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A Multi-faceted Program Causes Lasting Progress for the Very Poor: Evidence from Six Countries

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Abstract

We present results from six randomized control trials of an integrated approach to improve livelihoods amongst the very poor. The approach combines the transfer of a productive asset with consumption support, training and coaching plus savings encouragement and health education and/or services. Results from the implementation of the same basic program, adapted to a wide variety of geographic and institutional contexts and with multiple implementing partners, show statistically significant, costeffective impacts on consumption (fueled mostly by increases in self-employment income) and psychosocial status of the targeted households. The impact on the poor households lasted at least a year after all implementation ended. It is possible to make sustainable improvements in the economic status of the poor with a relatively short-term intervention.

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I. INTRODUCTION

More than one fifth of the world's population lives on less than Purchasing Power Parity (PPP) US\$1.25 a day, and there is an emerging international consensus that this share should (and can) be driven close to zero by 2030 (1, 2). Reaching this objective will require enabling the poorest families, who are often the most marginalized within their villages, to shift from insecure and fragile sources of income to more sustainable income-generating activities. One possible avenue, popular with both development organizations and governments, is to promote self-employment activities (such as cow rearing or petty trading). Past efforts to reduce poverty by encouraging these types of activities among the poor, however, have often been plagued by implementation problems and been deemed failures (3). For example, India's Integrated Rural Development Program is believed to have been both poorly targeted and ineffective (4, 5). However, in recent years, several large non-governmental organizations (prominent international northern NGOs such as Oxfam, World Vision and Heifer, as well as many local NGOs) have gone back to this "livelihood" approach. This past experience raises the question: is it actually possible to reliably improve the livelihoods of the poorest households by giving them access to self-employment activities, or is this entire approach flawed? In particular, is it possible to come up with a model for doing so that can be implemented by a wide variety of organizations and works in a wide range of geographic, institutional, and cultural contexts?

We present results from randomized control trials (RCTs) in six countries of a particular approach to foster self-employment activities amongst the very poor. Originally designed and implemented by BRAC, a large Bangladeshi NGO that runs several country-wide programs, the "Graduation" program provides a holistic set of services, including the grant of a productive asset, to the poorest households in a village (referred to by BRAC as the "ultra-poor"). The beneficiaries are identified through a participatory process in a village meeting, followed by a verification visit by the organization's staff. Selected beneficiaries are then given a productive asset that they choose from a list, training and support for the asset they have chosen, as well as general life skills coaching, weekly consumption support for some fixed period, and typically access to savings accounts and health information or services. These different activities (plus regular interactions with the households over the course of a year) are designed to complement each other in helping households to start a productive self-employment activity. The idea is to provide a "big push", over a limited period of time, with the hope of unlocking a poverty trap. The program costs per household average 100% (range from 62% to 145%) of baseline household consumption. While the program may initially be relatively expensive (compared to just providing training, coaching or a cash transfer), the thinking behind the program is that the combination of these activities is necessary and sufficient to obtain persistent impact on a large fraction of the beneficiaries.

We address the "sufficiency" claim: is the Graduation approach effective and cost effective, and can it be implemented at scale and in different contexts and cultures? Whether all the ingredients of the program are individually necessary is not tackled here and will need to be dealt with in future work.

A key feature of the BRAC approach is that, while comprehensive, it is well codified, scalable, and replicable. BRAC has already implemented the program at scale in Bangladesh. As of 2011, BRAC had reached close to 400,000 households, and a further 250,000 were scheduled to be reached between 2012 and 2016 (6). It has now also been replicated in about twenty countries, including the six countries that are studied here. A high-quality RCT, conducted independently but simultaneously with this study, has shown the BRAC program in Bangladesh to be very effective (6). Two years after graduation, households have expanded their self-employment activities, diversified out of agriculture and livestock, reduced casual labor, and increased consumption. Previous non-randomized studies of the BRAC program (7–9) found similar impacts.

Between 2007 and 2014, we conducted a multi-site RCT of the Graduation program. The sites were chosen as part of an effort led by Ford Foundation and Consultative Group to Assist the Poor (CGAP), referred to here as the Graduation Program Consortium. The programs were implemented by six different organizations in six countries (Ethiopia, Ghana, Honduras, India, Pakistan, and Peru), but overall planning on the programs and evaluation were coordinated from the onset.¹ Treatment was randomly assigned amongst eligible households. Data were collected at baseline and just after program end, two years after the programs began ("endline 1"), and again approximately one year after the end of the programs, i.e., about three years after treatment began ("endline 2"). We report pooled results from all the sites (21,063adults in 10,495 households) as well as site by site results.

The main contribution of this study is the evaluation of the cost-effectiveness of the same potentially important intervention across a diverse set of contexts. The sites span three continents, and different cultures, market access and structures, religions, subsistence activities, and overlap with government safety net programs. This diversity should give us a high level of confidence in the robustness of the impact to variations in both the context and implementation agency. The core components of the program are similar in substance and magnitude, although the program design includes adjustments as are necessary for local contexts. For example, country-specific market analysis was conducted to determine viable livelihoods to promote, rather than simply promoting the same livelihood in every context. In addition, since the study was conceived from the onset as one multi-site study, variables were collected in a comparable manner on a broad array of outcomes. Finally, households were surveyed over three years,

including one year after the end of the program, which directly speaks to the sustainability of the changes we observe.

II. THE PROGRAM: COMMONALITIES AND VARIATIONS

The basic approach of the program is to combine six different activities designed to complement each other to help households start, and continue with, a self-employment activity. The core of the program is a productive asset transfer, but the premise of the program is that the support has to be sufficiently broad and long-lasting to ensure that households continue to benefit from that asset into the future.

Following identification of the beneficiary households through a participatory process in the village, the six activities are:

- 1. Productive asset transfer: a one-time transfer of a productive asset
- 2. Consumption support: a regular transfer of food or cash for a few months to about a year²
- 3. Technical skills training on managing the particular productive assets
- 4. High-frequency home visits
- 5. Savings: access to a savings account and in some instances a deposit collection service and/or mandatory savings
- 6. Some health education, basic health services, and/or life-skills training

The Graduation Program Consortium organized global learning events at which staff from each of the sites, along with researchers, gathered to discuss site-specific design considerations. The Consortium also hosted a dedicated website to foster ongoing knowledge exchange between sites and a wider community of practice. There were five global learning events between 2008 and 2014, plus several regional workshops. The first two global meetings featured exposure visits to the BRAC program in Bangladesh and the Bandhan program in India. Each partner thus participated in at least two field visits, with some additional exchange visits arranged on an ad hoc basis (e.g., the Ghana team visited the Ethiopia site as they designed their program).

We now detail the core components of the program. We first discuss the commonalities across all sites, and then discuss the important variations across sites. Table 1 has a detailed description of the program features in each site.

Targeting

The Graduation program is intended to serve the poorest of the poor within villages. The targeting process starts with selection of a poor region based on national survey data, and a list of villages within the target area (often selected in consultation with program staff). At most program sites, ultra-poor households are then identified using a Participatory Wealth Ranking (PWR) during which villagers create an economic ranking of all village households. In Indonesia, Alatas et al (11) finds that a PWR used to identify recipients of a government program successfully identified the poorer households. The households selected for the Graduation program through the PWR are then visited by field officers from the implementing organizations to verify their poverty status using an asset checklist (often the Progress out of Poverty (PPI) scorecard (12)). 48% of the selected households have daily per capita consumption below 1.25, compared to 19% of the population at large in these countries (Table S1a).

A fraction of households in the resulting list are then randomly assigned to receive the program and are invited to participate. In all sites but India, all intended beneficiaries enrolled. We provide more discussion of take up in the India program below.

Productive-Asset Transfer

The asset transfer is the core component of the program and also one of its largest costs. Each household chose, in consultation with the field officer, one of the assets (or asset bundle options) in a list proposed by the implementing organization (often, this list was created after hiring local experts to analyze markets and the viability of livelihood options). Common choices included raising livestock (sheep, goats, chicken, cattle, etc.) and petty trade, and are detailed in Table 1. The value of assets varied between sites, ranging from PPP US\$451 to PPP US\$1228 per household. The differences in transfer costs partially reflect the differences in local livestock prices: all but one site (Peru) transferred productive assets worth between four to eight goats at local prices (see Table 1 for exact figures). Furthermore, although the asset type differed across countries, the principle in choosing the asset was consistent. In four of the six sites, the asset transferred was the most or the second most commonly held asset at baseline. In Peru and Ethiopia, the most commonly transferred assets were guinea pigs, and sheep and goats, respectively, because they were believed to be more profitable than the most commonly held assets. Different assets generated quite different cash flow patterns: some produced immediate revenue (e.g., petty trade) whereas others (like cows) produced far more delayed and lumpy revenue flows.

The asset transfer generally happened between zero and 15 months, largely depending on the site, after the identification of the beneficiaries and the baseline survey. In Pakistan, where the intervention was run

by several organizations, it took several months, and in some cases a year or more, to complete all rounds of asset transfers. Honduras also had delays in starting the program. In Ethiopia, the transfers were spread out over six months.

Consumption Support

Consumption support—generally a cash stipend—was distributed typically weekly or monthly. The purpose of the consumption stipend is both to immediately improve and stabilize consumption, and to reduce incentives to sell (or eat up) the productive assets being distributed. The distribution of consumption support lasted between four and 13 months depending on the site, and ranged from PPP US\$26 to PPP US\$71 per month.³ This variation partly reflects the fact that the PPP in each country is not based on the bundle of goods purchased by the poor: in all sites but Ethiopia (where the consumption support was part of an existing program), the transfer corresponds roughly to the monetary equivalent of between 2,400 and 5,000 calories per day (or roughly a kg of rice at local price) (*13*).

Consumption support was provided everywhere, but in two sites (Ethiopia and Peru), a form of consumption support already existed before the program started, so it was available for all (Ethiopia) or part (Peru) of the control group as well. In Ethiopia, both treatment and control households received benefits from the Productive Safety Net Programme (PSNP), a food-for-work program for food-insecure households. For this reason, the program did not offer any additional consumption support to treatment households. In Peru, a conditional cash transfer program, *Juntos* was active in 51 of the 86 project villages. *Juntos* provides PEN 200 (PPP US\$143.33) every two months, on the condition that female heads of households meet the following conditions: obtain identity cards for their children, take children under five to health check-ups, and send children to school. In the non-*Juntos* villages, the treatment households received a "Juntos-like" consumption support: PEN 100 (PPP US\$71.96) per month for nine months, conditional on children attending school and receiving health check-ups. In our sample, 57% of control households receive either *Juntos* or the replacement. Thus, Peru is an intermediate case between Ethiopia and the other sites.

Honduras implemented its consumption support by providing a one-time food transfer intended to cover the six month lean season.

Training

Before receiving their assets, households were provided with training on running a business and managing their chosen livelihood. For example, those selecting livestock received information on how to rear the livestock, including vaccinations, feed and treatment of diseases.

High-Frequency Home Visits

Households received regular training and coaching from a field officer throughout the two-year program. The visits were intended to provide accountability (i.e., making sure that the households carry out the tasks necessary to maintain and grow their livelihood into a stable income-generating activity) as well as to be encouraging (e.g., helping households believe that they can have control of their lives and put themselves on a path out of extreme poverty) (14). During the home visits field staff provided health education and financial capabilities coaching. In Peru, where travelling to the villages proved to be logistically challenging, visits happened only every six weeks, and in Pakistan similar difficulties led the implementing NGOs to shift gradually to bi-weekly or monthly visits.

