).

Figure 3 and Tables 4 and 5 capture the main results. For concision, the figure presents the primary estimated treatment effects for outcome families comparing across

treated and eligible individuals in treatment and control villages respectively, with estimated coefficients for round one and round two. The confidence intervals are constructed using q-values that are robust to corrections for multiple hypothesis testing. Tables 4 and 5 present results from rounds one and two, respectively. In both tables, the first set of columns captures the main treatment effect estimated comparing across treatment and control villages using specification (1), analogous to the figure; the second set of column captures the estimated spillover effects comparing across treatment and control villages, using specification (1) for the sample of eligible individuals not offered treatment; and the third set of columns captures the within-village treatment effect, using specification (2).

Figure 3 shows that there are significant and positive effects of cash-for-work comparing across eligible individuals in treatment and control communities in the first follow-up round: this includes an increase in the index of the respondent's labor market outcomes of .28 standard deviations, an increase in household labor market activity of .24 standard deviations, an increase in the consumption and assets indices of between .2 and .4 standard deviations, and an increase in the financial inclusion index of .28 standard deviations. There is no significant increase in human capital. For secondary outcomes, there are similarly positive effects on civic engagement, psychological well-being, and women's empowerment and agency, all around .3 standard deviations; however, there is no evidence of any effects on coping mechanisms or social cohesion. (As described in more detail below, the variables related to women's empowerment and agency relate to the level of economic empowerment of the principal woman in the household: either the individual sampled for treatment, if the treated individual is female, or his spouse, if the treated individual is male.)

It is clear in the figure, however, that these effects have substantially attenuated in the second round and are no longer statistically different from zero. We can see in Table 5 that in the second round, we observe an increase in consumption of .26 standard deviations that is not statistically significant when corrected for multiple hypothesis testing; and an increase in assets of .30 standard deviations that remains statistically significant. None of the other coefficients in round two are significant. Though in some cases the width of the confidence intervals does not allow us to reject the hypothesis that the effects are equal in magnitude across the two follow-up rounds, this hypothesis can be rejected for labor market outcomes, financial inclusion, psychological well-being, and women's empowerment and agency.

Returning to Table 4, Columns (6) through (10) capture the spillover effects estimated

comparing eligible but untreated individuals in treatment and control communities. Here, the coefficients for the primary and secondary outcome families are comparable in magnitude vis-a-vis the direct treatment effects (and in some cases, slightly larger). This suggests that these individuals also benefit significantly via informal social support from treated individuals, and/or local economic spillovers of the cash payments. There is, however, no effect on financial inclusion, or women's empowerment. Unsurprisingly, given that the direct and spillover treatment effects are similar, the final set of columns capturing the within-village difference between eligible individuals who are and are not offered treatment shows coefficients that are generally small in magnitude and statistically insignificant when corrected for multiple hypothesis testing. These effects also show the same pattern of attenuation across rounds: the only statistically significant spillover effect in the second round is an increase in the asset index, and there are no significant within-village treatment effects in the second round.

We also report the same set of findings using specifications including additional controls in Tables A1 and Table A2 in the Appendix; in both cases, we compile the findings from rounds one and two into a single table for concision. In Table A1, we include additional control variables for all time-invariant individual-level demographic characteristics reported in the balance tests in Panel B of Table 3, and in Table A2, we add additional controls for survey period.<sup>15</sup> In both tables, the main findings are unchanged.

Moving beyond the aggregate indices, Tables A9 through Table A30 report the estimated treatment effects for the individual variables in each index to unpack the mechanisms for the underlying effect. For labor market outcomes, we can observe in Table A9 that engagement in short-term public works employment leads to a near-doubling of the probability that treated individuals report an income-generating activity in round one (an increase of eight percentage points, relative to a control arm mean of nine percentage points), and an increase in the number of days worked over the last month (again, a near doubling). The low base rates of any economic activity are consistent with the targeting of the intervention to an extremely economically inactive population. In round two, however, these effects have in fact reversed in sign, with treated individuals reporting a significant five percentage point decline in the probability of any income generating activity, relative to a mean of 18%; conversely, treated individuals are significantly more likely to report that they have looked for paid work (an increase

<sup>&</sup>lt;sup>15</sup>The first follow-up survey spanned a period of nine months. We simply divide this period into two halves, and control for early and late survey timing.

of 10 percentage points, relative to a mean in the control arm of 22%). This constitutes suggestive evidence that the medium-term effects of the intervention may in fact be slightly negative for labor market outcomes — perhaps because respondents have forgone potentially higher-return labor market experience in the private sector while engaged in the intervention, or have raised their wage expectations suboptimally high after exposure to the wage offered by the public works program — though there seems to be a positive effect on search behavior.

A similar pattern is evident for household-level labor market outcomes, capturing whether the household head (who is the same as the respondent in about 50% of cases) or any other household member reports an income-generating activity; we observe a large and positive effect in the first round that is weakly negative in the second round. In the first round, there is an increase in the probability of an income generating activity for the household head of 14 percentage points relative to the mean in the control arm of 20%, but in the second round, the estimated effect is a decline of seven percentage points, relative to a mean in the control arm of 26%.

The detailed findings on consumption and assets reported in Tables A13 through A16 suggest that the increase in consumption in the short run is driven primarily by more discretionary categories of expenditure such as communications, household chores, rent and housing repairs, and other services; the largest increase seems to be in housing expenses, where we observe an increase of around \$4.50 over the past week, relative to a mean in the control arm of \$11.50, for a proportional increase of 40%. In the second round, many of the coefficients on consumption categories remain positive, but they are no longer statistically significant, and the coefficient on rent expenditure has reversed in sign. For assets, there is a significant increase in reported ownership of livestock, furniture, and electronic equipment, and these coefficients are largely consistent across both survey rounds (with the exception of livestock). The pattern of effects over time is particularly notable for financial inclusion outcomes, where in round one we observe a very large proportional increase in savings in the treatment arm: the current stock of savings increases by \$0.93 relative to a mean of just seven cents in the control arm, increasing nearly fourteen-fold. By the second round, however, savings is precisely zero in both arms, reducing the treatment effect to a null.<sup>16</sup> There are no significant effects on debt or reported ownership of a bank account in either survey round.

For secondary outcomes, we can see that the substantial increase in psychological

<sup>&</sup>lt;sup>16</sup>A small number of observations reporting positive savings are winsorized.

well-being in the first round is driven by a reduction in adverse feelings of loss of control and uselessness, and a substantial increase in feelings of social connectedness, as proxied by the number of people with whom the respondent would share a decision to depart the village. The increase in women's empowerment is substantially driven by a large increase in the probability that the female member of the household reports any income generating activity: the probability increases by five percentage points relative to a base probability of two, nearly quadrupling. Again, all of these effects have attenuated to zero by the second round, often inverting in sign.

We can also compare the magnitudes of the estimated effects on economic outcomes in the short run to the actual magnitude of the transfer (again, \$610 over three months). The total positive effect on monthly consumption (summing across all categories enumerated) is around \$29. If this pattern of increased consumption has been consistent over the 12 months since the conclusion of the program, that would suggest around \$350 or 57% of the value of the original transfer has been directed toward increased consumption. (Of course, households have also presumably earned additional income during this period.) The value of additional assets is challenging to assess, as no data on asset prices was collected; and the value of additional savings (though proportionally large relative to the mean of virtually zero) is minimal, with no evidence of any shift in debt. In general, it seems plausible to conclude that the transfer was substantially directed toward increased consumption in the post-transfer year. This pattern would also be consistent with the attenuation of effects in the longer-term as funds are depleted (and as the initial positive effect on the probability of an income-generating activity disappears).

To sum up, there is very little evidence that a short-term cash-for-work program generated persistent economic or non-economic effects in this context. The short-term effects were large for both economic and non-economic outcomes and for both direct beneficiaries and eligible individuals who were not offered work but benefited from spillover effects. These initial large effects are perhaps unsurprising given that the magnitude of the cash infusion was substantial, but they did not lead to any longerterm shifts other than some increased asset ownership.

# 3.4 Heterogeneous effects

The pre-analysis plan specified a number of dimensions of heterogeneity analysis.<sup>17</sup> Here, we report heterogeneity with respect to participant gender, the village-level unemployment rate (as reported in the 2014 census), and the mean incidence of recent shocks in the village (as reported in the first follow-up survey). The first community-level variable captures local economic conditions more broadly; the second community-level variable captures whether the area has recently experienced a high volume of adverse shocks.

The results presented in Tables A3 through A5 generally suggest there is no meaningful variation in the estimated treatment effects. For heterogeneity with respect to local economic conditions, there is some weak evidence the treatment-induced increase in consumption in round one may be smaller, but this interaction effect is noisily estimated and the pattern is not observed consistently. For heterogeneity with respect to the incidence of local shocks, there may be some positive interaction with financial inclusion (and negative interaction for social participation), but again the pattern is not consistent across outcomes.

### 3.5 Selection into the evaluation sample

There are two forms of potential selection into the evaluation sample that are relevant for this analysis. First, as previously noted only 76% of individuals included on the eligibility list for the employment intervention in treatment communities, and thus targeted for inclusion in the evaluation, were in fact surveyed in the first round of follow-up and entered the evaluation sample. This includes 69% of those who were eligible and not offered employment, and 79% of those who were eligible and offered employment, and 79% of those who were eligible and offered and offered employment.<sup>18</sup> In addition, an attrition rate of 19.6% was observed between the first and second follow-up surveys.

To explore potential selection into the sample, we estimate treatment effects in the first round using Lee bounds (for a detailed description of the methodology, see (Lee

<sup>&</sup>lt;sup>17</sup>The specified dimensions were gender, pre-existing levels of wealth/affluence, geographic isolation, project type, and community-level shocks. There is insufficient variation in project type and geographic isolation to pursue this analysis.

<sup>&</sup>lt;sup>18</sup>99% of those who were identified as eligible in control communities were sampled, a rate that may substantially reflect the fact that the list of eligible individuals in control communities was generated only shortly prior to the follow-up survey.

2009)). As in the main estimation, we include randomization strata indicators as a baseline covariate in the analysis to tighten the bounds, and employ bootstrapped standard errors.<sup>19</sup> The results for the main outcome families are reported in Table A6. The evidence suggests that the positive treatment effects for the primary economic outcomes for individuals directly randomized into treatment are generally robust, particularly for labor market outcomes and assets. However, the estimated treatment effects for secondary outcomes for treated individuals (civic engagement, psychological well-being, and women's empowerment) have bounds that cross zero, as do the estimated treatment effects capturing spillovers for individuals in treatment communities who were not offered employment.

Also, as previously noted, attrition was non-trivial in this sample given the longfollow-up period: 20% of respondents attrited between the first and second surveys. To analyze the predictors of attrition, Table A7 presents evidence using the following specification. A binary variable for attrited is regressed on a (time-invariant) household covariate as measured in the first survey round, a treatment indicator, and the interaction between the two; the same covariates presented in the balance tests in Table 3 are employed here.

$$Attrit_{iv} = \beta_1 X_{iv} + \beta_2 T_v + \beta_3 X_{iv} \times T_v + \epsilon_{iv}$$
(3)

The findings suggest that respondents who are older, female, married, have some education and are from outside the governorate are significantly less likely to attrite, suggestive of lower levels of mobility for these subpopulations, and the coefficients are large: women are 16 percentage points more likely to be successfully surveyed in the second round, and married individuals are 10 percentage points more likely to be surveyed. There is also some evidence of heterogeneity by treatment status in these patterns: treated women are even less likely to attrite, possibly because of the positive effects of the intervention (at least in the short-term). Respondents who have some labor market experience and who were born locally are also somewhat less likely to attrite in treatment communities.

In order to explore the robustness of the estimated treatment coefficients in the long-run to the observed pattern of attrition, we also estimate Lee bounds for the second-round treatment effect estimates using a parallel strategy. The results reported

<sup>&</sup>lt;sup>19</sup>The only available information for those eligible respondents who were not included in the first survey round is the village and the sex of the respondent. Covariates that may explain attrition are used to split the sample into cells. Bounds are calculated separately for each randomization strata. The results are also robust to the inclusion of a binary variable for gender to tighten the bounds.

in Table A8 are generally consistent with those previously reported, in that only the small positive effects on consumption and assets are positive and significant, suggesting that attrition is not a meaningful source of bias in these results.<sup>20</sup>

# 4 Conclusion

This paper provides new evidence from a multilevel randomized controlled trial around the short- and long-term effects of a three-month cash for work project targeting the long-term unemployed in rural Tunisia. The program provided a wage stipend equivalent to more than two months of household consumption expenditure, and it led to substantial short-term positive effects (around one year post-intervention) on a range of economic and social outcomes including consumption, assets, financial inclusion, civic engagement, psychological well-being, and women's empowerment. Importantly, these effects are observed not only for individuals in treatment villages who were randomly selected for an offer of employment, but also for eligible individuals in treatment villages who were randomly selected not to receive an offer of employment, suggestive of meaningful and large intravillage spillover effects.

However, there is very little evidence that these effects persist five years postprogram. Other than a weakly positive effect on assets, treatment and control individuals show little evidence of differential outcomes at this point, suggesting that engagement in short-term public works labor had no meaningful effects on shifting economic trajectories in the medium-term. In particular, there is no evidence that the intervention led to any shift in labor market integration or skill acquisition five years post-treatment.

These findings add to a growing evidence base suggestive of very limited persistent effects of short-term public works employment, though these programs could still be a useful mechanism to provide a short-term buffer against adverse shocks or to smooth consumption. Further research may usefully explore the relative effectiveness and particularly cost-effectiveness of cash for work vis-a-vis cash transfers; given the absence of evidence that public works programs are effective in building skills or increasing employability, the relative advantage of these interventions vis-a-vis simpler social safety net programs remains an open question.

Data availability statement: Replication data for this paper will be made publicly

<sup>&</sup>lt;sup>20</sup>These results are robust when including a female indicator to tighten the bounds.

available in an appropriate repository following acceptance of the paper.

FIGURE 1: Study Design



Notes: This figure illustrates the experimental design. The 80 rural villages were first randomized into 40 treatment and control villages. Following the identification of eligible households, assignment to the cash-for-work programs was randomized in treatment villages.



Notes: This figure captures the evaluation timeline.

#### FIGURE 3: Main results



Notes: This figure reports the treatment effects for the primary and secondary outcome families in the first follow-up survey round (one year post-treatment) and second follow-up survey round (five years post-treatment). The outcome families are described in Table 1 for primary outcomes and Table 2 for secondary outcomes. We report the primary treatment effect estimate comparing across treated individuals offered employment in treatment villages and untreated individuals in control villages, corresponding to specification (1); the corresponding coefficients are reported in Columns (1) through (4) of Tables 4 and 5. The bars capture 95% confidence intervals; these intervals are constructed using q-values that are corrected for multiple hypothesis testing.

Outcome Family		Indicators
Labor market: main respondent	Primary	Any income-generating activity (IGA) (past 4 weeks) Number of days worked in main IGA (past 4 weeks) Active employment search (past 4 weeks)
Labor market: other household members	Primary	Any IGA for household head (past 4 weeks) Any IGA for any other member of the household (past 4 weeks)
Consumption	Primary	Value of past-month household consumption in categories: meat and fish; fruit and legumes / vegetables; eggs and milk; oil and fat; beverages; cigarettes and alcohol; other food; healthcare; education; leisure; transportation; electricity / gas / water; communications; household chores; rent/small repairs; other services
Assets	Primary	Count variables for household ownership of any mode of transportation / vehicle; livestock; furniture; electronic equipment; binary variables for cement or brick wall; cement or tile roof; reports title to home; owns land; also, self-reports three or higher on poverty scale
Financial inclusion	Primary	Amount of savings (past year) Binary variable for any debt (past year) Current debt balance Reports any bank account
Human capital	Primary	Received formal training in a trade Reports skills would like to use in the future

# TABLE 1: Primary families of outcomes

Notes: This table summarizes the variables included in each primary outcome family. For consumption, the survey collected data about food consumption over the past week and non-food consumption over the past month, but both are converted to monthly aggregates for the purposes of analysis. For the financial inclusion index, the variable capturing access to a bank account was reported only in the second follow-up round.

Outcome Family		Indicators
Coping mechanisms (in response to shock)	Secondary	Reduced food consumption Borrowed money from friends, neighbors or cooperatives Received assistance from friends, community, NGO, or government Drew down assets or savings
Social cohesion	Secondary	Community participation and cohesion Collective action Violent conflict inside/outside imada (inverted)
Civic engagement	Secondary	Civic engagement Political knowledge and attitudes Political inclusion
Psychological well being	Secondary	Fear of losing control (inverted) Fear of being exploited (inverted) Feeling of uselessness for others (inverted) Positive relationships between household members Would share with others decision to leave the village Feels accepted within family Feels accepted by other households Feels in control Feels that goals can be accomplished
Women's empowerment and agency	Secondary	Woman reports any earned income over past six months Woman decides how income will be used Man decides alone how income will be used (inverted) Woman reports income generating activity

#### TABLE 2: Secondary families of outcomes

Notes: This table summarizes the variables included in each secondary outcome family. For the psychological well being index, there were some minor differences in the variables reported across the two follow-up survey rounds. In round two, four variables are not reported: fear of being exploited, a feeling of uselessness for others, a feeling of acceptance within the household, and a feeling of acceptance by other households. The first two variables linked to self-esteem / depression are replaced by two others: a binary variable for feeling depressed, and a binary variable for loss of interest in activities.

	(1) Control mean	(2) Traatmant maan	(3) Difference	(4) D-Valine	(5) M	(9)	6
Number of households	1081.475	926.847	-154.628	0.211	80		
Average household Size	(893.523) 3.864	(547.547) 3.913	(165.695) 0.049	0.734	80		
	(0.294)	(0.279)	(0.064)				
Percentage of males aged 18 years old and above	0.355 (0.024)	0.349 (0.023)	-0.006 (0.005)	0.337	80		
Percentage of females aged 18 years old and above	0.384	0.385	0.002	0.549	80		
Percentage of males aged 14-30 years old	(0.020) 0.129	(0.020) 0.131	(0.004) 0.001	0.831	80		
Percentage of females aged 14-30 years old	(0.014) 0.132	(0.014) 0.135	(0.003) 0.003	0.639	80		
Unemployment rate (age 15 and above)	(0.019) 0.266	(0.020) 0.275	(0.004) 0.009	0.734	80		
Illiteracy rate (age 10 and above)	(0.119) 0.397	(0.098) 0.409	(0.024) 0.011	0.936	80		
Percentage of household heads: no education	(0.139) 0.530	(0.112) 0.554	(0.028) 0.024	0.723	80		
Percentage of household heads: primary educ.	(0.192) 0.292	(0.155) 0.314	(0.039) 0.022	0.258	80		
Deventage of household heads, secondary or higher educ	(0.095) 0.178	(0.090)	(0.021) -0.047	0 143	80		
rescentage of mousemout neads. Secondary of migner educ.	0.178	(0.101)	(0.028)	C#110	00		
Previous PWP	0.350 (0.483)	0.475 (0.506)	0.125 (0.111)	0.280	80		
Panel B: Balance in time-invariant household covariates (rep	orted in round one, 2016						
	Treatment villages Treated	Treatment villages Untreated	Control villages	Within: Offered emp. vs. spillovers	Between: Offered emp. vs. control	Spillovers: Spillovers vs. control	Z
	Mean	Mean	Mean	p-value	p-value	p-value	
Age	41.472	40.772	41.522	0.904	0.293	0.273	2718
Female	0.550	0.557	0.497	0.064*	0.824	0.103	2718
	(0.498)	(0.500)	(0.497)	0			0120
Matrieu	0.703	(0.463)	(0.478)	600.0	771.0	1.20 <del>1</del>	01/7
No education	0.617	0.592	0.600	0.534	0.684	0.798	2718
No primary education	0.617	0.592	0.600	0.534	0.684	0.798	2718
Worked more than three months in 2013	(0.486) 0.084	(0.490) 0.072	(0.492) 0.057	0.055*	0.292	0.561	2718
	(0.278)	(0.233)	(0.258)				
Born in the village	0.858 (0.349)	0.826 (0.346)	0.861 (0.379)	0.856	0.204	0.255	2718
Born outside the governorate	0.113	0.142	0.111	0.932	0.185	0.212	2718
	(0.316)	(0.315)	(0.350)				

TABLE 3: Balance across treatment and control arms

objury treatment variable. In Fands we ports the mean of a time-invariant household covariate measured in the first follow-up survey for households in the predited arm, the p-values reported correspond to pairwise tests comparing accords the three subsamples of interst (treated individuals in treated villages, and untreated individuals in control communities). All specifications use strata fixed effects and standard errors are clustered at the village level. \*\*p-0.01, \*\* p-0.05, \* p-0.01, \*\* p-0.05, \* p-0.01, \*\* p-0.05, \* p-0.01, \*\* p-0.05, \* p-0.01, \*\* p

		Across	villages			Spill	overs			Within	villages	
	(1)	(2)	(3)	(4)	(5)	(9)	6	(8)	(6)	(10)	(11)	(12)
	T-C	SE	p-value	Z	T-C	SE	p-value	Z	T-C	SE	p-value	Z
			(FDR-adj)				(FDR-adj)				(FDR-adj)	
imary Outcomes												
abor market of the main respondent	0.277***	0.089	0.003	2126	0.319***	0.080	0.000	1386	-0.013	0.049	0.789	1924
			(0.010)				(0.001)				(0.790)	
abor market of the household	0.243***	0.082	0.004	2124	0.308***	0.075	0.000	1385	-0.037	0.048	0.447	1921
	***570 0	200.0	(0.010)	7010	**7000	0 111	(0.001)	2001	670.0	0.050	(0.514) 0.200	1001
ouisminpiroti experiminates	107.0	160.0	(0.014)	0717	077.0	111.0	0.082)	0001	0100	000.0	0.514)	1744
ssets owning	$0.436^{***}$	0.114	0.000	2126	0.368***	0.123	0.004	1386	0.037	0.050	0.467	1924
			(0.002)				(0.010)				(0.514)	
nancial inclusion	$0.280^{**}$	0.107	0.010	2126	0.084	0.095	0.376	1386	$0.116^{**}$	0.050	0.020	1924
			(0.015)				(0.591)				(0.221)	
uman capital	0.087	0.073	0.235	2126	0.022	0.086	0.799	1386	0.061	0.050	0.227	1924
			(0.287)				(0.879)				(0.514)	
econdary Outcomes												
oping mechanisms	0.009	0.114	0.938	467	-0.072	0.122	0.556	251	0.113	0.106	0.288	462
			(0:939)				(0.680)				(0.514)	
ocial cohesion	0.047	0.068	0.486	2126	0.003	0.067	0.960	1386	0.055	0.056	0.322	1924
			(0.535)				(0.960)				(0.514)	
ivic engagement	$0.284^{***}$	0.098	0.005	2126	0.319***	0.110	0.005	1386	-0.036	0.049	0.463	1924
			(0.010)				(0.011)				(0.514)	
sychological well being	0.288***	0.072	0.000	2125	0.327***	0.081	0.000	1386	-0.046	0.050	0.359	1923
			(0.002)				(0.001)				(0.514)	
'omen's empowerment and agency	0.268***	0.094	0.005	1162	0.100	0.126	0.429	723	0.125*	0.069	0.071	1015
			(0.010)				(0.591)				(0.392)	

TABLE 4: Estimated treatment effects: Round one

spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All specifications include strata fixed effects and standard errors clustered at the village level. FRD q-values are calculated according to Anderson (2008). \*\*\*p-0.01, \*\* p-0.00, \* p-0.10