Savings

Households were encouraged (and in some sites, required) to save in order to improve their ability to cope with shocks. This is one component which varied significantly from site to site. Four sites (Ethiopia, Honduras, India and Peru) partnered with microfinance institutions able to provide access to savings accounts. In Pakistan, households were encouraged to save through savings groups, and in Ghana, households received savings accounts. In India and Ghana, individuals were able to save at program meetings or with a visit by a field agent, but in the other four sites households had to make deposits at the financial institution.

In Honduras, savings was further encouraged through financial incentives. Beneficiary households opened a savings account and were randomized into two groups: (1) savings matching biannually equal to 50% of the average account balance, or (2) monthly direct savings transfers. Both groups received savings incentives equal to a maximum value of HNL 800 (PPP US\$90.42). We do not analyze this experimental variation in this paper.

Ethiopia had a strong forced savings component. The government prohibited unconditional transfers to the poor. To satisfy this prohibition but still implement the program, the implementing partner, Relief Society of Tigray (REST) and the government agreed to allow the asset transfers to be described as "like" a loan, as recipients had to make deposits into a savings account in exchange for receiving the asset.

Households were not able to withdraw their savings from the account until they saved an amount equal to ETB 4,724 (PPP US\$1,228), the value of the asset transfer. However, once households achieved the required savings threshold, they had full access to their deposits and could withdraw from their accounts as they saw fit. Furthermore, if they failed to make the deposits, they did not forfeit their asset. Compliance with the deposits was very high, with only 15 households (out of 458) not fulfilling the commitment.

Health and other services

Finally, all sites but one (Ethiopia) included a health component such as health, nutrition, and hygiene training. Some sites also facilitated access to health care, either as direct services from community health workers, referring them to government or NGO health clinics, or by enrolling beneficiaries in national health insurance. Several of the sites organized support from village assistance committees comprised of village leaders who helped advise the households, mediated problems, and connected beneficiaries with additional services.

III. EXPERIMENTAL METHODS

a. Experimental design

Of the six experiments, three are individual randomized trials with randomization at the household level within each village (India, Ethiopia and Pakistan) and three are clustered randomized trials, with randomization at both the village and household level (Ghana, Honduras, and Peru). In the countries with clustered randomization, villages were randomly selected to be treatment or control villages, and then treatment households were randomly selected within the set of eligible households in treatment villages. The goal of this design was to be able to measure spillovers. For the main analysis in this paper, we ignore possible externalities and include all control households (within villages or across villages). In section IV we provide a discussion of whether any spillovers within the sample may bias our results. Randomization was either carried out remotely by the research team (using a computer), or on-site via a public lottery.

One site (Ghana) had a more complex design with two additional treatment groups (savings only, and productive asset grant only) to "unpack" those aspects of the intervention. In this paper we are using only the group that received the pooled intervention. This is because none of the other studies systematically tried to unpack the effects and therefore even with the full Ghana results we would have just one "data-

point" and would not be able to answer the unpacking questions with anything approaching the degree of confidence that we have about the overall program effect.

The sample size used in the analysis varies from 925 households (Ethiopia) to 2,606 households (Ghana) from site to site. The overall sample size pooling all sites is 10,495 households.

Table 2 provides details by site of key experimental design features, including sample sizes, and Figure 1 provides a timeline for the typical implementation of both the program and the data collection, and Figure S1 provides a timeline for each site.

b. Integrity of the experimental design

Balance

Table S1b presents baseline data for the same variables and indices used as the primary outcome measures. Panel A presents the mean comparisons and t-tests for equality of means. At baseline we fail to reject at the 5% level the equality of means of treatment and control groups for any of the ten primary outcome measures. Panel B presents similar analysis, but with a regression framework that includes fixed effects by country, and finds similar balances. The aggregate test, reported in Panel C, finds that we are not able to reject equality of means across all ten measures (p-value = 0.689) Tables S1c-S1e present similar results for each country. Overall, the sample balance was good in every individual country.

Survey Attrition

Table S1f presents an analysis of survey attrition for both endlines 1 and 2. The follow up rate was excellent. We re-surveyed 94% of baseline respondents in endline 1, and 91% in endline 2 (Panel A). Panel B presents analysis on the type of people that were more likely to be resurveyed. Panel C presents a test of whether the treatment affected the type of person who completed the endline surveys, i.e., whether the treatment caused a sample composition bias. The p-values on a full set of baseline characteristics interacted with treatment are 0.75 (endline 1) and 0.17 (endline 2), thus supporting the contention that the survey attrition did not lead to a different sample frame across treatment and control groups.⁴ Tables S1g and S1h present similar results for each country. At 17%, attrition was the worst in India in endline 1; Pakistan was the worst at endline 2, at 21%. In neither country was attrition differential in the treatment group.

Compliance with treatment assignment

In all sites but one, the experimental design was strictly adhered to: no control received the program, and all treatment households received the program. The India site was the only site in which some individuals refused participation: 52% of those selected in the randomization participated in the program. According to Bandhan, the implementing organization, 35% of households declined the offer, for two unrelated reasons: first, in some villages, a section of villagers held the (erroneous) belief that Bandhan was a Christian organization trying to convert beneficiaries, and acceptance of the livestock constituted agreeing in some way to participating in Christian rituals. Second, some wives were worried that their husband would mishandle the asset and they would lose face in front of their village. A further 13% were deemed ineligible by Bandhan because they were participating in microcredit or self-help group activities. The analysis below is an "intention to treat": we compare households assigned to control to those assigned to treatment, irrespective of whether they received treatment or not.

c. Analysis methods for pooled results

Following standard practice in the analysis of multi-site trials, we estimate a single model, with strata and country dummies. Each column of each table represents the results of a separate OLS regression of the form

$$Y_i^k = \alpha + \beta_1 assignment_i + \beta_2 Z_i^k + T_{country} + U_{shortsurveys} + V_{stratification} + \varepsilon_i$$
(1)

where Y_i^k is the outcome k of interest for either household or adult i (details of the variable constructions are presented in the SOM Text 1-3), assignment_i is an indicator for having been randomly selected into the program, Z_i^k is the household or adult's baseline value of the outcome variable k (coded as zero, with an indicator for missing baseline, whenever it was not available), $T_{country}$ is a vector of dummy variables for each of the countries in the study, $U_{shortsurveys}$ is a vector of dummy variables indicating whether or not the household was surveyed in a short survey round (in some countries, data was collected through both long and short surveys), and $V_{stratification}$ is the vector of all variables included in stratification in each of the six countries.⁵

In the main analysis of the pooled sample, no adjustments are made to reflect the differences in sample sizes between countries; every observation is weighted equally. Again, this follows standard practice in the analysis of multi-site RCTs. Regressions that instead weigh each country equally generate similar

results. For each variable we report, we also present the result of a test for equality of the effects across sites (which we discuss in the next subsection).

Because of the comprehensive nature of the program, a large number of outcome variables are reported. Therefore, we expect some of the variables to show significant results due to chance. To avoid overemphasis on any single significant result, we take several steps. First, following Kling et al (15), for each "family" of outcomes, we report an index of all of the outcomes taken together, which we report in Table 3. This is our main results table. We construct indices first by defining each outcome Y_{ijl}^k (outcome k, for observation i in family j, within country l) so that higher values correspond to better outcomes. Then we standardize each outcome into a z-score, by subtracting the country control group mean at the corresponding survey round and dividing by the country l's control group standard deviation at the corresponding survey round. We then average all the z-scores, and again standardize to the control group within each country and round.⁶

Second, given that multiple families of outcomes are being reported, we correct for the potential issue of simultaneous inference using multiple inference testing. We calculate q-values using the Benjamini-Hochberg step-up method (*10*) to control for the false discovery rate (FDR). We follow the procedure outlined in Anderson (*16*), and test α at all significance levels (1.000, 0.999, 0.998... 0.000). Our q-value is the smallest α at which the null hypothesis is rejected. It is reported in Table 3.⁷

IV. RESULTS

a. Pooled sample

Table 3 (both endlines), Figure S2 (endline 1) and Figure 2 (endline 2) present an overview of the results pooled across all sites. Table 3 shows the results aggregated by "families", including q-values corrected for the fact that we are presenting the results from 10 indices.⁸

At endline 1 (year two of the study, just after the end of the program in most sites), all the families of outcomes have improved in the treatment group (compared to the control group). We use two outcome measures for consumption: per-capita consumption increases by 0.12 standard deviations (q-value 0.001), which is equivalent to PPP US\$4.55 per capita per month, or roughly 5% of control group mean of PPP US\$78.80, and an index of food security increases by 0.11 standard deviations (q-value 0.001). An index of productive and household assets increases by 0.26 standard deviations (q-value 0.001). Household income and revenues increase by 0.38 standard deviations (q-value 0.001). There are also improvements in personal lives: physical health improves by 0.034 standard deviations (q-value 0.078), and mental

health improves by 0.10 standard deviations (q-value 0.001). Political involvement increases by 0.064 (q-value 0.001), and women's empowerment by 0.046 (q-value 0.049).

By endline 2 (year three of the study, typically one year after the program ended), all the effects on economic variables are still significant, and usually similar to or larger than after endline 1. It is striking that there is no evidence of mean reversion in the per capita consumption, food security or assets. The gains in financial inclusion, total time spent working, income and revenue, and mental health have declined but are still positive and statistically significant. The gains in physical health and women's empowerment have declined and are no longer statistically significant.

Figure S2 and Figure 2, which present the variable-by-variable results at a glance, tell a similar story: the indices are not driven by specific variables. Most individual variables show significant impacts at endline 1. At endline 2, most variables stay significant, and the various variables in the women's decision-making families and the mental health families have either declined or become not significant.

Tables S2a to S2h contain the detailed variable-by-variable results for the entire sample.

In Table S2a, we see that food consumption increases more than non-food consumption, both in absolute value and in proportion (specifically, food consumption increases 7.5% from a control group mean of \$51.60, and non-food consumption increases 2.4% from a control group mean of \$25.30). The elasticity of food consumption to overall expenditure appears to be greater than one, a striking result given prior estimates that find estimates well below one (*17*). Durable goods expenditures do not increase significantly in either time period, but we do see treatment households have more household assets than the control households in both periods (Table S2c), so the expenditure variable may fail to pick up some durable goods expenditures. The consequence of the increase in food expenditure is a greater sense of food security (Table S2b), which is as strong in endline 2 as in endline 1 (for example, 14% reported at least one person not eating at all for an entire day, compared to 17% in the control group, Table S2b Column 3).

In Table S2c, we see that households have statistically significantly more assets both in endline 1 and in endline 2. The asset index we construct in all countries is 0.26 standard deviations larger in endline 1 and 0.25 standard deviations larger in endline 2. Likewise, the effect size for productive assets (those used in household self-employment activities) does not change between endlines 1 and 2, with an effect size of 0.27 standard deviations at endline 1 and 0.25 standard deviations at endline 1 and 0.25 standard deviations at endline 1 and 0.25 standard deviations at endline 2. There is an increase both in household and productive assets, but the increase in productive assets is larger in both years (productive asset value increases by 15.1% and 13.6% compared to control group means of PPP US\$1964

and PPP US\$1576 in endline 1 and 2, respectively). Row 12 of Table 4 compares the value of the assets held by households by year 3 to the value of the asset that was transferred to them. In general, the impact of the program on asset values is lower than the cost of the assets (Ethiopia is the exception). However, the program impact on asset holdings is stable from year 2 to year 3 (Table 3), so after the households made an initial adjustment to asset holdings, there was no further decline.