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TABLE

		Ą	Across villag	sə				Spillovers				Δ	Vithin villag	ses	
	(1) T-C	(2) SE	(3) p-value	(4) N	(5) R2=R1	(6) T-C	(7) SF	(8) p-value	(6) N	(10) R2=R1	(11) T-C	(12) SE	(13) p-value	(14) N	(15) R2=R1
	)	2	L	1		)	5	L and	1		)	2	L and	•	
			(FDR-adj)		(FDR-adj)			(FDR-adj)		(FDR-adj)			(FDR-adj)		(FDR-adj)
Primary Outcomes															
Labor market of the main respondent	-0.027	0.061	0.662	1748	(0.001)	0.00	0.066	0.896	1131	(0.001)	-0.041	0.056	0.464	1491	(0.682)
Labor market of the household	-0.087	0.056	(0.929) 0.124	1748	(0000)	-0.054	0.059	(0.896) 0.366	1131	(0000)	-0.026	0.057	(0.936) 0.648	1491	(0.878)
;			(0.419)					(968.0)					(0.936)		
Consumption expenditures	0.258**	0.113	0.026	1748	(0.985)	0.290**	0.125	0.023	1131	(0.713)	-0.014	0.056	0.797	1491	(0.427)
Assets owning	0.303***	0.084	(791.0) 0.001	1748	(0.210)	0.271***	0.087	(0.003) 0.003	1131	(0.429)	0.001	0.057	(0.985) 0.985	1491	(0.556)
)			(0.007)					(0.034)					(0.985)		
Financial inclusion	0.004	0.071	0.956	1748	(0.021)	0.014	0.075	0.852	1131	(0.570)	0.006	0.058	0.915	1491	(0.188)
			(1.000)					(0.896)					(0.985)		
Human capital	0.111	0.082	0.181	1748	(0.826)	0.048	0.085	0.572	1131	(0.820)	0.049	0.058	0.393	1491	(0.846)
			(0.472)					(0.896)					(0.936)		
Secondary Outcomes															
Coping mechanisms	0.000	0.120	1.000	438	(0.957)	-0.054	0.142	0.705	253	(0.926)	0.053	0.113	0.638	397	(0.703)
			(1.000)					(0.896)					(0.936)		
Social cohesion	0.055	0.106	0.604	1748	(0.943)	0.032	0.102	0.754	1131	(0.815)	0.036	0.055	0.508	1491	(0.829)
			(0.929)					(0.896)					(0.936)		
Civic engagement	0.127	0.083	0.129	1748	(0.239)	0.074	0.088	0.402	1131	(0.100)	0.040	0.056	0.477	1491	(0.347)
			(0.419)					(0.896)					(0:936)		
Psychological well being	0.034	0.084	0.691	1748	(0.007)	0.069	060.0	0.442	1131	(0.022)	-0.035	0.057	0.539	1491	(0.887)
			(0.929)					(0.896)					(0:936)		
Women's empowerment and agency	-0.069	0.074	0.359	1074	(0.001)	-0.017	0.083	0.834	655	(0.415)	-0.041	0.072	0.565	951	(0.047)
			(0.778)					(0.896)					(0.936)		
Notes: The table presents the primary treatment effects	s for the outc	omes of inte	test in the secor	n-wolloh pu	o survev, for the	between-vil	age compar	ison of eligible	treated ind	ividuals vis-a-v	is control v	illage indivi	iduals; the spill	over compa	rison of eligible

untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All specifications include strata fixed effects and standard errors clustered at the village level. FRD q-values are calculated according to Anderson (2008). The columns denoted R2=R1 reports the p-values corresponding to the estimated coefficients for the same outcomes counded. \*p-c0.01, \*p-c0.05, \*p-c0.10,

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# Appendix A Outcome families reported

In this section, we provide a brief overview of any differences in the outcome families analyzed vis-a-vis the pre-analysis plan that was pre-registered, and as relevant, also note any differences in outcome variables comparing across the first and second followup survey rounds. It is important to note that the original PAP also specified that any outcome variable for which 95% or more of the sample provided the same response would be excluded from the analysis, a rule that has been consistently employed here.

Two outcome families included in the originally registered PAP were completely dropped as it was subsequently identified that there was no plausible channel for the intervention to target those outcomes: shocks, and access to basic services. Provision of public works employment would not alter households' exposure to economic and non-economic shocks (though it might alter their response to those shocks, as captured in the variables linked to coping mechanisms), and similarly would not alter their access to health or education services. In addition, one outcome family (intimate partner violence) is omitted from this analysis as it will be reported in a separate paper.

For labor market outcomes, there were five potentially relevant outcome families originally described in the pre-analysis plan (wage employment, other employment, non-agricultural enterprise, other farming activities, and employment and income by other household members). Two of these pre-specified outcome families had insufficient variation to be analyzed (other employment, and non-agricultural enterprise), and the detailed module on farming activities was collected only in the second follow-up survey round. Accordingly, for concision we have collapsed these to two outcome families: respondent labor market outcomes and household labor market outcomes. We also report only the binary variables, rather than the binary and continuous variables.

For consumption, food and non-food consumption have been combined, and there are no other differences vis-a-vis the pre-analysis plan. For assets, there are no difference vis-a-vis the pre-analysis plan. For financial inclusion, this outcome family was originally named debt and savings index. Two of the pre-specified variables (saved money in the last three months, and total amount of savings) were combined into a slightly different question (total money saved over the last 12 months). Two additional questions around debt were added (contracted any debt over the last 12 months, and amount of debt over the last two months).

For human capital, two variables from the originally specified set of outcomes were omitted because there was no plausible channel for the intervention to target these outcomes: literacy of the main respondent, and education level of the main respondent. Given the age of the respondents, they had plausibly completed their educational trajectory considerably prior to the intervention launch.

For coping mechanisms, there are no differences vis-a-vis the pre-analysis plan other than that some mechanisms were aggregated up to generate seven variables instead of five. For social cohesion, the only difference vis-a-vis the pre-analysis plan is that migration has been excluded, to be reported in a separate paper; inter-personal trust has also been more appropriately re-named violent conflict. For civic engagement, there are no difference vis-a-vis the pre-analysis plan, but "political isolation" has been more appropriately renamed "political inclusion."

For psychological well-being, there are no differences vis-a-vis the pre-analysis plan in round one. In round two, four variables are not reported: fear of being exploited, a feeling of uselessness for others, a feeling of acceptance within the household, and a feeling of acceptance by other households. The first two variables linked to self-esteem / depression are replaced by two others: a binary variable for feeling depressed, and a binary variable for loss of interest in activities.

For women's empowerment and agency, four of the seven variables are reported; the remaining three had an insufficient level of variation.

The designation of primary and secondary outcome families is consistent with the PAP, except that the coping mechanisms outcomes are re-designated as secondary.



FIGURE A1: Study Locations

FIGURE A1: Timeline of the projects



T-C	SE	p-value					opundo					VITIUU VILLAB	6	
		4	Z	R2=R1	Τ.C	SE	p-value	z	R2=R1	ΓC	SE	p-value	z	R2=R1
		(FDR-adj)		(FDR-adj)			(FDR-adj)		(FDR-adj)			(FDR-adj)		(FDR-adj)
Panel A: Tunisia Round 1														
Primary Outcomes														
Labor market of the main respondent 0.262***	0.074	0.001	2098		0.290***	0.071	0.000	1364		0.015	0.046	0.735	1896	
Labor market of the household 0.241***	0.072	0.001	2096		0.309***	0.067	(100.0)	1363		-0.040	0.047	0.403	1893	
Consumption expenditures 0.207**	0.092	0.027	2098		$0.183^{*}$	0.108	(100.0)	1364		0.002	0.050	0.972	1896	
Assets owning 0.411***	0.105	00000	2098		0.362***	0.114	0.002	1364		0.043	0.049	0.381	1896	
Financial inclusion 0.289***	0.105	0.003	2098		0.075	0.096	(cnuc) 0.436	1364		0.083	0.051	(0.634) 0.103 0.733	1896	
Human capital 0.106*	0.064	0.100	2098		0.027	0.078	0.727	1364		0.056	0.048	(0.542) 0.246 (0.542)	1896	
Secondary Outcomes		(					(000-0)					(71.00)		
Coping mechanisms 0.073	0.116	0.532	458		0.018	0.123	0.887	242		0.145	0.105	0.170	452	
Social cohesion 0.040	0.068	0.560	2098		-0.026	0.070	0.718	1364		0.073	0.059	0.212	1896	
Civic engagement 0.285***	0.092	0.003	2098		0.321***	0.100	0.002	1364		0.004	0.049	0.936	1896	
Psychological well being 0.271***	0.074	(2000) 000000	2098		0.311***	0.085	(con.o)	1364		-0.010	0.051	0.844	1896	
Women's empowerment and agency 0.294***	0.095	0.003	1157		0.155	0.125	0.221	720		0.086	0.071	0.226	1009	
Panel B: Tunisia Round 2		(<00.0)					(0.348)					(0.542)		
Primary Outcomes														
Labor market of the main respondent         0.033	0.051	0.519	1729	(0.011)	0.062	0.059	0.292	1117	(0.012)	-0.016	0.053	0.768	1474	(0.872)
Labor market of the household -0.062	0.054	0.256	1729	(0.001)	-0.016	0.056	(c.0900) 0.774 0.774	1117	(0.001)	-0.021	0.056	0.714	1474	(0.600)
Consumption expenditures 0.239**	0.110	(0.0666) 0.033	1729	(0.897)	0.306**	0.125	(609.0) 0.017	1117	(0.596)	-0.028	0.055	0.616	1474	(0.376)
Assets owning 0.294***	0.080	0.000	1729	(0.091)	0.271***	0.082	0.0110)	1117	(0.274)	0.000	0.057	(606.0) 0.998	1474	(0.456)
Financial inclusion 0.025	0.074	0.737	1729	(0.029)	0.012	0.075	(0.020) 0.869 0.865	1117	(0.619)	0.018	0.059	0.763	1474	(0.224)
Human capital 0.118	0.079	0.137	1729	(0.931)	0.051	0.082	0.533	1117	(0.860)	0.055	0.057	0.334	1474	(0.761)
Secondary Outcomes		(U. <del>11</del> /)					(cn6.0)					(606.0)		
Coping mechanisms 0.034	0.114	0.764	436	(0.893)	-0.018	0.146	0.900	249	(0.865)	0.060	0.113	0.595	391	(0.686)
Social cohesion 0.033	0.110	(1.651) 0.767 0.267	1729	(0.933)	0.014	0.117	0.905)	1117	(0.816)	0.036	0.055	0.512	1474	(0.837)
Civic engagement 0.131	0.083	0.117	1729	(0.225)	0.072	0.087	0.412	1117	(0.067)	0.042	0.055	0.439	1474	(0.325)
Psychological well being 0.048	0.084	0.571	1729	(0.007)	0.088	0.089	0.327	1117	(0.030)	-0.030	0.056	0.594	1474	(906.0)
Women's empowerment and agency	0.072	(0.831) (0.831)	1062	(0.002)	0.030	0.083	(0.905) 0.721 (0.905)	645	(0.354)	-0.057	0.072	(0.909) 0.428 (0.909)	939	(0.100)