The increase in asset holding does not come at the expense of more borrowing or less savings. Instead, we see in Table S2d large increase in savings in both endlines (PPP US\$151, or 155.5% of control mean in endline 1, and PPP US\$75, or 95.7% of control means in endline 2). Savings was mandatory during the first year in many sites, so it is not entirely surprising that we see an increase at endline 1. But continued savings was not required after the program, and the increase in net savings is still large.

These productive assets are being put to use: adult labor supply increases by 17.5 minutes per adult per day (10.4% increase over control households) at endline 1, and 11.2 minutes (6.1% increase) at endline 2 (Table S2e). The increase is concentrated on livestock and agricultural activities, consistent with the assets chosen by most people. More assets and more labor translate into increased revenue from livestock (Table S2f, Column 1)⁹ and net income from agriculture (Column 2). At endline 1, the revenue from livestock is 41.6% larger, compared to a control group mean of PPP US\$80.60. The households also feel better off economically: 0.33 points improvement on a scale of 1 to 10 at endline 1 (control group mean = 3.74), and 0.30 points improvement at endline 2 (control group mean = 3.65). All of the gains to income and revenue persist one year after the end of the program, including the increase in self-reported economic status.

Table S2g presents the detailed health and mental health results. The only significant positive impact on physical health seen at either endline at the 5% level is on the activities of daily living score at endline 1. At endline 1, the mental health index is 0.099 standard deviations higher, driven by the overall self-reported happiness and lack of symptoms of mental distress.¹⁰ By endline 2, the positive impact on the mental health index has declined to 0.071 standard deviations, but it remains significantly positive and continues to be driven by both self-reported happiness and lack of stress. This minor decrease in the treatment effect may be another instance of the well-known "hedonic treadmill" (*18*).

Table S2h presents results on political and social empowerment, and women's empowerment within the household. Beneficiaries, who are at the outset often marginalized within their village, become more likely to be involved in political activity (except voting) and village-level actions. This improvement is

true both immediately after the program ends and one year later. At endline 1, treatment women report having a greater say in decisions within the household related to health expenditures and home improvements. However, this gain in empowerment does not persist over time.

In Table S3, we present bounds for our treatment effects, depending on different assumption with respect to attrition, using Horowitz-Manski-Lee bounds (19, 20). The conclusions are robust to this exercise, with all lower bounds except that for women empowerment significantly positive at endline 1.

b. Country-by-Country variation

There are too many countries and too many variables to comment on the country-by-country and variableby-variable results in detail, though the tables are all available in the supplementary material. Figure S3 (endline 1) and Figure 3 (endline 2) have a similar format to Figure S2 and Figure 2, but they present the country-by country results for the summary indices. Tables S4a through S4f present the impacts on the 10 indexed family outcomes, one table per country. Tables S5a-1 through S5h-2 present the impacts on each of the components in each of the countries, one table per family of outcomes per endline. Here, we highlight some particularly relevant information from this analysis.

The first and most important point is that the results are not driven by any one country. The differences across countries can be seen in Figure S3 and Figure 3. We present tests for the hypothesis that the results are the same for all countries for each outcome variable. The hypothesis is rejected for almost all pooled outcomes (Table 3), which suggests that there is significant site-by-site variation (and enough data to pick it up), which would be important to study in future work. However, in endline 1 the program appears to have positive impacts on most indices for most countries (Tables S4a-S4f). An exception is Peru, where we see three results out of ten statistically significant at the 5% level. In endline 2, four of the countries (Ethiopia, Ghana, India and Pakistan) continue to have statistically significant and positive impacts on most variables, but Honduras and Peru have weaker results, with positive and statistically significant impacts on three out of ten and four out of ten families of outcomes before multiple hypothesis adjustments, respectively (and Honduras also has a negative, and statistically significant prior to multiple hypothesis adjustment, impact on assets).

Turning to the key variables, the gains in per capita consumption, for example, are statistically significant for both endlines in every country except Honduras and Peru. However, we do find a statistically significant increase in food consumption for Honduras in endline 1 and Peru in endline 2 (Tables S5a-1 and S5a-2). Likewise there is an increase in livestock revenues (livestock was the most frequently chosen asset in all sites) in all countries by endline 2. There is significant improvement in assets in all countries

except Honduras (where it actually declines by endline 2). When looking at the variables individually, some results are different from country to country, no doubt partly due to local specificities and probably partly due to pure luck, but the overall bottom line is that the program appears to be effective in most places. Even in Peru, where we see gains on fewer variables than in other countries, the gains in food expenditures per capita, assets, livestock revenues, physical health and mental health, are all positive and significant.

Second, while it is of course dangerous to rationalize the Honduras results ex-post, there is a relatively simple explanation for the pattern of results we observe, with generally positive results in endline 1 declining by endline 2. Most households were given chickens. In both endlines we do see an increase in revenue coming from chickens, as well as a significant increase in food consumption. However, a large fraction of the chickens died due to illness. By the time households were interviewed at endline 2, the households had lost most of their productive asset (leading to a negative and statistically significant impact on the asset index by endline 2) and were not consuming more.

Third, the India results, which come from West Bengal, an area of India that is directly abutting Bangladesh and shares a language and a culture, are strikingly similar, down to most details, to the results in the RCT of the impact of BRAC reported in Bandiera et al (6). In particular, as they do, we find that there is an increase in non-agricultural, non-livestock income by endline 2 in West Bengal (Table S5f-2). None of these were promoted through the program, yet they materialized as the household's wellbeing improved.¹¹ This result suggests a pathway—income diversification—through which the results might persist over time.

Fourth, the strongest positive results across the board are obtained in Ethiopia. The Ethiopia case is interesting, because it is the one country where all of the control group also received the basic consumption support that, in other sites, is only provided to the treatment groups (in Peru, half of the control group was also on a government cash transfer program, *Juntos*). Since it is only one country, we have no counterfactual to what would have happened in Ethiopia if the control group had not received consumption support, but this design at least tells us that the consumption support on its own is not responsible for the entire impact of the program. Note however that the productive asset transfer in Ethiopia (equivalent to 7.98 goats) was also larger than in Ghana (6.00 goat equivalents), India (6.53 goat equivalents), or Pakistan (3.75 goat equivalents), so to the extent that assets are liquid, the larger asset transfer in Ethiopia may have compensated for the difference in consumption support.

c. Effects on distribution of outcomes

Table 5 shows quantile regression estimates at the 10th, 25th, 50th, 75th and 90th quantiles of the distribution of the outcomes. There are several notable results. First, we see positive and significant impacts on income, consumption and assets, at all tested quantiles. This is encouraging, in that it shows that the program did not push the poorest towards an activity that they did not have the wherewithal to manage successfully. Second, for the other variables, the pattern of results is what standard theory would predict. For example we see impacts on food security only towards the bottom (at the 25th percentile): those are the households who frequently miss meals and thus likely use any income gains to buy more food. On the other hand, we see impacts on financial inclusion only for the top quantiles (median and above at both endlines): if either access to credit or savings requires meeting some threshold of resources, the poorest of the poor may not have met that threshold even with the program. Third, the effects on consumption per capita and the income and revenues index are all increasing with the quantiles: for example, at endline 1, the 10th percentile of consumption (income and revenue index) increases by 0.027 SD (0.005 SD), while the 90th percentile increases by 0.491 SD (0.079 SD). Finally, we do see much larger asset growth at higher quantiles (0.038 SD for the 10th quantile vs 0.357 for the 90th quantile).

d. Are Spillovers biasing the Results?

In SOM Text 4 and Tables S6a and S6b, we examine spillover results in Ghana, Honduras and Peru. These three sites employed a randomization at both the village and household levels to permit comparisons of control individuals in treatment villages to control individuals in control villages. Overall, these results suggest that neither externalities nor general equilibrium effects within villages significantly affect our outcomes. This finding implies it is appropriate to pool the control households in treatment villages with the households in control villages to form the control group.

V. DISCUSSION

The experiment, conducted in six countries on three continents, shows that the ultra-poor Graduation program improves the lives of the very poor along many dimensions. The program's primary goal, to increase consumption, is achieved by the conclusion of the program and maintained one year later. Furthermore, the pattern of impacts on intermediate and downstream outcomes accords with the theory of change: productive assets, income and revenue go up. While results vary across countries, the general pattern of positive effects that persist for at least a year after the program concludes is common across all countries, with weaker impacts in Honduras and Peru.

a. Cost benefit analysis

Naturally the benefits should not be considered without also considering the costs. Table 4, Panel A presents costing details, broken down by direct costs (direct transfer and supervision costs), start-up expenses and indirect costs (including local and international overhead costs). The total program costs for the full duration of the program (inflated to year 3 equivalent PPP dollars, using 5% as the social discount rate range from PPP US\$1538 per household (India) to PPP US\$5742 (Peru). We use 5% as the social discount rate to harmonize with the joint World Bank and International Monetary Fund policy (21), but also calculate internal rates of return and show sensitivity to 7% and 10%. There is no single driver of costs to explain the differences; some of it can be attributed to in-country operating cost differences and some is presumably due to variations in the actual program design. Peru, for example, is a much richer country than India, so the wages paid to the implementing staff were a lot higher. It is not possible to precisely assign labor costs to specific activities; however, the majority of supervision costs in each country are likely attributable to the household visits and training activities. The asset costs and food stipends, on the other hand, required little labor to distribute.

Table 4, Panel B summarizes the consumption gains and asset value changes attributable to the program, all inflated to year 3 equivalent PPP dollars. We assume that the (unmeasured) year 1 ITT effect on percapita consumption is equal to that estimated for year 2, and we assume that the estimated impact on year 3 consumption continues indefinitely into the future (we then relax this assumption, below, as a sensitivity check). The overall impact of the program on consumption expenditure, reported in row 8, is the sum of the impact on the year 3 stock of household durables and the total impact on each year's nondurable consumption (in year 3 equivalent dollars). Rows 9 and 10 of Panel B also report the impact of the programs on the stock of productive assets and savings.

As noted previously, the increase in assets held by the households is lower than the value of the asset in all countries but Ethiopia. On average, households have drawn down part of the asset transfer in the first year, but there is no further decline between year 1 and year 2, and the consumption gains (the final objective of the programs) persist over time. The decline in asset holding in the first year, followed by a stable pattern in both assets and consumption is somewhat surprising, as economic theory would suggest a slower adjustment to a steady state level of assets (even if the initial transfer was larger than the optimal steady state level of assets). We may capture imperfectly some informal assets or liabilities (such as debt or loans to or from other households in the village, which may be labeled as gifts or alms). We also do not capture the value of human capital, which has increased due to better nutrition, physical and mental

health: spending on better food and needed health expenditures early in the program may have been a valuable investment.

Of course, the ultimate goal of the program is to durably increase consumption, not merely to increase asset holding. Using total consumption as the measure for benefits, the total benefit-cost ratios presented in row 11 indicate that with the exception of Honduras, the programs all have benefits greater than their costs (ranging from 133% in Ghana to 410% in India).

We explore the sensitivity of this conclusion to some of our crucial assumptions. First, we calculate the internal rate of return, to assess at what social discount rate costs equal benefits. They are 13.3% (Ethiopia), 6.9% (Ghana), n/a (Honduras), 23.4% (India), 9.5% (Pakistan), and 7.5% (Peru). Second, we calculate in row 18 the rate at which nondurable consumption must dissipate after year 3 (rather than persist into the future) in order for benefits to equal costs. Third, in the subsequent two rows, 19 and 20, we show the sensitivity of the benefit-cost ratio to alternative social discount rates of 7% and 10%. Benefits continue into the future while the costs are front-loaded, so the benefit-cost ratios decline with increases in the assumed social discount rate. See SOM Text 5 for details on the cost-benefit analysis calculations.

b. Mechanisms

As mentioned, the results echo the positive results of the evaluation of the BRAC program in Bangladesh (6). Two other studies of cash transfers and support for self-employment, both in Uganda, find similar results. Blattman et al (22) finds that a program that provided a \$150 grant (PPP US\$401) towards a non-farming self-employment activity along with training and follow-up guidance to very poor women in conflict-affected regions increased consumption, cash earnings, labor supply, and non-farm self-employment. Blattman et al (23) finds that a program that provided both training and support and a cash grant to youth increased business assets by 57%, work hours by 17% and earnings by 38%. The programs we studied differ from those reported on in (22) and (23) on a few dimensions: choice of sample frame (representative ultra-poor, versus unemployed young men or poor women); the level of intervention (household, versus group-level investments as in (23)); and the integration of other components (health and access to savings). Nevertheless, these studies add to an emerging picture from a variety of countries that these types of programs can be effective.

While we see impacts across the board, more work is needed on the mechanisms that underlie the positive impacts. The core fact is that a time-limited big push led to a sustained increase in consumption and income. One common way to think about the effect of a big push is through the lens of the large,

primarily theoretical, literature on poverty traps (24). In such models the combination of constraints and incentives faced by the poor act to keep them in place, ensuring that any small improvement in their wellbeing quickly dissipates. Only a big push that significantly relaxes those constraints can set off a virtuous cycle where the beneficiaries move to an entirely different trajectory.

The fact that the effects of the program seem durable supports the interpretation that the program unlocked a poverty trap. On the other hand, the average effects are not very large and do not correspond to our intuitive sense of what it would mean to be liberated from the trap of poverty. There are several possible ways to resolve this tension:

First, it could be that there is no trap—but rather what one might call a "poverty flat", a world in which small changes persist but neither unleash continued improvement, thus leading to large longer term changes, nor dissipate rapidly.

Second, it is possible that this particular trap is small—the beneficiaries have gotten out of it, only to join the broader mass of the poor, who might be in some other, bigger, trap.

Third, it is worth recalling that the theory predicts that the effect of a push will be heterogeneous, unless the push is simply enormous. Those who are closer to the edge of the trap will exit, but the rest will just slowly fall back in. Perhaps this is what happened—the heterogeneity in the impacts we see across the distribution lend some support to this hypothesis. Even among the very poor households targeted by these programs, the impacts on income and revenues and consumption, while positive everywhere, are lower at the bottom of the distribution. Since everyone was offered the same menu of assets, under the standard assumptions of constant or decreasing returns to the assets and homotheticity of preferences, we would expect those impacts to be either constant or decreasing. Instead, it appears that the poorest of the poor either have a lower return to the asset, or that they chose to consume more of it, or both. The differences in terms of final asset accumulation are very large: by endline 2, the point estimate of the impact of the program at the 90th percentile of the asset index is more than ten times that at the 10th percentile.

Fourth, another source of heterogeneity, the level of patience or return on investment, could also help explain why the average impact is both durable and yet not very large. The more patient or productive would use the asset transfer as a springboard to accumulate more assets and permanently be on a different consumption trajectory, while the others would sell off some part of the transferred assets to consume more than they earn, and perhaps eventually end up where they started. In rows 13-17 of Table 5, we use quantile treatment effects to generate the total gain in assets at different quantiles and present them relative to value of the original transfer. The ratio of the asset gain to the cost of the transfer is less than

one at all tested quantiles in every country except Ethiopia (above one for the 50th, 75th and 90th percentiles) and India (above one for the 90th percentile), suggesting that the general pattern of eating into assets holds at every quantile. Therefore, we do not find strong evidence for this kind of heterogeneity.

But what would be the specific nature of a trap? One standard narrative for a poverty trap essentially says that poor people remain poor because they cannot afford enough food to make them strong enough to be productive (25). This theory has been discounted in recent years on grounds of empirical plausibility— essentially most poor people can afford to spend more on food if that were a priority for them (26). However, this may be a case where that theory does apply, at least to some participants in the program, because these people are poorer than most poor people and may actually not be able to afford enough food (Table 1 reports the daily per-capita calories that could be purchased if baseline expenditures were allocated solely to staple grains). As noted, for the very poor, we do see large increases in food security. Moreover, the elasticity of food consumption is greater than one in the overall experimental population. However this is driven by the food expenditure responses in Ghana, Honduras, and Peru. In the three other countries, the proportional increase in non-food consumption is either similar to or greater than the proportional increase in food consumption, and we see a persistent effect there as well. Moreover, we see even larger and persistent impact even at the quantiles where there is no impact on food security (although it could still be that they are eating more nutritional food). So nutrition cannot be the whole story, although it may well be a part.

An alternative view of the poverty trap emphasizes underinvestment by the poor, either because they are unable to borrow enough to be able to make the necessary investment or because they find it too risky (24, 27, 28). For the poorest within our study, we do not find an impact on financial inclusion, and we find a weaker impact on assets. This is consistent with the need to satisfy some asset threshold before being eligible for credit, one of the key ingredients for a credit-based poverty trap. Once again, however, the evidence for the existence of such traps is not very strong. There is a growing body of evidence now on microcredit which was intended to improve credit access among the segment of the population only slightly less poor than our targeted group. For example, Banerjee et al (29) reviews six randomized studies of microcredit in six different countries (30–35) and concludes that while microcredit loans sometimes lead to an increase in business activity, the effect on average business profits is much more muted, and there is no effect of an impact on consumption over a one to three year time period. In other words, for the average poor person, better access to microcredit does not seem to generate the kind of sustained consumption gains that we see with this program, suggesting credit alone is not the explanation.

Of course the programs we analyze are different from microcredit in multiple ways. Here, households did not need to repay. This might have encouraged them to take more risks and genuinely invest themselves in the activity. Or it could be the training and personal encouragement. Or these people may be in a different economic position—the microcredit borrowers already have an occupation and an income and are merely trying to expand, not start a new activity. The participants in the Graduation programs are starting new activities, more or less from nothing. These are all important possibilities that deserve exploration.

But perhaps we need to go beyond these standard theories. There are now behavioral theories of poverty traps that give an important role to positive expectations of the future (36, 37). We do see some improvement in the self-reported well-being of the beneficiaries, which, at endline 1, are visible at all level of the distribution except for the 90th percentile. Much more detailed psychological measurement would be necessary to fully understand this result and its underlying mechanisms. Perhaps this program worked by making the beneficiaries feel that they mattered, that the rest of society cared about them, that with this initial help they now had some control over their future wellbeing, and therefore, the future could be better.

These positive results leave us with a number of important questions. First, is it better to deliver physical assets and support, rather than pure cash transfers? There is evidence—from an RCT evaluation of the GiveDirectly program in Kenya, which transferred on average PPP US\$720 to poor households, either monthly or in one lump sum—that pure cash transfers also have positive impacts on consumption, food security, asset holdings in the short run (including productive assets) and on psychological well-being (*38*). Similarly, de Mel et al (*39*) finds that a cash (or in-kind) transfer to existing self-employed individuals in Sri Lanka has a persistent positive effect on self-employment profits 4.5 to 5.5 years later. Since it is cheaper and easier to just deliver cash rather than physical assets and training, and the initial consumption increases from Kenya seem to be higher than what we observe after two and three years, it would be useful to have a direct comparison of the effects of these programs. The Ghana experimental design does include a comparison of the Graduation program to merely an asset transfer and the results are forthcoming.

However, the Kenya results are unfortunately not quite comparable, because the time to follow up was much shorter (four months). The Kenya study did employ random variation in survey timing to try to examine persistence of the impact, and found that the estimated treatment effect reduced by about half from one month after the transfer to seven months, however, this reduction was not statistically significant. We observe no decline in the gain in consumption per capita almost three years after the asset

transfer. If the effects of one-time transfers dissipate rapidly in one case and are permanent in the other, this obviously has major consequences for the comparative cost-benefit analyses of the two programs. The evolution of the impacts over time over a longer horizon is thus something that needs to be further explored, both for pure cash transfer programs and for these broader programs.

Second, how important was the training and coaching as a component in the full intervention? This is a particularly important component to test, because its costs are on average twice that of the direct transfer costs, and because operating at scale requires quality hiring, training and staff supervision. As discussed above, we do not have experimental variation with which to test this question. Evidence from elsewhere suggests that the household visits, which are a large expenditure, may not be a cost effective component. In Blattman et al (22), for example, variation between zero and five household visits did not generate, after nine months, large differences in income outcomes (but did lead to higher investment). Furthermore, a meta-analysis of self-employment training programs has found mixed but rarely transformative impacts from training (40).

This brings us to the next key question: how long will these results persist? This will not be known until some participants are followed for a longer period of time, but there are a number of encouraging signs. First, the effect on consumption does not decline over time as one would have expected had the program not led to long-term increases in income. Similarly, the increase in consumption was not generated by merely spending down the asset provided.¹² Second, treatment households have more productive assets and have increased their labor supply one year after the program ends, and in some countries have diversified out of the original asset that was provided. Finally, in Bangladesh (*3*), households were followed for two more years after the end of the period of support, and the study continues to find robust impacts on consumption, productive assets, and earnings.

Another issue is the potential for externalities or general equilibrium effects, both positive and negative, from the program. Transferring (often) the same productive asset to many households in a small village may generate a negative externality on other asset owners, if for example the transfers result in a fall in the price of cows or milk. On the other hand, the benefits that accrue to the treatment households may be shared with others, as has been observed from a conditional cash transfer program in Mexico (41). It is worth pointing out that the program is designed to serve few people (the poorest) within each village, and in that sense, the current design probably picks up a fair share of the possible externalities. In endline 2, the evidence from the three sites where randomization allowed the examination of spillover shows no effects on primary economic outcomes such as consumption and income, and no significant effects at the 5% level on any variable after accounting for multiple hypothesis testing.

These questions will become ever more important as these programs scale. The programs studied here were implemented at relatively small scale, and typically by NGOs. Moving forward, to reach the largest numbers of very poor households, either governments will have to implement the programs or governments will fund implementation via subcontracts to local NGOs). Note that implementing the program at larger scale will mainly require increasing geographic coverage, rather than increasing the proportion of households reached in each village. This suggests that the smallish general equilibrium effects observed here are probably also representative of what one would expect from a larger program. Hence, the positive impacts generated by these programs are likely to be predictive of what a government could expect, if implemented similarly but at larger scale.