TABLE A1: Estimated treatment effects conditional on time-invariant covariates

			0	2				spillovers				-	Vitnin Viluag	22	
I	1-C	SE	p-value	z	R2=R1	1-C	SE	p-value	z	R2=R1	4C	SE	p-value	z	R2=R1
			(FDR-adj)		(FDR-adj)			(FDR-adj)		(FDR-adj)			(FDR-adj)		(FDR-adj)
Panel A: Tunisia Round 1															
Primary Outcomes															
Labor market of the main respondent	0.237***	0.088	0.009	2125		0.263***	0.091	0.005	1384		0.035	0.052	0.499	1921	
Labor market of the household	0.227***	0.083	0.008	2123		0.309***	0.080	(910-0) 0000-0	1383		-0.018	0.051	0.730	1918	
Consumption expenditures	0.308***	0.099	0.003	2125		0.354**	0.135	0.010	1384		-0.041	0.054	(0.75)	1921	
Assets owning	0.463***	0.122	0.000	2125		0.474***	0.135	0.001	1384		-0.015	0.053	0.778	1921	
Financial inclusion	0.341***	0.113	0.004)	2125		0.212*	0.124	(c00.0) 060.0	1384		0.061	0.053	0.253	1921	
Human capital	0.065	0.074	0.380 0.380	2125		0.045	0.092	0.631	1384		0.086	0.054	0.112	1921	
Secondary Outcomes			(001-0)					(=<0.0)					( 100.0)		
Coping mechanisms	0.006	0.121	0960	467		-0.159	0.141	0.265	250		0.147	0.111	0.186	461	
Social cohesion	0.046	0.075	0.547	2125		-0.002	0.097	(0.324) 0.984 (0.067)	1384		0.049	0.061	(0.687) 0.423	1921	
Civic engagement	0.278***	0.102	0.008	2125		0.351***	0.123	0.006	1384		-0.028	0.052	0.592	1921	
Psychological well being	0.264***	0.086	0.003	2124		0.293**	0.126	0.023	1384		0.039	0.053	0.460	1920	
Women's empowerment and agency	0.276***	0.095	0.005	1162		0.216	0.144	(0.137)	723		0.092	0.075	0.219	1015	
Panel B: Tunisia Round 2			(110.0)					(061.0)					(700.0)		
Primary Outcomes															
Labor market of the main respondent	-0.027	0.061	0.662	1748	(0.003)	0.00	0.066	0.896	1131	(0.007)	-0.041	0.056	0.464	1491	(0.307)
Labor market of the household	-0.087	0.056	0.124	1748	(0.001)	-0.054	0.059	0.366	1131	(0.000)	-0.026	0.057	0.648	1491	(0.946)
Consumption expenditures	0.258**	0.113	0.026	1748	(0.725)	0.290**	0.125	0.023	1131	(0.724)	-0.014	0.056	0.797	1491	(0.708)
Assets owning	0.303***	0.084	0.001	1748	(0.138)	0.271***	0.087	0.003	1131	(0.114)	0.001	0.057	(0.985) 0.985 0.985	1491	(0.782)
Financial inclusion	0.004	0.071	0.956	1748	(0.008)	0.014	0.075	(0.034) 0.852	1131	(0.179)	0.006	0.058	(0.985) 0.915 0.085	1491	(0.504)
Human capital	0.111	0.082	0.181	1748	(0.683)	0.048	0.085	0.572	1131	(0.976)	0.049	0.058	0.393	1491	(0.571)
Secondary Outcomes			(0.472)					(060·N)					(066.N)		
Coping mechanisms	0.000	0.120	1.000	438	(0.971)	-0.054	0.142	0.705	253	(0.606)	0.053	0.113	0.638	397	(0.548)
Social cohesion	0.055	0.106	0.604	1748	(0.933)	0.032	0.102	0.754	1131	(0.813)	0.036	0.055	0.508	1491	(0.891)
Civic engagement	0.127	0.083	0.129	1748	(0.264)	0.074	0.088	0.402	1131	(0.081)	0.040	0.056	0.477	1491	(0.434)
Psychological well being	0.034	0.084	(0.419) 0.691	1748	(0.030)	0.069	060.0	0.442	1131	(0.110)	-0.035	0.057	0.539	1491	(0.344)
Women's empowerment and agency	-0.069	0.074	(0.359 0.359 (0.778)	1074	(0.001)	-0.017	0.083	(0.896) 0.834 (0.896)	655	(0.118)	-0.041	0.072	(0.936) 0.565 (0.936)	951	(0.117)

TABLE A2: Estimated treatment effects including control for survey period

			Between					Within		
	β	Factor	$\beta$ x Factor	P-value	N	β	Factor	$\beta$ x Factor	P-value	e N
Panel A: Tunisia Round 1										
Primary Outcomes										
Labor market of the main respondent	0.282**	-0.853***	-0.017	(0.902)	2126	0.040	-0.720***	-0.019	(0.836)	1924
Labor market of the household	(0.140) 0.288**	(0.114) -0.324***	(0.140) -0.086	(0.551)	2124	(0.075) -0.083	(0.075) -0.428***	(0.091) 0.130	(0.169)	1921
Consumption expanditures	(0.142)	(0.107)	(0.143)	(0.486)	2126	(0.084)	(0.079) -0 149*	(0.095)	(0.295)	1974
consumption experiancies	(0.126)	(0.071)	(0.114)	(0.400)	2120	(0.076)	(0.081)	(0.100)	(0.293)	1724
Assets owning	0.385*** (0.111)	-0.086	0.092	(0.507)	2126	0.007	-0.066 (0.080)	0.060	(0.545)	1924
Financial inclusion	0.240*	-0.162**	0.073	(0.595)	2126	0.107	-0.161**	0.035	(0.725)	1924
Human capital	(0.124) 0.084	(0.073) -0.294***	(0.137) 0.003	(0.973)	2126	(0.074) 0.066	(0.082) -0.325***	(0.100) 0.024	(0.806)	1924
- Sacondary Outcomac	(0.098)	(0.067)	(0.098)			(0.076)	(0.080)	(0.099)		
Secondary Outcomes										
Coping mechanisms	-0.021	-0.007	0.052	(0.834)	467	0.260	0.334*	-0.276	(0.196)	462
Social cohesion	(0.152)	(0.215)	(0.245) 0.039	(0.725)	2126	(0.161)	(0.179)	-0.023	(0.840)	1924
Social concision	(0.089)	(0.084)	(0.111)	(0.720)	2120	(0.083)	(0.083)	(0.112)	(0.010)	1/21
Civic engagement	0.258**	-0.195**	0.046	(0.676)	2126	-0.089	-0.257***	0.126	(0.198)	1924
	(0.117)	(0.091)	(0.111)			(0.070)	(0.081)	(0.098)		
Psychological well being	0.175**	-0.244***	0.205**	(0.035)	2125	-0.082	-0.131	0.080	(0.425)	1923
	(0.085)	(0.081)	(0.096)	~		(0.068)	(0.082)	(0.100)		
Women's empowerment and agency	0.268***	0.000	0.000	(.)	1162	0.125*	0.000	0.000	(.)	1015
Panel B: Tunisia Round 2	(0.094)	(0.000)	(0.000)			(0.069)	(0.000)	(0.000)		
Primary Outcomes										
Labor market of the main respondent	0.000	-0.662***	0.048	(0.622)	1748	-0.029	-0.650***	0.023	(0.844)	1491
	(0.084)	(0.070)	(0.097)	(0.0(4)	1740	(0.101)	(0.099)	(0.117)	(0.005)	1 401
Labor market of the household	-0.071	-0.221***	0.005	(0.964)	1748	-0.001	-0.186*	-0.027	(0.825)	1491
Consumption expenditures	(0.091)	-0.267***	0.100)	(0.103)	1748	(0.104) =0.106	(0.102) =0.169*	0.123)	(0 195)	1491
consumption experientales	(0.143)	(0.083)	(0.147)	(0.100)	17 10	(0.095)	(0.099)	(0.132	(0.170)	11/1
Assets owning	0.315***	0.027	-0.021	(0.857)	1748	-0.019	-0.030	0.033	(0.784)	1491
0	(0.102)	(0.089)	(0.119)	. ,		(0.096)	(0.099)	(0.119)	. ,	
Financial inclusion	-0.009	-0.219***	0.050	(0.661)	1748	0.198**	0.114	-0.302**	(0.013)	1491
	(0.116)	(0.075)	(0.113)			(0.096)	(0.095)	(0.122)		
Human capital	0.066	0.123	0.052	(0.672)	1748	0.083	0.205**	-0.065	(0.539)	1491
Secondary Outcomes	(0.066)	(0.085)	(0.122)			(0.067)	(0.087)	(0.106)		
Coping mechanisms	0.092	-0.034	-0.128	(0.534)	438	0.191	0.027	-0.198	(0.445)	397
	(0.178)	(0.158)	(0.205)	()		(0.222)	(0.229)	(0.259)	(	
Social cohesion	0.062	0.015	-0.012	(0.885)	1748	-0.017	-0.080	0.087	(0.464)	1491
	(0.111)	(0.057)	(0.082)			(0.101)	(0.101)	(0.119)		
Civic engagement	0.044	-0.418***	0.185*	(0.074)	1748	0.012	-0.310***	0.063	(0.597)	1491
	(0.103)	(0.072)	(0.102)	<i>(</i> )		(0.099)	(0.101)	(0.118)	()	
Psychological well being	0.018	-0.209***	0.052	(0.564)	1748	-0.053	-0.213**	0.041	(0.722)	1491
Women's empowerment and agency	(0.092)	(0.072)	(0.089)	()	1074	(0.091)	(0.097)	(0.116)	()	951
moments empowerment and agency	(0.074)	(0.000)	(0,000)	(.)	1074	(0.072)	(0.000)	(0,000)	(.)	751
Antisocial behaviors	0.029	-0.088	-0.040	(0.702)	1748	0.089	-0.003	-0.131	(0.211)	1491
	(0.102)	(0.071)	(0.105)	. ,		(0.076)	(0.086)	(0.104)	. ,	
Prosocial behaviors	0.054	-0.110	-0.019	(0.878)	1748	0.214**	0.021	-0.194	(0.123)	1491
	(0.138)	(0.083)	(0.126)			(0.099)	(0.094)	(0.126)		

# TABLE A3: Heterogeneous effects with respect to gender

Notes: This table reports heterogeneous effects with respect to the gender of the sampled individual (denoted "factor" in the table). We report the between-village comparison of eligible treated individuals vis-a-vis control village individuals; and the within-village comparison of eligible treated and untreated individuals. All specifications include strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.10

			Between					Within		
	β	Factor	$\beta$ x Factor	P-value	N	β	Factor	$\beta$ x Factor	P-value	Ν
Panel A: Tunisia Round 1										
Primary Outcomes	_									
Labor market of the main respondent	0.304**	0.168	-0.091	(0.599)	2126	-0.090	-0.066	0.133	(0.185)	1924
	(0.118)	(0.131)	(0.172)			(0.078)	(0.085)	(0.100)		
Labor market of the household	0.247**	0.109	-0.037	(0.813)	2124	-0.120	-0.079	0.143	(0.151)	1921
	(0.108)	(0.120)	(0.156)			(0.079)	(0.085)	(0.099)		
Consumption expenditures	0.488***	0.390***	-0.496***	(0.007)	2126	0.074	-0.038	-0.053	(0.609)	1924
	(0.148)	(0.120)	(0.180)			(0.082)	(0.085)	(0.104)		
Assets owning	0.477***	0.317*	-0.156	(0.521)	2126	-0.075	-0.054	0.193*	(0.064)	1924
	(0.154)	(0.176)	(0.243)			(0.083)	(0.084)	(0.104)		
Financial inclusion	0.289*	-0.014	-0.011	(0.953)	2126	0.223***	0.127	-0.182*	(0.066)	1924
	(0.155)	(0.119)	(0.193)	(2.2.(2))		(0.072)	(0.080)	(0.099)	(0.140)	
Human capital	0.158*	0.161	-0.164	(0.268)	2126	0.104	0.062	-0.074	(0.466)	1924
Secondary Outcomes	(0.085)	(0.124)	(0.147)			(0.077)	(0.083)	(0.101)		
		0.01/	0.044	(0.500)		0.150	0.000	0.070	(0 50 ()	460
Coping mechanisms	0.053	-0.016	-0.066	(0.790)	467	0.159	0.002	-0.073	(0.734)	462
Control and and an	(0.193)	(0.191)	(0.246)	(0.052)	2126	(0.155)	(0.181)	(0.215)	(0.100)	1024
Social cohesion	0.039	0.020	0.008	(0.953)	2126	0.142*	0.183**	-0.148	(0.189)	1924
Civia an as som on t	(0.100)	(0.096)	(0.144)	(0, 200)	2126	(0.084)	(0.087)	(0.112)	(0.077)	1024
Civic engagement	(0.124)	(0.155)	-0.198	(0.299)	2120	-0.037	(0.082)	(0.003	(0.977)	1924
Paychological wall hoing	(0.154)	0.000	(0.190)	(0.100)	2125	(0.075)	(0.062)	(0.099)	(0.147)	1022
i sychological well beilig	(0.000)	(0.104)	(0.132)	(0.100)	2125	(0.080)	(0.084)	(0.143)	(0.147)	1923
Women's empewerment and acongy	0.205**	0.020	0.069	(0.600)	1162	(0.000)	0.060	0.006	(0.488)	1015
women's empowerment and agency	(0.132)	(0.105)	(0.171)	(0.050)	1102	(0.097)	(0.115)	(0.139)	(0.400)	1015
Panel B: Tunisia Round 2	(0.102)	(0.100)	(0.17.1)			(0.0577)	(0.110)	(01103)		
Primary Outcomes	_									
I abor market of the main respondent	-0.043	-0.059	0.043	(0.731)	1748	-0.052	-0.026	0.019	(0.870)	1491
Eabor market of the main respondent	(0.085)	(0.101)	(0.123)	(0.701)	17 10	(0.086)	(0.097)	(0.113)	(0.070)	11/1
Labor market of the household	-0.122	-0.068	0.079	(0.499)	1748	-0.066	-0.057	0.068	(0.560)	1491
	(0.084)	(0.092)	(0.116)	(0.0.7)		(0.092)	(0.099)	(0.117)	(0.000)	
Consumption expenditures	0.039	-0.186	0.426**	(0.045)	1748	0.059	0.312***	-0.115	(0.286)	1491
1 1	(0.158)	(0.138)	(0.210)	. ,		(0.075)	(0.093)	(0.108)	. /	
Assets owning	0.259**	0.009	0.075	(0.660)	1748	0.040	0.150	-0.061	(0.598)	1491
	(0.126)	(0.140)	(0.170)			(0.089)	(0.097)	(0.116)		
Financial inclusion	0.092	$0.174^{*}$	-0.196	(0.163)	1748	0.020	-0.014	-0.024	(0.836)	1491
	(0.090)	(0.098)	(0.139)			(0.088)	(0.096)	(0.118)		
Human capital	0.032	-0.105	0.163	(0.253)	1748	0.028	0.033	0.038	(0.748)	1491
Corrections Outcome	(0.104)	(0.106)	(0.142)			(0.091)	(0.099)	(0.118)		
Secondary Outcomes										
Coping mechanisms	0.095	0.177	-0.196	(0.403)	438	-0.046	-0.213	0.193	(0.400)	397
	(0.154)	(0.192)	(0.233)			(0.163)	(0.197)	(0.230)		
Social cohesion	0.086	0.271	-0.121	(0.611)	1748	-0.102	-0.073	0.238**	(0.041)	1491
	(0.076)	(0.214)	(0.237)			(0.094)	(0.102)	(0.116)		
Civic engagement	0.061	-0.011	0.119	(0.456)	1748	0.022	0.078	0.034	(0.763)	1491
	(0.111)	(0.112)	(0.159)			(0.083)	(0.096)	(0.111)	·	
Psychological well being	-0.078	-0.222*	0.249	(0.131)	1748	-0.015	0.065	-0.031	(0.789)	1491
	(0.126)	(0.129)	(0.163)	(0.005)		(0.089)	(0.098)	(0.115)	(0.005)	0.54
women's empowerment and agency	-0.060	-0.110	0.013	(0.935)	1074	0.060	0.070	-0.174	(0.228)	951
	(0.107)	(0.119)	(0.154)			(0.109)	(0.121)	(0.144)		

# TABLE A4: Heterogeneous effects with respect to local unemployment rate

Notes: This table reports heterogeneous effects with respect to the local village-level unemployment rate as reported in the 2014 population census (denoted "factor" in the table). We report the between-village comparison of eligible treated individuals vis-a-vis control village individuals; and the within-village comparison of eligible treated and untreated individuals. All specifications include strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

TABLE A5:	Heterogeneous	effects	with	respect	to	local	mean	probability	of	economic
shocks										

			Between					Within		
	β	Factor	$\beta$ x Factor	P-value	N	β	Factor	$\beta$ x Factor	P-value	N
Panel A: Tunisia Round 1										
Primary Outcomes										
Labor market of the main respondent	0.278***	0.249*	-0.110	(0.539)	2126	-0.140*	-0.102	0.202**	(0.046)	1924
Labor market of the household	(0.099) 0.220**	(0.142) 0.243*	(0.178) -0.072	(0.670)	2124	(0.080) -0.189**	(0.085) -0.101	(0.101) 0.241**	(0.018)	1921
	(0.090)	(0.134)	(0.169)	()		(0.083)	(0.088)	(0.102)	(,	
Consumption expenditures	0.360***	0.179	-0.232	(0.231)	2126	0.080	0.011	-0.058	(0.562)	1924
	(0.132)	(0.143)	(0.192)			(0.074)	(0.081)	(0.100)		
Assets owning	0.414**	0.154	-0.035	(0.890)	2126	-0.112	-0.138	0.235**	(0.031)	1924
Financial inclusion	(0.183)	(0.179)	(0.253)	(0 559)	2126	(0.092)	(0.090)	(0.109)	(0.002)	1024
Financial inclusion	(0.113)	(0.128)	(0.187)	(0.556)	2120	(0.078)	(0.041	-0.012	(0.903)	1924
Human capital	0.048	0.084	0.023	(0.880)	2126	0.069	0.108	-0.013	(0.898)	1924
Tunian cupitai	(0.069)	(0.132)	(0.149)	(0.000)	2120	(0.076)	(0.082)	(0.101)	(0.050)	1721
Secondary Outcomes	(0.0007)	(01101)	(01-17)			(0.01.0)	(0.00-)	(01202)		
Coping mechanisms	0.060	0.283	-0.120	(0.603)	467	0.030	0.084	0.103	(0.713)	462
1 0	(0.171)	(0.184)	(0.230)	. ,		(0.253)	(0.244)	(0.280)	. ,	
Social cohesion	0.153	0.171*	-0.237	(0.109)	2126	0.009	-0.101	0.074	(0.481)	1924
	(0.106)	(0.090)	(0.146)			(0.071)	(0.080)	(0.105)		
Civic engagement	0.364***	0.492***	-0.339*	(0.069)	2126	-0.180**	-0.089	0.229**	(0.026)	1924
	(0.129)	(0.146)	(0.184)			(0.083)	(0.086)	(0.102)		
Psychological well being	0.299***	0.044	-0.036	(0.785)	2125	-0.051	0.009	0.007	(0.946)	1923
	(0.098)	(0.100)	(0.132)			(0.086)	(0.087)	(0.106)		
Women's empowerment and agency	0.172	0.110	0.099	(0.550)	1162	0.174**	0.219**	-0.067	(0.593)	1015
Panel B: Tunisia Round 2	(0.124)	(0.100)	(0.165)			(0.082)	(0.100)	(0.126)		
Primary Outcomes										
	-									
Labor market of the main respondent	-0.043	0.128	-0.032	(0.800)	1748	-0.031	0.110	-0.018	(0.870)	1491
	(0.087)	(0.101)	(0.124)			(0.084)	(0.095)	(0.112)		
Labor market of the household	-0.089	0.015	-0.003	(0.981)	1748	0.064	0.153	-0.144	(0.205)	1491
Community and the second strength	(0.083)	(0.096)	(0.120)	(0.227)	17740	(0.086)	(0.095)	(0.114)	(0.41()	1401
Consumption expenditures	0.094	0.084	0.214	(0.327)	1748	0.036	(0.027***	-0.086	(0.416)	1491
A seats symptom	0.146)	(0.149)	(0.217)	(0.221)	1740	(0.073)	(0.069)	(0.108)	(0 EE1)	1401
Assets owning	(0.120)	-0.008	(0.172)	(0.331)	1740	(0.044	(0.000	(0.115)	(0.551)	1491
Financial inclusion	0.003	0.184*	-0.079	(0.588)	1748	-0.014	0.078	0.030	(0.807)	1491
	(0.106)	(0.099)	(0.146)	(0.000)		(0.096)	(0.100)	(0.121)	(0.001)	
Human capital	-0.046	-0.131	0.299**	(0.024)	1748	0.087	0.222***	-0.065	(0.538)	1491
*	(0.095)	(0.098)	(0.130)	. ,		(0.065)	(0.085)	(0.105)	. ,	
Secondary Outcomes										
Coping mechanisms	0.094	0.343*	-0.310	(0.187)	438	-0.073	-0.164	0.186	(0.443)	397
1 0	(0.161)	(0.188)	(0.233)			(0.199)	(0.208)	(0.243)		
Social cohesion	0.131	0.163	-0.188	(0.462)	1748	0.026	-0.080	0.018	(0.866)	1491
	(0.091)	(0.222)	(0.254)			(0.078)	(0.089)	(0.108)		
Civic engagement	0.258**	0.025	-0.211	(0.186)	1748	0.016	-0.246**	0.042	(0.723)	1491
	(0.115)	(0.111)	(0.158)			(0.097)	(0.102)	(0.117)		
Psychological well being	0.141	0.032	-0.179	(0.320)	1748	-0.009	-0.097	-0.039	(0.744)	1491
	(0.113)	(0.151)	(0.178)	(0.4 <b>=</b> ()	407	(0.099)	(0.103)	(0.120)	(0.075)	0.54
Women's empowerment and agency	0.005	0.230*	-0.228	(0.154)	1074	0.067	0.166	-0.163	(0.277)	951
	(0.115)	(0.118)	(0.158)			(0.121)	(0.128)	(0.150)		

Notes: This table reports heterogeneous effects with respect to the local prevalence of adverse shocks over the past year as reported in the first follow-up survey round conducted in 2016 (denoted "factor" in the table). We report the between-village comparison of eligible treated individuals vis-a-vis control village individuals; and the within-village comparison of eligible treated and untreated individuals. All specifications include strata fixed effects and standard errors clustered at the village level.