References

- 1. World Bank, "The World Bank Annual Report 2013" (Washington, D.C., 2013), (available at https://openknowledge.worldbank.org/handle/10986/16091).
- 2. "A new global partnership: Eradicate poverty and transform economies through sustainable development" (United Nations High Level Panel, 2013), (available at http://www.un.org/sg/management/pdf/HLP_P2015_Report.pdf).
- 3. S. D. Ashley, S. J. Holden, P. B. S. Bazeley, Livestock in Development (Organisation), *Livestock in poverty-focused development* (Livestock in Development, Crewkerne, 1999; http://www.theidlgroup.com/documents/IDLRedbook_000.pdf).
- 4. J. Dreze, Poverty in India and the IRDP Delusion. *Econ. Polit. Wkly.* **25** (1990) (available at http://www.epw.in/review-agriculture/poverty-india-and-irdp-delusion.html).
- 5. R. V. Pulley, Making the Poor Creditworthy: A Case Study of the Integrated Rural Development Program. *World Bank Discuss. Pap.* **58** (1989) (available at http://wwwwds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2000/06/28/000178830_9810190 3572627/Rendered/PDF/multi_page.pdf).
- 6. O. Bandiera, R. Burgess, S. Gulesci, I. Rasul, M. Sulaiman, Can entrepreneurship programs transform the economic lives of the poor? *LSE Work. Pap.* (2013) (available at http://sticerd.lse.ac.uk/dps/eopp/eopp43.pdf).
- A. U. Ahmed, M. Rabbani, M. Sulaiman, N. C. Das, The impact of asset transfer on livelihoods of the ultra poor in Bangladesh. *BRAC Res. Monogr. Ser.* **39** (2009) (available at http://research.brac.net/new/component/k2/livelihoods).
- 8. M. S. Emran, V. Robano, S. C. Smith, Assessing the Frontiers of Ultrapoverty Reduction: Evidence from Challenging the Frontiers of Poverty Reduction/Targeting the Ultra-poor, an Innovative Program in Bangladesh. *Econ. Dev. Cult. Change.* **62**, 339–380 (2014).
- 9. N. C. Das, F. A. Misha, Addressing extreme poverty in a sustainable manner: Evidence from CFPR programme. *BRAC CFPR Work. Pap.* **19** (2010) (available at http://research.brac.net/reports/cfpr wp19.pdf).
- 10. J. Morduch, S. Ravi, J. Bauchet, "Failure vs. Displacement: Why an Innovative Anti-Poverty Program Showed No Net Impact" (CEI Working Paper Series 2012–05, Center for Economic Institutions, Institute of Economic Research, Hitotsubashi University, 2012), (available at http://ideas.repec.org/p/hit/hitcei/2012-05.html).
- 11. V. Alatas, A. Banerjee, R. Hanna, B. A. Olken, J. Tobias, Targeting the Poor: Evidence from a Field Experiment in Indonesia. *Am. Econ. Rev.* **102**, 1206–1240 (2012).
- 12. Grameen Foundation, PPI Construction, (available at http://www.progressoutofpoverty.org/ppi-construction).
- 13. A. Deaton, O. Dupriez, Purchasing Power Parity Exchange Rates for the Global Poor. *Am. Econ. J. Appl. Econ.* **3**, 137–66 (2011).

- 14. J. B. Rotter, Generalized expectancies for internal versus external control of reinforcement. *Psychol. Monogr. Gen. Appl.* **80**, 1 (1966).
- 15. J. Kling, J. Liebman, L. Katz, Experimental Analysis of Neighborhood Effects. *Econometrica*. **75**, 83–120 (2007).
- M. Anderson, Multiple Inference and Gender Differences in the Effects of Early Intervention: A Reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects. J. Am. Stat. Assoc. 103, 1481–1495 (2008).
- 17. S. Subramanian, A. Deaton, The demand for food and calories. J. Polit. Econ. 104, 133-62 (1996).
- 18. P. Brickman, D. T. Campbell, Hedonic relativism and planning the good society. *Adapt.-Level Theory*, 287–305 (1971).
- 19. J. Horowitz, C. Manski, Nonparametric Analysis of Randomized Experiments with Missing Covariate and Outcome Data. J. Am. Stat. Assoc. 95, 77–84 (2000).
- 20. D. S. Lee, Training, Wages, and Sample Selection: Estimating Sharp Bounds on Treatment Effects. *Rev. Econ. Stud.* **76**, 1071–1102 (2009).
- 21. The World Bank, "Staff guidance note on the application of the joint bank-fund debt sustainability framework for low-income countries" (82566, The World Bank, 2013), pp. 1–64.
- 22. C. Blattman, E. Green, J. Annan, J. Jamison, The Returns to Cash and Microenterprise Support Among the Ultra-Poor: A Field Experiment. *Columbia Univ. Work. Pap.* (2014) (available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2439488).
- 23. C. Blattman, N. Fiala, S. Martinez, Generating skilled self-employment in developing countries: Experimental evidence from Uganda. *Q. J. Econ.* **129**, 697–752 (2014).
- 24. A. V. Banerjee, The two poverties. Nord. J. Polit. Econ. 26, 129–141 (2000).
- 25. P. Dasgupta, D. Ray, Inequality as a Determinant of Malnutrition and Unemployment: Theory. *Econ. J.* **96**, 1011–34 (1986).
- 26. A. Banerjee, A. V. Banerjee, E. Duflo, *Poor economics: A radical rethinking of the way to fight global poverty* (PublicAffairs, 2011).
- 27. O. Galor, J. Zeira, Income Distribution and Macroeconomics. Rev. Econ. Stud. 60, 35-52 (1993).
- A. Banerjee, A. Newman, Occupational Choice and the Process of Development. J. Polit. Econ. 101, 274–298 (1993).
- 29. A. Banerjee, D. Karlan, J. Zinman, Six Randomized Evaluations of Microcredit: Introduction and Further Steps. *Am. Econ. J. Appl. Econ.* **7**, 1–21 (2015).
- M. Angelucci, D. Karlan, J. Zinman, Microcredit Impacts: Evidence from a Randomized Microcredit Program Placement Experiment by Compartamos Banco. Am. Econ. J. Appl. Econ. 7, 151–82 (2015).

- 31. O. Attanasio, B. Augsburg, R. De Haas, E. Fitzsimons, H. Harmgart, The Impacts of Microfinance: Evidence from Joint-Liability Lending in Mongolia. *Am. Econ. J. Appl. Econ.* **7**, 90–122 (2015).
- 32. B. Augsburg, R. De Haas, H. Harmgart, C. Meghir, The Impacts of Microcredit: Evidence from Bosnia and Herzegovina. *Am. Econ. J. Appl. Econ.* **7**, 183–203 (2015).
- 33. A. Banerjee, E. Duflo, R. Glennerster, C. Kinnan, The Miracle of Microfinance? Evidence from a Randomized Evaluation. *Am. Econ. J. Appl. Econ.* **7**, 22–53 (2015).
- B. Crépon, F. Devoto, E. Duflo, W. Pariente, Estimating the Impact of Microcredit on Those Who Take It Up: Evidence from a Randomized Experiment in Morocco. *Am. Econ. J. Appl. Econ.* 7, 123–50 (2015).
- 35. A. Tarozzi, J. Desai, K. Johnson, The Impacts of Microcredit: Evidence from Ethiopia. *Am. Econ. J. Appl. Econ.* **7**, 54–89 (2015).
- 36. A. Banerjee, S. Mullainathan, The shape of temptation: Implications for the economic lives of the poor. *Natl. Bur. Econ. Res.* **15973** (2010) (available at http://www.nber.org/papers/w15973).
- 37. B. D. Bernheim, D. Ray, S. Yeltekin, Poverty and self-control. *Natl. Bur. Econ. Res.* **18742** (2013) (available at http://www.nber.org/papers/w18742).
- 38. J. Haushofer, J. Shapiro, Welfare Effects of Unconditional Cash Transfers: Evidence from a Randomized Controlled Trial in Kenya. *MIT Work. Pap.* (2013) (available at http://www.princeton.edu/~joha/publications/Haushofer_Shapiro_UCT_2013.pdf).
- 39. S. de Mel, D. McKenzie, C. Woodruff, One-Time Transfers of Cash or Capital Have Long-Lasting Effects on Microenterprises in Sri Lanka. *Science*. **335**, 962–966 (2012).
- 40. D. McKenzie, C. Woodruff, What are we Learning from Business Training and Entrepreneurship Evaluations around the Developing World? *World Bank Policy Res. Work. Pap.* **6202** (2012).
- 41. M. Angelucci, G. De Giorgi, Indirect Effects of an Aid Program: How Do Cash Transfers Affect Ineligibles' Consumption? *Am. Econ. Rev.* **99**, 486–508 (2009).

Notes

⁵ In all countries, individuals were grouped into geographic block strata, which are included here as dummies for each block. In Honduras, Peru and Ghana, re-randomization was performed to ensure balance on a set of variables. These variables are included as controls.

⁶ The ITT estimators can thus be interpreted as effect sizes relative to the control group.

⁷ The significance levels reported in Table 3 (* 10%, ** 5%, *** 1%) correspond to the naïve p-values, which can be inferred from the coefficient and standard errors.

⁸ Mental health questions were not asked in Pakistan in endline 1, while in India, women's empowerment was not asked about in endline 2, and so in both cases the correction is for only 9 outcome families when reporting country-specific indexed family outcomes in Tables S3a-S3f. However, it is for 10 families in all other cases.

⁹ This is gross livestock revenue, not income or net profit. On the expenditure side, it does not include fodder costs which was not measured everywhere and was measured with considerable noise even where it was measured. On the profit side, it does not include unrealized capital gains (for examples as more calves are born, if they are not sold). ¹⁰ In some sites individuals were shown a ten-rung ladder and asked "How would you describe your satisfaction

¹⁰ In some sites individuals were shown a ten-rung ladder and asked "How would you describe your satisfaction with life? If the top rung of this ladder (10) represents very satisfied and the lowest rung (1) represents very dissatisfied, where would you place yourself?" In others, individuals were shown five images of faces, and asked "Which picture describes the current satisfaction level with your life, if the smiling face is the most satisfied and the crying/frowning face is the least satisfied?" In the latter case, the question was also scaled 1-10. ¹¹ Bandhan is also probably the organization that has the strongest links to BRAC, and the Bandhan program may

¹¹ Bandhan is also probably the organization that has the strongest links to BRAC, and the Bandhan program may have been run more similarly to BRAC's than the others. BRAC staff trained Bandhan staff at the onset of the program, for example.

program, for example. ¹² Nor is the consumption increase simply the permanent income hypothesis in operation. If a household were capable of smoothing the income shock from the transfer perfectly, the increased long-term consumption would simply be the interest rate times the value of the assets transferred. The consumption increases we are observing are considerably higher than that.

¹ In total, 10 sites were identified and programs implemented. Four are not included here for the following reasons: Yemen conducted a randomized evaluation, but has been delayed due to the civil conflict; a second India site, implemented by the microlender SKS, also conducted a randomized evaluation, but by a different set of researchers. It has not been included due to lack of comparability of data. They find no impact, due either to mis-targeting individuals engaged in the labor markets, thus the grants generated substitution away from other income-generating activity; portfolio reallocation, in which productive asset grants were sold to pay down debt; or other data issues leading to lack of conclusive evidence (*10*)). Two sites (Haiti, implemented by Fonkoze, and a second in West Bengal, India, implemented by Trickle-Up), did not employ experimental methods to measure their impact, and are thus not reported here. Ford and CGAP also coordinated ethnographic research in several of the sites.

 $^{^2}$ In Ghana, households received consumption support during the six month lean season for both years. They therefore received consumption support over the course of two years, but the total duration of support received was 14 months.

³ All exchange rates used in this paper are in PPP terms. We convert all monetary figures from local currency to USD PPP, at the year of the program's inception for cost data, and the year of the relevant survey for our results data. We then convert from USD PPP for that year to 2014 USD by multiplying by the ratio of the 2014 US Consumer Price Index (CPI) to the US CPI for the year in question. We use the following PPP rates: for Ethiopian Birr (ETB) in 2010, 2012, and 2013, 4.18, 6.45 and 6.66, respectively; for Ghanaian Cedis (GHS) in 2011, 2012, and 2014, 0.70, 0.79 and 0.91, respectively; for Honduran Lempiras (HNL) in 2009, 2012 and 2013, 9.77, 10.13, and 10.15, respectively; for Indian Rupees in 2007, 2009 and 2010, 11.76, 13.20, 14.21, respectively; for Pakistan Rupees (PKR) in 2008, 2011, and 2013, 15.84, 24.35, and 26.83, respectively; for Peruvian Nuevo Soles (PEN) in 2011, 2013, and 2014, 1.48, 1.53 and 2.03, respectively. The US CPIs used for 2007-2014 are respectively 207.3, 215.303, 214.537, 218.056, 224.939, 232.957 and 236.9111.