# TABLE A6: Lee bounds for estimated treatment coefficients in round one

			Betv	veen					Spille	overs					Wit	hin		
	lower	p-value	upper	p-value	e N	N selected	lower	p-value	upper	p-value	Ν	N selected	lower	p-value	upper	p-value	Ν	N selected
Labor market of the main respondent	: 0.150*** (0.055)	0.006	0.614***	0.000	2474	2122	-0.286 (0.074)	0.542	0.113***	0.000	1663	1385	-0.286***	0.000	0.113*	0.054	2537	1919
Labor market of the household	0.148***	0.008	(0.657*** (0.040)	0.000	2474	2120	-0.402 (2.716)	0.961	0.052***	0.000	1663	1384	-0.402*** (0.050)	0.000	0.052	0.336	2537	1916
Consumption expenditures	-0.028	0.645	0.655*** (0.049)	0.000	2474	2122	-0.255*** (0.073)	0.003	0.239***	0.000	1663	1385	-0.255*** (0.065)	0.000	0.239***	0.000	2537	1919
Assets owning	0.123**	0.023	(0.769*** (0.049)	0.000	2474	2122	-0.248	0.133	0.286***	0.000	1663	1385	-0.248*** (0.067)	0.000	0.286***	0.000	2537	1919
Financial inclusion	0.023	0.757	0.566***	0.000	2474	2122	-0.096***	0.001	0.262***	0.000	1663	1385	-0.096	0.116	0.262***	0.000	2537	1919
Human capital	-0.082	0.143	(0.002) 0.458*** (0.045)	0.000	2474	2122	-0.273*** (0.070)	0.000	(0.070) 0.170*** (0.054)	0.000	1663	1385	-0.273*** (0.068)	0.000	0.170***	0.004	2537	1919
Coping mechanisms	-0.320	0.105	(0.040) 0.406* (0.210)	0.053	2474	466	-0.278 (0.209)	0.171	0.636	0.683	1663	251	-0.278* (0.147)	0.058	(0.050) 0.636*** (0.164)	0.000	2537	461
Social cohesion	-4.391		0.159		2474	2122	-3.463		0.179		1663	1385	-3.463 (11.152)	0.756	(0.101) 0.179 (3.658)	0.961	2537	1919
Civic engagement	-0.043	0.408	(.) 0.617***	0.000	2474	2122	(.) -0.247***	0.003	(.) 0.185***	0.000	1663	1385	-0.247*** (0.063)	0.000	(0.050) 0.185*** (0.062)	0.003	2537	1919
Psychological well being	-0.058	0.220	(0.051) 0.624*** (0.054)	0.000	2474	2121	-0.280*** (0.057)	0.003	(0.005)	0.000	1663	1385	-0.280***	0.000	(0.002) 0.247*** (0.062)	0.000	2537	1918
Women's empowerment and agency	(0.047) 0.128 (0.087)	0.140	(0.054) 0.458*** (0.066)	0.000	1294	1164	-0.037* (0.116)	0.074	(0.003) 0.227*** (0.097)	0.000	832	724	-0.037 (0.111)	0.741	(0.002) 0.227*** (0.079)	0.004	1248	1018

Notes: This table reports the results of bounds on the estimated treatment effects in the first follow-up survey conducted one years post-treatment, allowing for differential selection into the survey sample, constructed following Lee (2009). \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

TABLE A7: Predictors of attrition between the first and second follow-up rour	nds
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	Covariate	Treated	Interaction	N
Age	-0.002**	0.040	0.000	2718
0	(0.001)	(0.061)	(0.001)	
Female	-0.159***	0.116***	-0.161***	2718
	(0.026)	(0.029)	(0.033)	
Married	-0.101***	0.031	-0.006	2718
	(0.025)	(0.030)	(0.037)	
No education	-0.068***	0.043	-0.028	2718
	(0.025)	(0.028)	(0.030)	
Worked more than three months in 2013	0.026	0.012	$0.144^{*}$	2718
	(0.052)	(0.016)	(0.082)	
Born in the village	0.044	-0.043	0.077**	2718
	(0.027)	(0.032)	(0.037)	
Born outside the governorate	-0.055*	0.029	-0.047	2718
	(0.029)	(0.019)	(0.040)	

Notes: Each row reports the results of running a regression in which a binary indicator for attrition in the second follow-up survey round is regressed on the covariate of interest, the treatment indicator, and the interaction between covariate and treatment. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

## TABLE A8: Lee bounds for estimated treatment coefficients in round two

			Betw	een					Spillo	overs					Wit	hin		
	lower	p-value	upper	p-value	N	N selected	lower	p-value	upper	p-value	Ν	N selected	lower	p-value	upper	p-value	N	N selected
Labor market of the main respondent	-0.106*	0.051	0.192**	0.013	2126	1748	-0.122*	0.069	0.359***	0.000	1386	1131	-0.222*	0.051	0.004	0.948	1924	1491
Labor market of the household	-0.150**	0.018	0.155***	0.007	2126	1748	-0.168**	0.013	(0.075) 0.286***	0.000	1386	1131	-0.204***	0.000	0.012	0.830	1924	1491
Consumption expenditures	0.118**	0.041	(0.038)	0.000	2126	1748	0.076	0.248	0.608***	0.000	1386	1131	-0.193**	0.027	0.071	0.301	1924	1491
Assets owning	(0.058) 0.106**	0.032	(0.063) 0.488***	0.000	2126	1748	(0.066) 0.008	0.916	(0.074) 0.559***	0.000	1386	1131	(0.087) -0.157**	0.038	(0.069) 0.144*	0.067	1924	1491
Financial inclusion	(0.049) -0.079	0.221	(0.058) 0.247***	0.000	2126	1748	(0.074) -0.135*	0.068	(0.059) 0.340***	0.000	1386	1131	(0.076) -0.197**	0.042	(0.079) 0.062	0.259	1924	1491
Social cohesion	(0.065) -1.835***	0.000	(0.068) 0.161***	0.000	2126	1748	(0.074) -1.873***	0.000	(0.066) 0.137***	0.008	1386	1131	(0.097) -0.081	0.200	(0.055) 3.218***	0.001	1924	1491
Civic engagement	(0.446) -0.194***	• 0.000	(0.034) 0.274***	0.000	2126	1748	(0.299) -0.232***	0.000	(0.052) 0.363***	0.000	1386	1131	(0.064) -0.146**	0.050	(0.999) 0.078	0.284	1924	1491
Psychological well being	(0.043) -0.140***	0.007	(0.043) 0.236***	0.001	2126	1748	(0.055) -0.188***	0.003	(0.065) 0.351***	0.000	1386	1131	(0.074) -0.169***	0.007	(0.073) 0.154**	0.044	1924	1491
Women's empowerment and agency	(0.052)	0.008	(0.072)	0.787	1174	1074	(0.062)	0 196	(0.061)	0.786	736	655	(0.063)	0 179	(0.077)	0.861	1026	951
women's empowerment and agency	(0.077)	0.008	(0.064)	0.707	11/4	10/4	(0.076)	0.190	(0.176)	0.700	750	000	(0.098)	0.179	(0.079)	0.001	1020	,51

Notes: This table reports the results of bounds on the estimated treatment effects in the first follow-up survey conducted one years post-treatment, allowing for differential selection into the survey sample, constructed following Lee (2009). \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

TABLE A9: Estimated treatment effects: respondent labor market outcomes (round one)

		Be	tween				Spi	llovers	6			I	Nithin		
	C Mean	T-C	p-value	C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	N		
Had an IGA last 4 weeks	0.091	0.079***	0.025	0.002	2123	0.091	0.096***	0.022	0.000	1384	0.178	-0.015	0.019	0.428	1921
				(0.007)					(0.001)					(0.680)	
Number of days work main IGA last 4 weeks	1.378	1.120**	0.440	0.013	2097	1.378	1.350***	0.391	0.001	1374	2.528	-0.134	0.325	0.680	1893
				(0.020)					(0.002)					(0.680)	
Looked for paid work in the last 30 day	0.352	0.026	0.033	0.427	2125	0.352	0.015	0.041	0.717	1385	0.355	0.017	0.024	0.481	1924
* · · ·				(0.428)					(0.718)					(0.680)	

Notes: This table presents regression results for labor market outcomes of the main respondent (round one). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\*p<0.05, \*p<0.10

# TABLE A10: Estimated treatment effects: respondent labor market outcomes (round two)

		Be	tween				Sp	illover	s			V	Vithin		
	C Mean	T-C	p-value	C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	N		
Had an IGA last 4 weeks	0.183	-0.052**	0.020	0.012	1748	0.183	-0.034	0.022	0.136	1131	0.146	-0.016	0.020	0.409	1491
				(0.018)					(0.147)					(0.614)	
Number of days work main IGA last 4 weeks	3.425	-1.101**	0.456	0.018	1744	3.425	-0.731	0.498	0.146	1128	2.714	-0.389	0.418	0.352	1490
				(0.019)					(0.147)					(0.614)	
Looked for paid work in the last 30 days	0.224	0.101***	0.035	0.005	1484	0.224	0.095**	0.038	0.015	940	0.308	0.005	0.028	0.871	1290
				(0.017)					(0.046)					(0.871)	

Notes: This table presents regression results for labor market outcomes of the main respondent (round two). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control village individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

#### TABLE A11: Estimated treatment effects: household labor market outcomes (round one)

		Be	tween	L			Spil	lovers				1	Vithin		
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	N
The head of HH has employment	0.201	0.136**	0.051	0.010	682	0.201	0.125***	0.045	0.007	469	0.305	0.012	0.039	0.752	633
Other member of the HH has employment	0.036	0.038**	0.015	0.013 (0.013)	1442	0.036	0.057***	0.017	0.001 (0.003)	916	0.089	-0.018	0.017	0.275 (0.551)	1288

Notes: This table presents regression results for labor market outcomes of the household (round one). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

## TABLE A12: Estimated treatment effects: household labor market outcomes (round two)

		Bet	ween				Spi	llover	3			V	Vithin		
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	N
The head of HH has employment	0.256	-0.066**	0.032	0.044	808	0.256	-0.020	0.037	0.586	559	0.234	-0.039	0.036	0.275	633
Other members of the HH have employment	0.101	-0.011	0.022	(0.089) 0.607	940	0.101	-0.018	0.025	(0.586) 0.478	572	0.078	0.007	0.020	(0.551) 0.744	858
				(0.607)					(0.586)					(0.744)	

Notes: This table presents regression results for labor market outcomes of the household (round two). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

		Be	tween				Spi	illovers	6			W	ithin		
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	N
Value of meat and fish consumed	3.978	-0.405	0.516	0.434 (0.497)	2126	3.978	-0.621	0.590	0.295	1386	3.391	0.218	0.348	0.532 (0.608)	1924
Value of fruit and legumes/vegetables consumed	10.932	1.454	1.165	0.216 (0.314)	2126	10.932	4.910***	1.507	0.002 (0.027)	1386	16.228	-3.376***	0.709	0.000 (0.001)	1924
Value of egg and milk consumed	2.145	0.897**	0.362	0.015 (0.104)	2126	2.145	0.635	0.392	0.109 (0.422)	1386	2.774	0.241	0.223	0.280 (0.374)	1924
Value of oil an fat consumed	1.722	0.292	0.209	0.166 (0.285)	2126	1.722	0.113	0.275	0.682 (0.893)	1386	1.838	0.203	0.144	0.158 (0.254)	1924
Value of beverages consumed	0.724	0.043	0.168	0.800 (0.854)	2126	0.724	-0.095	0.176	0.591 (0.860)	1386	0.649	0.138	0.093	0.139 (0.253)	1924
Value of cigarette and alcohol consumed	5.259	0.789	0.829	0.345 (0.460)	2126	5.259	1.742*	0.994	0.084 (0.422)	1386	7.001	-0.963*	0.550	0.080 (0.253)	1924
Value of other consumption	12.782	5.134***	1.142	0.000 (0.001)	2126	12.782	3.838***	1.370	0.006 (0.052)	1386	16.217	1.535*	0.872	0.079 (0.253)	1924
Expenditures on healthcare (medical expenses)	49.571	-6.953*	3.854	0.075 (0.172)	1829	49.571	-0.835	4.458	0.852 (0.904)	1200	50.008	-6.974**	3.035	0.022 (0.116)	1607
Expenditures on education	18.214	1.570	1.809	0.388 (0.478)	1899	18.214	-0.202	1.672	0.904 (0.904)	1261	17.666	1.882	1.280	0.142 (0.253)	1696
Expenditures on leisure	10.567	-0.211	1.919	0.913 (0.913)	1757	10.567	0.642	2.142	0.765 (0.893)	1208	11.704	-0.849	1.072	0.428 (0.527)	1557
Expenditure on transportation	30.393	5.296	3.604	0.146 (0.285)	1806	30.393	5.244	3.442	0.132 (0.422)	1209	35.876	0.566	1.980	0.775 (0.775)	1573
Expenditures on electricity, gas water, etc	68.508	7.435	5.470	0.178 (0.285)	1963	68.508	-1.749	6.272	0.781 (0.893)	1294	67.106	8.590**	3.518	0.015 (0.116)	1761
Expenditures on communication	10.208	2.419*	1.311	0.069 (0.172)	1829	10.208	2.135	1.683	0.208 (0.556)	1216	12.608	0.273	0.899	0.761 (0.775)	1595
Expenditures on household chores	10.891	1.956*	1.055	0.068	1615	10.891	0.987	1.234	0.426	1078	12.173	1.009	0.841	0.230	1395
Expenditures on rent and/or housing repairs	11.536	4.503**	2.030	0.029 ()	1697	11.536	2.379	2.516	0.347 ()	1145	13.600	2.569	1.706	0.132	1496
Expenditures on other services	21.677	4.980**	2.087	0.019 ()	1452	21.677	2.758	2.658	0.303 ()	1002	24.708	2.419	1.525	0.113 ()	1244

# TABLE A13: Estimated treatment effects: consumption (round one)

Notes: This table presents regression results for consumption outcomes (round one). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

		Be	tween				Sp	illover	s			V	Vithin		
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	N
Value of meat and fish consumed	22.091	2.576	1.749	0.145	1672	22.091	3.228	1.969	0.105	1069	25.015	-0.624	1.082	0.564	1439
Value of fruit consumed	2.846	0.772	0.617	0.215 (0.356)	1740	2.846	1.513*	0.781	0.056 (0.241)	1120	4.329	-0.721	0.451	0.110 (0.858)	1486
Value of milk products consumed	8.679	0.907	0.896	0.315 (0.420)	1695	8.679	1.345	1.005	0.185 (0.296)	1083	9.868	-0.387	0.635	0.542 (0.858)	1464
Value of oil consumed	2.200	0.944	0.661	0.158 (0.356)	1741	2.200	1.588*	0.808	0.053 (0.241)	1121	3.688	-0.540	0.450	0.230 (0.858)	1484
Value of beverages consumed	2.200	0.517	0.631	0.415 (0.512)	1740	2.200	0.665	0.680	0.331 (0.442)	1126	2.760	-0.164	0.414	0.693 (0.858)	1486
Value of cigarette consumed	0.865	1.161	0.787	0.144 (0.356)	1747	0.865	1.707*	0.960	0.079 (0.241)	1130	2.468	-0.535	0.519	0.303 (0.858)	1491
Value of other consumption	24.371	6.707**	3.053	0.031 (0.248)	1665	24.371	4.593	2.975	0.127 (0.254)	1068	28.902	1.973	1.877	0.293 (0.858)	1435
Expenditures on healthcare (medical expenses)	71.831	7.965	6.472	0.222 (0.356)	1740	71.831	9.792	7.275	0.182 (0.296)	1124	82.289	-2.042	5.455	0.708 (0.858)	1486
Expenditures on education	38.628	3.542	3.246	0.279 (0.406)	1741	38.628	1.621	3.375	0.632 (0.633)	1122	40.600	2.200	3.203	0.492 (0.858)	1487
Expenditures on leisure	3.778	2.331	1.789	0.197 (0.356)	1748	3.778	3.087	1.874	0.103 (0.241)	1131	6.532	-0.837	0.871	0.337 (0.858)	1491
Expenditure on transportation	38.528	4.361	2.815	0.125 (0.356)	1744	38.528	5.354*	3.010	0.079 (0.241)	1125	43.370	-0.196	2.439	0.936 (0.936)	1485
Expenditures on electricity, gas water, etc	75.884	5.452	8.572	0.527 (0.562)	1746	75.884	-5.381	8.604	0.533 (0.610)	1127	70.782	9.352**	4.748	0.049 (0.786)	1489
Expenditures on communication	13.999	5.054***	1.673	0.003	1747	13.999	4.431**	1.917	0.023 (0.241)	1130	17.809	0.736	1.113	0.509	1491
Expenditures on household chores	16.866	1.900*	1.137	0.099	1742	16.866	1.651	1.303	0.209	1125	18.508	0.218	0.879	0.804 (0.858)	1487
Expenditures on rent and/or housing repairs	12.048	-2.038	3.012	0.501 (0.562)	1294	12.048	-3.490	3.785	0.359	818	7.547	1.262	2.770	0.649	1116
Expenditures on other services	0.323	0.012	0.085	0.883	1748	0.323	0.051	0.099	0.605	1131	0.324	-0.018	0.072	0.797	1491

# TABLE A14: Estimated treatment effects: consumption (round two)

Notes: This table presents regression results for consumption outcomes (round two). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

		Be	tween				Spi	llovers	;			W	ithin		
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	N
Movable assets	0.030	0.026**	0.011	0.018	2126	0.030	0.013	0.012	0.299	1386	0.041	0.012	0.010	0.228	1924
Livestock	2.797	1.004*	0.520	0.057 (0.086)	2126	2.797	0.737	0.518	0.159 (0.239)	1386	3.417	0.354	0.239	0.138 (0.249)	1924
Furniture	5.780	0.593**	0.291	0.045 (0.086)	2126	5.780	0.889***	0.291	0.003 (0.014)	1386	6.581	-0.272**	0.137	0.048 (0.108)	1924
Electronic equipment	3.112	0.334**	0.150	0.029 (0.086)	2126	3.112	0.371**	0.160	0.023 (0.070)	1386	3.461	-0.059	0.080	0.458 (0.589)	1924
Cement or brick wall	0.838	0.016	0.028	0.570 (0.571)	2123	0.838	0.022	0.029	0.459 (0.516)	1382	0.871	-0.010	0.017	0.559 (0.630)	1923
Home roof materials: cement or tiles	0.913	0.016	0.019	0.401 (0.451)	2121	0.913	0.035*	0.020	0.075 (0.170)	1382	0.951	-0.023**	0.011	0.045 (0.108)	1919
House ownership	0.229	0.066*	0.034	0.057 (0.086)	1986	0.229	0.059	0.039	0.137 (0.239)	1322	0.291	0.006	0.023	0.783 (0.783)	1778
Land ownership	0.122	0.053	0.038	0.164 (0.211)	2110	0.122	0.003	0.033	0.928	1380	0.126	0.054***	0.017	0.002	1904
Three or more on the imada poverty scale	0.055	0.121***	0.024	0.000 (0.001)	2126	0.055	0.076***	0.024	0.002 (0.014)	1386	0.127	0.040**	0.017	0.019 (0.088)	1924

# TABLE A15: Estimated treatment effects: assets (round one)

Notes: This table presents regression results for assets outcomes (round one). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

#### TABLE A16: Estimated treatment effects: assets (round two)

		Be	tween				Spi	llovers	;			W	ithin		
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	N
Movable assets	0.063	0.003	0.019	0.883 (0.884)	1748	0.063	0.002	0.018	0.905 (0.905)	1131	0.066	-0.003	0.014	0.811 (0.912)	1491
Livestock	5.648	0.476	0.697	0.497 (0.746)	1748	5.648	1.022	0.788	0.198 (0.358)	1131	6.510	-0.515	0.392	0.189 (0.426)	1491
Furniture	13.146	1.121*	0.615	0.072 (0.217)	1748	13.146	1.173*	0.640	0.071 (0.164)	1131	14.039	-0.086	0.326	0.791 (0.912)	1491
Electronic equipment	4.510	0.447**	0.182	0.016 (0.075)	1748	4.510	0.525***	0.195	0.009 (0.040)	1131	4.966	-0.078	0.122	0.522 (0.784)	1491
Cement or brick wall	0.842	0.012	0.029	0.672 (0.865)	1746	0.842	0.008	0.031	0.807 (0.905)	1128	0.862	0.001	0.020	0.973 (0.973)	1490
Home roof materials: cement or tiles	0.921	0.004	0.020	0.827 (0.884)	1745	0.921	0.034*	0.019	0.073 (0.164)	1128	0.956	-0.033**	0.013	0.010 (0.091)	1487
House ownership	0.355	0.053	0.042	0.213 (0.480)	1737	0.355	0.031	0.043	0.469 (0.705)	1119	0.381	0.024	0.028	0.394 (0.710)	1480
Land ownership	0.056	0.016	0.021	0.446 (0.746)	1748	0.056	-0.010	0.020	0.628 (0.808)	1131	0.043	0.027**	0.013	0.034 (0.115)	1491
Three or more on the imada poverty scale	0.058	0.124***	0.027	0.000 (0.001)	1748	0.058	0.079***	0.025	0.002 (0.021)	1131	0.130	0.041**	0.020	0.038 (0.115)	1491

Notes: This table presents regression results for assets outcomes (round two). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

#### TABLE A17: Estimated treatment effects: financial inclusion (round one)

		Be	etween				Sp	oillovers	;			W	ithin		
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	Ν
Contract debt last 12 month	0.519	0.054	0.039	0.172	2114	0.519	-0.017	0.044	0.710	1376	0.512	0.068***	0.025	0.006	1910
	(0.259)								(0.711)					(0.018)	
Actual amount of debt	118.045	-5.039	13.047	0.700	2055	118.045	-6.532	13.609	0.633	1342	111.141	4.658	9.600	0.628	1859
				(0.701)					(0.711)					(0.628)	
Amount saved during the last 12 months	0.069	0.932***	0.311	0.004	2120	0.069	0.456**	0.218	0.040	1383	0.482	0.399	0.276	0.149	1915
Ŭ				(0.012)					(0.119)					(0.224)	

Notes: This table presents regression results for financial inclusion outcomes (round one). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

#### TABLE A18: Estimated treatment effects: financial inclusion (round two)

		В	etween				Sp	illovers				1	Nithin		
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	N
Contracted any debt	0.380	-0.018	0.029	0.524 (0.793)	1699	0.380	0.020	0.032	0.537 (0.717)	1098	0.406	-0.038	0.028	0.172 (0.376)	1459
Money borrowed in total (in USD)?	527.629	22.691	86.070	0.793 (0.793)	1698	527.629	-69.672	88.654	0.434 (0.717)	1097	476.435	87.144	66.087	0.188 (0.376)	1457
Total amount saved	0.000	0.000	0.000		1748	0.000	0.000	0.000	()	1131	0.000	0.000	0.000		1491
Have a savings or deposit account	0.107	0.009	0.030	0.769 (0.793)	1748	0.107	0.012	0.034	0.723 (0.724)	1131	0.108	0.002	0.018	0.889	1491
Mat: Recently saved at a formal institution	0.006	-0.002	0.003	0.600 (0.793)	1748	0.006	-0.004	0.004	0.292 (0.717)	1131	0.002	0.002	0.003	0.612 (0.816)	1491

Notes: This table presents regression results for financial inclusion outcomes (round two). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

#### TABLE A19: Estimated treatment effects: human capital (round one)

		В	etwee	n			Sp	oillove	rs			V	Vithin		
	C Mean T-C SE p-value N					C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	Ν
Received training in a trade	0.116	0.035	0.024	0.159 (0.319)	2124	0.116	0.003	0.025	0.919 (0.920)	1386	0.110	0.031**	0.016	0.049 (0.099)	1922
Has skills would like to use	(0.319) e 0.270 0.015 0.032 0.634 2097 (0.635)					0.270	0.013	0.042	0.766 (0.920)	1379	0.288	-0.001	0.022	0.956 (0.956)	1898

Notes: This table presents regression results for human capital outcomes (round one). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

TABLE A20: Estimated treatment effects: human capital (round two)

		В	etwee	n			Sp	illover	s			1	Nithin	ı	
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	N
Received training in a trade	0.042	0.007	0.013	0.613	1748	0.042	-0.004	0.016	0.825	1131	0.039	0.009	0.011	0.442	1491
Has skills would like to use	0.019	0.018	0.012	(0.613) 0.156	1748	0.019	0.012	0.012	(0.826) 0.313	1131	0.027	0.004	0.009	(0.655) 0.655	1491
				(0.312)					(0.627)					(0.655)	

Notes: This table presents regression results for for human capital outcomes (round two). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