⁴ We present bounds for our treatment effects, depending on different assumption with respect to attrition, discussed in Results section.

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Analysis

Multiple Inference Testing:

Given that multiple families of outcomes are being reported, we correct for the potential issue of simultaneous inference using multiple inference testing. We calculate q-values using the Benjamini-Hochberg step-up method (10) to control the false discovery rate (FDR). The Benjamini-Hochberg method finds the adjusted significance levels as follows:

For each of our *m* outcome families, let $p_1 \le p_2 \le p_3 \le \dots \le p_m$ be the set of ordered p-values that correspond to the *m* hypotheses tested. At every significance level α (we initially test $\alpha = 0.10, 0.05, 0.01$), let k be the largest value of *i* such that the following condition holds:

$$p_i \leq \frac{i}{m} \times \alpha$$

Then, reject all hypotheses with rank $i \leq k$. This gives the number of successfully rejected hypotheses and the critical p-value α at which every null hypothesis H_i can be rejected.

While the Benjamini-Hochberg procedure does measure whether or not a hull hypothesis can be rejected at every significance level α tested, it does not provide the smallest level at which the hypothesis is rejected. This analog to the p-value ("q-value") is the minimum significance level α at which the null hypothesis can be rejected for all hypotheses whose unadjusted p-values are less than the critical rank, k. We follow the procedure outlined in Anderson (11), and test α at all significance levels (1.000, 0.999, 0.998... 0.000). Our q-value is the smallest α at which the null hypothesis is rejected. The q-value is reported alongside the un-adjusted p-value in Table 3.¹

Quantile regressions

In Table 5, we present quantile regressions of the indexed family outcomes presented in table 3. We test quantiles at the 10^{th} , 25^{th} , 50^{th} , 75^{th} and 90^{th} percentiles, of the form:

$$Y_i^{k,q} = \alpha + \beta_1 assignment_i + \beta_2 Z_i^k + T_{country} + \varepsilon_i$$

where $Y_i^{k,q}$ is the outcome k of interest at quantile q for either household or adult i, assignment_i is an indicator for having been randomly selected into the program, Z_i^k is the household or adult's baseline value of the outcome variable k (coded as zero, with an indicator for missing baseline, whenever it was not available), and $T_{country}$ is a vector of dummy variables for each of the countries in the study. Note that these specifications differ from the regressions used in Table 3 in that they do not include short survey or block stratification controls. We use this simplified regression to ensure convergence for all regressions performed. Regressions including the same vector of controls used in Table 3 are qualitatively similar to those presented in Table 5 in cases where convergence is achieved.

Unit of analysis and short survey dummies:

¹ The significance levels reported in Table 3 (* 10%, ** 5%, *** 1%) correspond to the un-adjusted p-values.

Questions pertaining to consumption, food security, asset ownership, food security, and income and revenues were asked at the household level. For each of these variables, our unit of analysis is the household. Questions relating to time use, physical and mental health and political and women's empowerment were asked to multiple adults in each household. Each adult is treated as a separate observation in these cases, though standard errors were clustered at the household level.²

In Ghana, Honduras, and Peru, a subset of the sample was asked short surveys during the implementation period, between the baseline and endline 1 surveys. These surveys are abbreviated versions of the full-length surveys, and include sections on topics such as income generating activities, agriculture and livestock management, consumption, assets, financial inclusion, and health. Peru had eight rounds of short surveys, Honduras had five rounds, and Ghana had three rounds. This analysis includes only short survey data from rounds that occurred during the same year as endline 1: four in Peru, two in Honduras, and two in Ghana.

For each of the outcome variables where short survey data exists, our outcome variable at endline 1 is the average of endline 1 and all relevant short survey data. We then include country-specific dummy variables for each short survey round, equal to 1 if short survey data from that round existed and 0 otherwise.

<u>Clustering of standard errors</u>:

Standard errors are clustered at the level at which randomization took place. In India, Ethiopia, and Pakistan, this took place at the household level. Therefore, in pooled analysis, standard errors are not clustered for household level results, and are clustered at the household level for adult level outcomes (use of time, physical and mental health, political and women's empowerment).

However, in Ghana, Honduras and Peru, there were two stages of randomization. In the first stage, villages were either selected to be control villages or treatment villages. Then, within treatment villages, households were randomly selected to be either treatment or control.

Among households in treatment villages, whether or not a household was part of the program was decided at the individual household level, so each has a cluster of one (and clustered at the household level for adult variable outcomes). However, among control villages, their selection as control households was determined at the village level, so error terms are likely to be correlated within each village. Therefore, all households within each control village share a single cluster. Our standard errors for regressions are therefore clustered at the "randomization unit", with unique clusters for every household in villages where the program was offered, and clusters at the village level for those in pure control villages.

Variable Construction

Consumption:

Food consumption is valued based on the amount of each type of good that the household consumed. The value of each household's consumption is found by multiplying the total amount consumed by the household in a given time period (typically, either a week or month) by the unit market price of the good. This is true regardless of whether it was a good produced within the home, purchased, or received as a

 $^{^{2}}$ In most cases, two adults were surveyed per household. However, in households with only one adult, or where only one adult could be found, only one adult was surveyed. In India, every adult in the household was surveyed and included in analysis (up to as many as 7 adults in a household).

gift. In cases where market price data is not available, the median price among households who did purchase the good is used to determine the unit value, which is then applied to all households.

Nonfood consumption: includes medical expenditures, school fees and expenses, clothing expenses, household repairs, temptation goods, fuel expenses, festival expenses, (non-work) transportation expenses, and other, country-specific expenses. It does not include any expenses incurred in the running of income-generating activities (such as buying inventory, or purchasing feed for livestock).

Income and Revenue:

Agricultural income: Equal to total revenues minus expenses.

Revenues consist of the following components:

Crop production—crop production is valued by multiplying the total amount of each type of crop produced (less any given to a landowner through a sharecropping arrangement) by the unit value of each crop. In cases where a household sold the crop, the observed sale price is used. In cases where the household stored the crop, or consumed it in their home, the total amount of crop production is multiplied by the median unit sale price of the crop to estimate the value of production.

Land rents-any income earned from renting out or sharecropping out any land

Expenses include hired labor, fertilizer costs, seed costs, and the cost of renting land. In every case, the amount reported by the household is used. The opportunity cost of a household's own labor is not treated as an expense.

Livestock revenue: Revenues consist of the following components:

Revenues from sales—the revenue from animal sales is found by multiplying the number of animals sold by the per-animal sale price at the household level.

Slaughters—if an animal is slaughtered, the revenue from this transaction is calculated using the observed sale price for the meat. If the sale price of meat is not reported, or the meat was consumed by the household, the median sale price of meat is used.

Output production—If a household sells outputs, the observed total sale price is used for the value of output production. In cases where the household consumed the products, the total production is multiplied by the median per-unit sale price of the output.

Non-farm micro-enterprise: equal to total sales minus total expenses. Expenses include rent, the cost of hiring labor, the cost of purchasing inputs, and any other listed expenses in the running of the business. Investments in the business (such as purchasing equipment) are not treated as expenses, but rather as a credit to the business' cash account, and a debit to the household's asset account (and therefore do not affect the business' income statement)

Assets:

Weighted asset index: In each of the six countries, households are asked about whether or not they own each of several types of durable goods and livestock, and how many of each type they own. In each of the six sites, there is also either information on the current value of those livestock, or on the median value of purchased livestock.

However, the value of durable goods owned is only measured directly in four of the six countries. In Ethiopia, households report the current estimated value of the assets they own. In Honduras, Pakistan and Peru, households report whether or not they purchased any of the asset in the last year and how much they spent, making it possible to estimate the unit value of each durable good. While some assets are unique to certain sites (for example, only households in Peru report owning guinea pigs), there are many types of assets that are held in several of the sites. (For example, goats, cows, televisions and bicycles are all assets that households in every site report owning).

While the cost of each good differs between sites, the *relative* values of each type of good are strongly correlated between sites. (As a robustness check, the correlation between the observed value of assets reported in one site and the predicted value of the assets based on relative values from the other sites is presented in Table S5a). Therefore, the prices of durable goods in the four countries where data is available are used to estimate the relative values of goods in all six sites. All six of the sites report value of livestock held, so all six countries' values for livestock were used in the construction of the relative prices. These deduced measures of value are then standardized and reported in a weighted asset index.

The asset index was constructed using the value of goats as the numeraire. Goats were chosen because they are an asset held in common across all six sites. The process for creating the index was as follows:

- 1. The median unit value for each asset (durable goods and livestock) was calculated in each country (for durable goods, only in Pakistan, Honduras, Peru and Ethiopia; for livestock, in all six countries). In Ethiopia, the median value is found from all households who own the good and offered a valuation of it. In Pakistan, Peru and Honduras the median is calculated from households that purchased the good in the past 12 months.
- 2. In each site, the value of each asset in terms of goats (the numeraire) was calculated by dividing the unit value of each asset by the median unit value of goats. For example, a bicycle in Ethiopia is expressed as 1.34 goats.
- 3. For every durable good and type of livestock, the medians from each of the countries where price information about the good is available are combined to construct a single, cross-site median value of each good in terms of goats.
- 4. Total asset value, productive asset value, and household asset value in terms of goats is calculated for all six sites by multiplying the cross-site unit value of each asset (expressed in terms of goats) by the number of each asset owned.
- 5. These values are then standardized to the control group within each country and survey round and reported as weighted indices.

Activities of Daily Living Score:

This score is one of the components of the physical health index. It measures individuals' ability to carry out a range of physical activities that are common to daily life. Adult respondents are asked to rank their ability to do the following physical tasks: (1) Lift a heavy object, (2) Work all day in the field, (3) Walk a certain distance without getting tired. These components were scored on a binary (0/1) scale, with 1 indicating that the respondent was able to complete the activity without help and 0 if they either would require help or could not do the activity. These three components were then averaged together to get the daily living score. A higher Activities of Daily Living score indicates a more physically capable individual.

Stress Index:
The stress index is a component of several symptoms of reported mental distress. Respondents were asked about how often they (1) feel sad, (2) cry, (3) have no appetite, (4) do not feel like working, and (5) have trouble sleeping. In some countries, households report how many times they had these experiences in the last week, while in others they report how frequently they experience those emotions on a scale of 1 to 5. In both cases, variables are recoded, such that a higher score corresponds to fewer times experiencing the negative emotion. Each of the components is then standardized against the control mean from that time period, and all of the components are then averaged and standardized to create a single score.

Women's Decision-making Index:

Only adult women were asked the questions that comprise this index, which measures the women's role in household decisions. Women reported who all in the home was responsible for making decisions related to (1) food expenses, (2) education expenses, , (3) health expenses, (4) home improvement decisions, and (5) household enterprise management expenses. In cases where multiple people were reported having a say, women were asked either who had the "major" say, or who the primary decision-maker was.

The components were coded on a binary (0/1) scale, with 1 indicating that the woman had the major role in the decision-making process, or was the primary person responsible for making that decision, and 0 otherwise .A higher score on the women's decision-making index therefore indicates that the respondent has a more active role in making household decisions.