#### TABLE A21: Estimated treatment effects: coping mechanisms (round one)

		Be	tween				Spi	illover	s			V	/ithin		
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	Ν
Reduced food consumption	0.078	0.031	0.027	0.247 (0.808)	467	0.078	0.010	0.034	0.773 (0.921)	251	0.098	0.020	0.032	0.528 (0.574)	462
Borrowed money	0.672	0.019	0.051	0.717 (0.808)	467	0.672	-0.027	0.060	0.655 (0.921)	251	0.642	0.058	0.050	0.251 (0.574)	462
Received assistance	0.141	0.010	0.042	0.808 (0.808)	467	0.141	-0.005	0.046	0.921 (0.921)	251	0.122	0.020	0.035	0.573 (0.574)	462
Sell assets or livestock/Use Savings	0.148	-0.023	0.047	0.629 (0.808)	467	0.148	0.012	0.053	0.823 (0.921)	251	0.154	-0.033	0.037	0.373 (0.574)	462

Notes: This table presents regression results for coping mechanisms outcomes (round one). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

#### TABLE A22: Estimated treatment effects: coping mechanisms (round two)

		Be	tween				Sp	illover	s			W	Vithin		
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	Ν
Reduced food consumption	0.299	0.094	0.064	0.143 (0.571)	438	0.299	0.047	0.077	0.545 (0.984)	253	0.340	0.051	0.054	0.345 (0.557)	397
Borrowed money	0.401	0.023	0.064	0.716 (0.716)	438	0.401	0.024	0.075	0.745 (0.984)	253	0.425	0.002	0.056	0.978 (0.979)	397
Received assistance	0.122	0.030	0.031	0.336 (0.673)	438	0.122	0.001	0.040	0.984 (0.984)	253	0.123	0.031	0.038	0.417 (0.557)	397
Sell assets or livestock/Use Savings	0.122	-0.022	0.039	0.575 (0.716)	438	0.122	0.021	0.043	0.626 (0.984)	253	0.142	-0.041	0.038	0.287 (0.557)	397

Notes: This table presents regression results for coping mechanisms outcomes (round two). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

#### TABLE A23: Estimated treatment effects: social cohesion (round one)

		В	etwee	n			Sp	oillover	s			V	Vithin		
	C Mean	T-C	SE	p-value	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	N	
Community participation and cohesion	0.008	0.008	0.005	0.138	2126	0.008	-0.003	0.004	0.358	1386	0.003	0.008**	0.004	0.034	1924
				(0.208)					(0.766)					(0.101)	
Collective action	0.035	0.017	0.017	0.314	2126	0.035	0.012	0.018	0.510	1386	0.042	0.007	0.011	0.531	1924
				(0.314)					(0.766)					(0.531)	
Violent conflict	0.021	0.015	0.009	0.100	2126	0.021	0.002	0.010	0.846	1386	0.025	0.013	0.009	0.167	1924
				(0.208)					(0.846)					(0.250)	

Notes: This table presents regression results for social cohesion outcomes (round one). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

#### TABLE A24: Estimated treatment effects: social cohesion (round two)

		В	etweer	ı			Sp	illove	s			I	Vithin		
	C Mean T-C SE p-value N C					C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	Ν
Community participation and cohesion	0.020	0.005	0.015	0.749	1748	0.020	-0.002	0.012	0.874	1131	0.011	0.007	0.006	0.275	1491
				(0.905)					(0.980)					(0.825)	
Collective action	0.124	0.009	0.072	0.905	1748	0.124	0.002	0.071	0.979	1131	0.092	0.005	0.032	0.873	1491
				(0.905)					(0.980)					(0.944)	
Violent conflict	0.061	-0.015	0.015	0.302	1748	0.061	-0.018	0.016	0.261	1131	0.048	-0.001	0.012	0.944	1491
				(0.905)					(0.784)					(0.944)	

Notes: This table presents regression results for for social cohesion outcomes (round two). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.05, \* p<0.10

#### TABLE A25: Estimated treatment effects: civic engagement (round one)

		Be	tween				Spi	llovers	;			I	Nithin		
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	Ν
Civic engagement	0.242	0.087*	0.047	0.066	2126	0.242	0.075	0.052	0.153	1386	0.309	0.012	0.023	0.588	1924
			(0.100)				(0.168)					(0.627)			
Political knowledge and attitudes	1.514	0.076	0.065	0.247	2126	1.514	0.099	0.071	0.168	1386	1.590	-0.017	0.035	0.626	1924
				(0.247)					(0.168)					(0.627)	
Political Inclusion	1.171	0.148***	0.054	0.007	2126	1.171	0.188***	0.058	0.002	1386	1.356	-0.043	0.031	0.165	1924
				(0.023)					(0.005)					(0.495)	

Notes: This table presents regression results for civic engagement outcomes (round one). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

#### TABLE A26: Estimated treatment effects: civic engagement (round two)

		В	etwee	n			Sp	oillove	rs			I	Vithin		
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	N
Civic engagment	0.297	0.012	0.042	0.768	1748	0.297	-0.015	0.046	0.750	1131	0.279	0.021	0.026	0.422	1491
				(0.768)					(0.750)					(0.423)	
Political knowledge and attitudes	1.012	0.111	0.072	0.128	1748	1.012	0.050	0.078	0.522	1131	1.064	0.056	0.042	0.181	1491
				(0.384)					(0.750)					(0.423)	
Political inclusion	1.176	0.037	0.061	0.539	1748	1.176	0.061	0.057	0.282	1131	1.222	-0.029	0.032	0.372	1491
				(0.768)					(0.750)					(0.423)	

Notes: This table presents regression results for for civic engagement outcomes (round two). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

		Be	tween				Spi	llovers	;			W	ithin		
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	N
Fear of losing control (inverted)	0.548	0.098**	0.041	0.019 (0.057)	2103	0.548	0.061	0.051	0.236 (0.304)	1375	0.475	0.040	0.025	0.108 (0.190)	1898
Fear of being exploited (inverted)	0.515	0.036	0.042	0.394 (0.591)	2110	0.515	0.053	0.052	0.306 (0.307)	1375	0.456	-0.020	0.025	0.417 (0.506)	1907
Useless for others (inverted)	0.852	0.083***	0.028	0.004 (0.019)	2107	0.852	0.066**	0.033	0.049 (0.148)	1380	0.776	0.016	0.021	0.450 (0.506)	1903
Good relation between HH member	0.554	0.072	0.054	0.190 (0.343)	2120	0.554	0.082	0.057	0.151 (0.273)	1383	0.641	-0.009	0.024	0.700 (0.701)	1917
Number of people telling important decisions	1.096	0.429***	0.109	0.000 (0.002)	2045	1.096	0.206*	0.115	0.078 (0.176)	1324	1.277	0.235***	0.076	0.002 (0.018)	1891
Accepted by family	0.952	-0.006	0.015	0.681	2109	0.952	0.014	0.014	0.300	1376	0.964	-0.015	0.010	0.118	1915
Accepted by other HH	0.967	-0.000	0.009	0.984	2098	0.967	0.013	0.010	0.201	1370	0.979	-0.014*	0.008	0.062	1896
Feel in control of things	0.694	0.013	0.031	0.670	2096	0.694	0.071**	0.033	0.037	1376	0.752	-0.055**	0.022	0.012	1898
Can accomplish goals	0.809	0.040	0.026	0.123 (0.278)	2108	0.809	0.073***	0.024	0.003 (0.025)	1377	0.869	-0.026	0.017	0.126 (0.190)	1903

#### TABLE A27: Estimated treatment effects: psychological well-being (round one)

Notes: This table presents regression results for psychological well-being outcomes (round one). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

#### TABLE A28: Estimated treatment effects: psychological well-being (round two)

		В	etweer	ı			Sp	oillover	rs			V	Vithin		
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	Ν
Fear of losing control (inverted)	0.320	0.006	0.044	0.889	1748	0.320	0.043	0.046	0.351	1131	0.279	-0.038	0.026	0.144	1491
				(0.963)					(0.985)					(0.896)	
Feels depressed (inverted)	0.411	-0.004	0.044	0.935	1709	0.411	0.004	0.046	0.930	1110	0.401	-0.008	0.028	0.772	1457
-				(0.963)					(0.985)					(0.972)	
Loss of interest for activity (inverted)	0.409	0.022	0.040	0.588	1724	0.409	0.028	0.045	0.535	1117	0.374	-0.008	0.028	0.776	1467
				(0.963)					(0.985)					(0.972)	
Problems being accepted in the household (inverted)	0.182	0.021	0.036	0.560	1691	0.182	0.031	0.038	0.415	1092	0.148	-0.012	0.021	0.562	1439
				(0.963)					(0.985)					(0.972)	
Tell important things to someone	0.909	0.019	0.019	0.333	1740	0.909	0.001	0.021	0.946	1126	0.908	0.018	0.016	0.256	1486
				(0.963)					(0.985)					(0.896)	
Feel that can accomplish goals	0.583	-0.038	0.057	0.511	1705	0.583	-0.028	0.060	0.646	1103	0.543	-0.003	0.029	0.921	1442
				(0.963)					(0.985)					(0.972)	
Feel in control of things	0.433	-0.002	0.044	0.963	1689	0.433	-0.001	0.052	0.984	1091	0.418	0.001	0.029	0.971	1426
~				(0.963)					(0.985)					(0.972)	

Notes: This table presents regression results for for psychological well-being outcomes (round two). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control village individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

TABLE A29: Estimated treatment effects: women's empowerment and agency (round one)

	Between					Spillovers					Within					
	C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	Ν	C Mean	T-C	SE	p-value	Ν	
Earn income	0.007	0.001	0.005	0.871 (0.872)	1161	0.007	0.008	0.009	0.400 (0.625)	722	0.014	-0.006	0.008	0.465 (0.465)	1013	
Decide by self how own's income is used	0.667	0.444	0.287	0.160 (0.320)	9	0.667	-0.235	0.300	0.468 (0.625)	7	0.500	0.600*	0.265	0.058 (0.117)	10	
Husband decide by itself how spouse income is used	0.545	-0.044	0.056	0.436 (0.582)	796	0.545	0.003	0.058	0.964 (0.965)	487	0.570	-0.043	0.039	0.270 (0.360)	751	
Women IGA	0.015	0.053***	0.015	0.001 (0.003)	806	0.015	0.014	0.013	0.293 (0.625)	484	0.028	0.039**	0.016	0.011 (0.045)	754	

Notes: This table presents regression results for Woman Bargaining outcomes (round one). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control arm individuals; and the within-village comparison of eligible treated and untreated individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

# TABLE A30: Estimated treatment effects: women's empowerment and agency (round two)

	Between					Spillovers					Within				
	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	N	C Mean	T-C	SE	p-value	N
Woman reports any earned income (past 6 months)	0.087	-0.012	0.019	0.539	1074	0.087	0.002	0.023	0.945	655	0.079	-0.008	0.019	0.672	951
	(0.720)					(0.946)					(0.709)				
Woman decides how income will be used	0.154	-0.035	0.025	0.169	1074	0.154	-0.058**	0.026	0.026	655	0.090	0.022	0.021	0.311	951
	(0.656)					(0.105)					(0.623)				
Man decides alone how income will be used (inverted)	0.668	0.012	0.050	0.814	1074	0.668	0.063	0.050	0.209	655	0.733	-0.056*	0.032	0.084	951
	(0.815)							(0.419)	(0.337)						
Women reports income generating activity	0.100	-0.021	0.021	0.328	1074	0.100	-0.008	0.026	0.769	655	0.083	-0.007	0.020	0.708	951
	(0.656)							(0.946)	(0.709)						

Notes: This table presents regression results for women's empowerment and agency outcomes (round two). The table presents the primary treatment effects for the outcomes of interest, for the between-village comparison of eligible treated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control village individuals; the spillover comparison of eligible untreated individuals vis-a-vis control village individuals. All the specifications use strata fixed effects and standard errors clustered at the village level. \*\*\*p<0.01, \*\* p<0.05, \* p<0.10

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