	Som Text 2. Components of indexed Tuning Outcomes
Consumption	Total per capita consumption, disaggregated parts include food consumption, non-food consumption and
	durable good consumption
Food Security	Everyone gets enough food every day, no adult skips meal, no one went a whole day without food, no child
	skipped meal, everyone regularly eats two meals a day
Assets	Total relative value of all assets (productive and household)
Financial inclusion	Formal borrowing, informal borrowing; total amount deposited into savings, total savings balance
Time spent working	Total time spent working, disaggregated parts include time spent on agriculture, livestock, business and paid work
Income and Revenue	Revenues from livestock, income from agriculture, income from business, income from paid work, self- perception of economic status
Physical Health	Activities of daily living scores, adult has not missed work due to illness, self-perception of health
Mental Health	Index of lack of symptoms of emotional distress, self-perception of life, adult has not experienced prolonged period of worry
Political Involvement	Voted in last election, is a member of a political party, attended village meeting, spoke with village leaders about village concerns
Women's Empowerment	Female was primary decision maker in (1) food-related spending decisions, (2) education expenditures, (3) health-related expenditures, (4) home improvement decisions, (5) household finances

Notes:

(1) For consumption and time spent working, the summary outcomes are the aggregate of each of the sub-components, standardized to the control mean in each time period.

(2) For all other families of outcomes, the mean treatment effects correspond to a z-score index of each of the sub-components, averaged and standardized against the control mean

SOM Text 2: Components of Indexed Family Outcomes

Analysis Variables	Ethiopia	Ghana	Honduras
Total consumption per capita, month	Total of all food consumption (detailed below), intoxicants and fuel * median purchase prices, annual and monthly expenditures, festival spending, durable good purchases, household repairs, total medical expenses, total expenses in response to a shock, all scaled down to monthly values	Total of all food consumption (detailed below), temptation goods and fuel expenditures, school, clothing, festival expenditures, transportation, rent, medical expenditures, and home improvement spending. Scaled to per capita monthly values	Total of all food consumption (detailed below), temptation goods and fuel expenditures, school, clothing, festival expenditures, transportation, rent, medical expenditures, durable good purchases, and home improvement spending. Scaled to per capita monthly values
Food consumption per capita, month	(Quantity*median market price) for each food item in consumption section. For questions without market data, median purchase price is used	(Quantity*market price) for each food item in consumption section; reported in survey as "in last day" or "in last week" so scaled to monthly per capita; for questions without market data, median purchase price is used	(Quantity*median market price) for each food item in consumption section; per capita; reported in survey as "in last day" or "in last week" so scaled to monthly per capita; for questions without market data, median purchase price is used
Nonfood consumption per capita, month	All expenses outlined in monthly average expenditures, less all spending on food (ic cereals, pulses, dairy, edible oils, vegetables, fruits and nuts, other foods) and durable good expenditures	Total monthly expenditures per capita (USD PPP) and total annual expenditures per capita; not food. Health expenditures, Education expenditures; home improvement purchases	Total monthly nonfood expenditures per capita and total annual nonfood expenditures per capita. Health expenditures, Education expenditures. Scaled to per capita monthly values
Durable good expenditure per capita, month	Total of spending on durable goods in last year	Total spending on durable goods last year; scaled to monthly per capita values	Total value of durable goods bought in last 12 months, in per capita terms, scaled to per capita monthly
Food security index	Z-score of: everyone gets enough food every day; no adults skipped meals; no one in household went entire day without eating; no children skipped meals; and everyone in household regularly eats two meals per day	Z-score of: everyone in the household gets enough food every day; no adults ever skipped meals; no adults ever went day without eating; no children skipped meals	Z-score of: no adults ever skipped meals; no adults ever went day without eating; no children skipped meals
Everyone in the household gets enough food everyday	Binary (0/1) of whether or not everyone in household gets enough food every day; imputed by looking at the number of months that respondent reports not having enough to eat	Binary (0/1) of whether or not everyone in household gets enough food every day; imputed by looking at the number of months that respondent reports not having enough to eat	
No adults skipped meals	Binary (0/1) of whether or not adults in the household skipped meals (1 if no adult skipped a meal)	Binary (0/1) of whether or not adults in the household skipped meals (1 if no adult skipped a meal)	Binary $(0/1)$ of whether or not adults in the household skipped meals (1 if no adult skipped a meal)
No one in the household went a whole day without food	Binary (0/1) of whether or not anyone in the household went an entire day without eating; 1 if everyone in the household ate during a day	Binary (0/1) of whether or not anyone in the household went an entire day without eating; 1 if everyone in the household ate during a day	Binary (0/1) of whether or not anyone in the household went an entire day without eating; 1 if everyone in the household ate during a day
No children skipped meals	Binary (0/1) of whether or not children in the household skipped meals (1 if no child skipped a meal)	Binary (0/1) of whether or not children in the household skipped meals (1 if no child skipped a meal)	Binary (0/1) of whether or not children in the household skipped meals (1 if no child skipped a meal)
Everyone in the household regularly eats two meals per day	Binary (0/1) of whether or not every member in the household regularly gets two meals (1 if yes, 0 otherwise)		
Asset Index	See SOM Text 1 for detailed description of how index was constructed. Relative value of durable goods and livestock based on ownership numbers.	See SOM Text 1 for detailed description of how index was constructed. Relative value of durable goods and livestock based on ownership numbers.	See SOM Text 1 for detailed description of how index was constructed. Relative value of durable goods and livestock based on ownership numbers.
Total asset value	Total value of all durable assets and the value of all livestock assets owned, combined		Value of all durable assets; if purchased use purchase price, if not purchased use average purchase price per asset) and livestock value
Productive asset index	See SOM Text 1 for detailed description of how index was constructed. Relative value of productive durable goods and number of each livestock type based on ownership numbers	See SOM Text 1 for detailed description of how index was constructed. Relative value of productive durable goods and number of each livestock type based on ownership numbers	See SOM Text 1 for detailed description of how index was constructed. Relative value of productive durable goods and number of each livestock type based on ownership numbers
Productive asset value	Total value of all durable assets the value of all animals and the value of livestock assets, combined		Value of all productive durable assets and livestock using household level purchase price if available, otherwise median purchase price for that asset in whole sample
Household asset index	See SOM Text 1 for detailed description of how index was constructed. Relative value of household durable goods based on ownership numbers	See SOM Text 1 for detailed description of how index was constructed. Relative value of household durable goods based on ownership numbers	See SOM Text 1 for detailed description of how index was constructed. Relative value of household durable goods based on ownership numbers
Household asset value	Total value of all durable household assets that are not productive		Value of all household durable assets owned; household level purchase price used if available, if not the median purchase price in sample
Total amount borrowed, last 12 months	Total of value of all loans taken out in the last year, reported in loan table	The total amount borrowed in loans over the previous 12 months, for every household member, aggregated to the household level	Total value of all loans taken out in the last 12 months
Amount borrowed from informal sources, last 12 months	Total value of loans from neighbor, friend, shopkeeper, family member, work place, moneylender, IQUB	Total value of loans from neighbor, friend, shopkeeper, family member, work place, moneylender	Total value of loans from neighbor, friend, shopkeeper, family member, work place, moneylender
Amount borrowed from formal sources, last 12 months	Total value of loans from MFI, NGO, Government	Total value of loans from MFI, NGO, government	Total value of loans from MFI, NGO, Government
Total savings balance Amount deposited in savings, month	Total amount held in savings account Amount deposited in the last month	Total amount in USD PPP	Total amount held in savings account Amount deposited; asked as in last year, so scaled to monthly

Analysis Variables	Ethiopia	Ghana	Honduras
Total minutes spent on productive activities, last day	Total time spent on PSNP, working on household Land, working with household livestock, working on household business, labor outside household in last 48 hours; converted to min/24h	Aggregate number of minutes spent by each female adult surveyed on each of the below listed activities: working on household land, tending household livestock, working in household-owned business, working outside the household (paid labor); converted to min/24h	Aggregate number of minutes spent by each adult surveyed on each of the below listed activities: working on household land, tending household livestock, working in household-owned business, working outside the household (paid labor); converted to min/24h
Minutes spent on agriculture in last day	Activities last 48 hours; converted to min/24h	Number of minutes spent by female household members on agricultural labor in past 7 days; scaled to 24 hours	Number of minutes spent by adult household members on agriculture in past 7 days (scaled to min/24h)
Minutes spent on livestock in last day	Activities last 48 hours; converted to min/24h	Number of minutes spent by female household members tending livestock in past 7 days; scaled to 24 hours	Number of minutes spent by adult household members on livestock in past 7 days (scaled to min/24h)
Minutes spent on own business in last day	Activities last 48 hours; converted to min/24h	Number of minutes spent by female household members on micro- enterprise in past 7 days; scaled to 24 hours	Number of minutes spent by adult household members on own business in past 7 days (scaled to min/24h)
Minutes spent on paid labor in last day	Activities last 48 hours, including both outside labor and work on Productive Safety Net Programme; converted to min/24h	Number of minutes spent by female household members on paid labor in past 7 days; scaled to 24 hours	Number of minutes spent by adult household members on paid work in past 7 days (scaled to min/24h)
Household livestock revenue, month	(1) Total income received from the sale of animals + (2) total production of all outputs * median sale price of outputs; all scaled down to monthly values	Gross earnings (USD) from: livestock and products sold (eg. animals, meat, milk, eggs, skin). Household level sale data is used when available, otherwise the median sale value of either livestock or product is used to value revenues.	Gross earnings from: livestock and products sold (ie. animals, meat, milk, eggs, skin). Household level sale data is used when available, otherwise the median sale value of either livestock or product is used to value revenues.
Household agricultural income, month	(1) Total quantity of crops produced (less any share lost through sharecropping) * the median sale price of all instances where the crop was sold + (2) all income earned from renting out land - (3) all costs of renting - (4) all input costs - (5) seed costs; all scaled down to monthly values	Use household level sale price to value the income from harvest when household did sell crops, otherwise use median sale price to value total production of crop; subtract out expenses (hired labor, seeds, fertilizer, renting land); scaled to monthly values	Use household level sale price to value the income from harvest when household did sell crops, otherwise use median sale price to value total production of crop; subtract out expenses (fertilizer, seeds, renting land, hired labor); scaled to monthly values
Household non-farm micro-enterprise income, month	 Microenterprise average monthly sales + (2) natural product total production * median sale price - (3) microenterprise expenses, including rent (per month), input cost, cost of labor, other expenses 	Total profit (sales - expenditures) for a typical month in USD PPP; total profits are calculated by aggregating over "normal" months, high-earning months and low-earning months. Expenditures include rent (per month), input cost, cost of labor, other expenses.	Total profit (sales - expenditures) for a typical month; total profits are calculated by aggregating over "normal" months, high-earning months and low-earning months. Expenditures include rent (per month), input cost, cost of labor, other expenses.
Household income from paid labor, month	 Total of all income from wages outside of household + (2) quantity of goods earned from food for work program * market value of goods received 	Total earnings from wages outside of the household; scaled to monthly	Total earnings from wages outside of the household; scaled to monthly.
Self-reported economic status	Self-classification of household's current economic status in comparison to the rest of the village, using a scale of 1-10		Self-classification of household's current economic status in comparison to the rest of the village, using a scale of 1-10 using blocks to visualize different levels of economic status
Physical health index	Z-scores of (1) reported status on health ladder, (2) average score on activities of daily living score, (3) Number of days adult missed due to illness; all standardized into single index	Z-score of: missed work days in last month and average of activities of daily living score	Z-score of: self perception of health; missed work days in last 30 days; average of Activities of Daily Living scores
Member has not missed any days due to illness, last month	Dummy variable for if adult member is listed in table for having missed days due to illness/injury	Binary (0/1): member did not miss work or school due to illness in lasat month	Binary (0/1) Question: Sickness prevented member from going to work or school
Average activities of Daily Living (ADL) Score	Score of whether or not individual can complete the following three activities without help: walking 5 km, lifting heavy objects (10lb), working an entire day without rest; each component is a Binary (0/1) with 1 if member can complete activitiy without help and 0 otherwise.	Score of whether or not individual can complete the following three activities without help: walking 5 km, lifting heavy objects (10lb), working an entire day without rest (each component is Binary (0/1) 0/1 if individual can complete without help)	Score of whether or not individual can complete the following three activities without help: walking 5 km, lifting heavy objects (10lb), working an entire day without rest; each component is a Binary (0/1) with 1 if member can complete activitiy without help and 0 otherwise
Self perception of physical health	Asks respondent (1-5 scale, least to most satisfied) about satisfaction with physical health		Asks respondent (1-5 scale, least to most satisfied) about satisfaction with physical health
Mental health index	Combined z-scores of life satisfaction index, reported distress index (detailed below), and did not experience period of worry	Combined z-scores of life satisfaction index and report distress index (detailed below), standardized	Combined z-scores of life satisfaction index and reported distress index (detailed below), standardized
Self reported happiness	Mental health ladder that asks respondent to rank satisfaction with mental health on a 1-10 ladder	Asks respondent (1-5 scale, least to most satisfied) about satisfaction with life	Asks respondent (1-5 scale, least to most satisfied) about satisfaction with life
Stress Index	Combined z-scores of number of times in the past week did respondent feel sad, cry a lot, not feel like eating, not feel like working, have restless sleep; and did respondent have a period of worry lasting at least 30 days in the last year.	Z-scores of questions regarding frequency of mental distress (1-4 point scale), including feeling sad, crying a lot, not wanting to eat, not wanting to work, and having restless sleep	Z-scores of questions regarding frequency of mental distress (1-4 point scale), including feeling sad, crying a lot, not wanting to eat, not wanting to work, having restless sleep
Member has not experienced period of worry in last year	Dummy for not experiencing more than a month of worry, tension or axiety in the past year (1 if didn't 0 if did)	Dummy for not experiencing more than a month of worry, tension, or anxiety in the past year (1 did not, 0 did)	

Analysis Variables	Ethiopia	Ghana	Honduras
Index of political involvement	Combined Z-scores of approaching village leaders, participates in politics	Z-score of did member attend village meetings in the past year	Z-score of: did you vote in the last elections; do you attend village meetings; do you attend village assemblies
Voted in last election			Binary (0/1) for whether or not adult voted in the last election
Member of political party	Binary (0/1) of whether or not adult was a member of a political party in last year		Binary (0/1) of whether or not adult was a member of a political party in last year
Attended village meeting in last year	Binary (0/1) of whether or not adult attended a village meeting in the last year	Binary (0/1) variable for whether or not adult attended a village meeting in last year (1=yes, 0=no)	Binary (0/1) variable for whether or not adult attended a village meeting in last year (1=yes, 0=no)
Has spoken with village members about village concerns	Binary (0/1) of whether or not adult approached village leader about own or village concerns in last year		
Women's decision-making index	Z-score index of women being the primary individual to make decisions regarding food, clothing, education, health, business/finance management and home improvement/repair	Z-score index measuring women's decision-making in the household: woman is primary decision maker (0/1) for food, education, health, and business management expenses	Z-score index measuring women's decision-making in the household: woman is primary decision-maker (0/1) for education, health, food, business management expenses
Food decision-making	How much influence do you have on food expenses within your household? (1= major influence, 0 = no or minor influence)	How much influence do you have on food expenses within your household? (1= major influence, 0 = no or minor influence)	How much influence do you have on food expenses within your household? $(1 = major influence, 0 = no or minor influence)$
Education decision-making	How much influence do you have on education-expenses within your household? (1= major influence, 0 = no or minor influence)	How much influence do you have on education-expenses within your household? (1= major influence, $0 = no$ or minor influence)	How much influence do you have on education-expenses within your household? (1= major influence, $0 = no$ or minor influence)
Health decision-making	How much influence do you have on health expenses within your household? (1= major influence, 0 = no or minor influence)	How much influence do you have on health expenses within your household? (1= major influence, 0 = no or minor influence)	How much influence do you have on health expenses within your household? (1= major influence, $0 = no \text{ or minor influence}$)
Home improvement decision-making	How much influence do you have on home improvement/repair decision within your household? (1= major influence, 0 = no or minor influence)		
Household finances and business decision-making	How much influence do you have on business expenses and decisions within your household? (1= major influence, 0 = no or minor influence)	How much influence do you have on household finances within your household? (1= major influence, $0 = no$ or minor influence)	How much influence do you have on business expenses and decisions within your household? (1= major influence, $0 = no \text{ or minor influence}$)

Analysis Variables	India	Pakistan	Peru
Total consumption per capita, month	Total of all food expenditures, tobacco/intoxicants, goods and services in the last 30 days. Along with goods and services and durables in the last year scaled to monthly. All divided by number of total household members	Total of food consumption + non-food expenditure + durable goods expenditure; scaled to per capita monthly values	Total of all food consumption (detailed below), temptation goods and fuel expenditures, school, clothing, festival expenditures, transportation, rent, medical expenditures, durable good purchases, and home improvement spending. Scaled to per capita monthly values
Food consumption per capita, month	Expenditures on food items in the last 30 days and divided by the total number of household members	[quantity*value/price, value replaced by median at village level if missing] for each food item, scaled to monthly per capita values	(Quantity*market price) for each food item in consumption section; reported in survey as "in last day" or "in last week" so scaled to monthly per capita; for questions without market data, median purchase price is used
Nonfood consumption per capita, month	Monthly average expenditure described above less the cost of food in the last month and divided by the total number of household members	Total non-food expenditures: ceremony, temptation goods, health expenses, other goods and services; scaled to monthly per capita values	Total monthly expenditures per capita (USD PPP) and total annual expenditures per capita (USD); not food. Health expenditures, Education expenditures. Scaled to per capita monthly values
Durable good expenditure per capita, month	Total of all durable goods purchased in the last year scaled to monthly divided by total number of household members	Total spending on durable goods last year; scaled to monthly per capita values	Total value of durable goods bought in last 12 months, scaled to per capita monthly
Food security index	Z-Score of no adults skipped meals; no one in household went entire day without eating; no children skipped meals; everyone in household regularly eats two meals per day	Z-score of: no adults ever skipped meals, no adults ever went day without eating, no children skipped meals, everyone gets enough food, everyone eats two meals; standardized	Z score of: no adults ever skipped meals; no adults ever went day without eating; no children skipped meals; everyone in household gets enough food every day
Everyone in the household gets enough food everyday		Binary (0/1) of whether or not everyone in household gets enough food every day; imputed by looking at the number of months that respondent reports not having enough to eat	
No adults skipped meals	Binary (0/1) of whether or not adults in the household skipped meals (1 if no adult skipped a meal)	Binary (0/1) of whether or not adults in the household skipped meals (1 if no adult skipped a meal)	Binary (0/1) of whether or not adults in the household skipped meals (1 if no adult skipped a meal)
No one in the household went a whole day without food	Binary (0/1) of whether or not anyone in the household went an entire day without eating; 1 if everyone in the household ate during a day	Binary (0/1) of whether or not anyone in the household went an entire day without eating; 1 if everyone in the household ate during a day	Binary (0/1) of whether or not anyone in the household went an entire day without eating; 1 if everyone in the household ate during a day
No children skipped meals	Binary (0/1) of whether or not children in the household skipped meals (1 if no child skipped a meal)	Binary (0/1) of whether or not children in the household skipped meals (1 if no child skipped a meal)	Binary (0/1) of whether or not children in the household skipped meals (1 if no child skipped a meal)
Everyone in the household regularly eats two meals per day	Binary (0/1) of whether or not every member in the household regularly gets two meals (1 if yes, 0 otherwise)	Binary (0/1) of whether or not every member in the household regularly gets two meals (1 if yes, 0 otherwise)	
Asset Index	See SOM Text 1 for detailed description of how index was constructed. Relative value of durable goods and livestock based on ownership numbers.	See SOM Text 1 for detailed description of how index was constructed. Relative value of durable goods and livestock based on ownership numbers.	See SOM Text 1 for detailed description of how index was constructed. Relative value of durable goods and livestock based on ownership numbers.
Total asset value		Total value of all durable assets and livestock, using median purchase price and median livestock value	Value of all durable assets; if purchased use purchase price, if not purchased use average purchase price per asset) and livestock value
Productive asset index	See SOM Text 1 for detailed description of how index was constructed. Relative value of productive durable goods and number of each livestock type based on ownership numbers	See SOM Text 1 for detailed description of how index was constructed. Relative value of productive durable goods and number of each livestock type based on ownership numbers	See SOM Text 1 for detailed description of how index was constructed. Relative value of productive durable goods and number of each livestock type based on ownership numbers
Productive asset value		Total value of all productive durable assets used for agriculture, animal husbandry, business and fishing + livestock value [nb*median animal value]	Value of all productive durable assets and livestock held by household
Household asset index	See SOM Text 1 for detailed description of how index was constructed. Relative value of household durable goods based on ownership numbers	See SOM Text 1 for detailed description of how index was constructed. Relative value of household durable goods based on ownership numbers	See SOM Text 1 for detailed description of how index was constructed. Relative value of household durable goods based on ownership numbers
Household asset value		Total value of all household durable assets using median purchase price	Value in USD PPP of all household durable assets
Total amount borrowed, last 12 months	Total value of all household loans taken out in last 12 months	Total amount borrowed in loans over the previous 12 months	The total amount borrowed in loans over the previous 12 months, for every household member, aggregated to the household level
Amount borrowed from informal sources, last 12 months	Total value of loans from family, moneylender, friend, neighbor, shopkeeper or other.	Total value of loans from family, SHG, moneylender, friend, neighbour, shop keeper, supplier, cooperative, landlord	Total value of loans from neighbor, friend, shopkeeper, family member, work place, moneylender
Amount borrowed from formal sources, last 12 months	Total value of loans from commercial bank or cooperative/MFI	Total value of loans from commercial bank or MFI	Total value of loans from MFI, NGO, Government
Total savings balance			Total amount in USD PPP
Amount deposited in savings, month	How much did the household deposit in savings accounts in the last 30 days	Amount deposited into savings in last 30 days	Total amount deposited over the last year, scaled to monthly
Total minutes spent on productive activities, last day	Minutes spent in the last 24 hours on the below activities	Total time spent working in agriculture, animal tending, business and paidwork during last 24 hours; converted to minutes	Aggregate number of minutes spent by each adult surveyed on each of the below listed activities: working on household land, tending household livestock, working in household-owned business, working outside the household (paid labor); converted to min/24h
Minutes spent on agriculture in last day	Minutes spent in the last 24 hours tending owned or sharecropped land	Time spent working in agriculture during last 24 hours; converted to minutes	Number of minutes spent by adult household members on agriculture in past 7 days (scaled to min/24h)

Analysis Variables	India	Pakistan	Peru
Minutes spent on livestock in last day	Minutes in the last 24 hours tending owned or leased animals	Time spent working in animal tending during last 24 hours; also includes time spent fishing; converted to minutes	Number of minutes spent by adult household members on livestock in past 7 days (scaled to min/24h)
Minutes spent on own business in last day	Minutes in the last 24 hours working at your own business (other than farm or animals)	Time spent working in own business during last 24 hours; converted to minutes	Number of minutes spent by adult household members on own business in past 7 days (scaled to min/24h)
Minutes spent on paid labor in last day	Minutes in the last 24 hours working as an agricultural laborer, doing housework in another home, other labor and any other work	Time spent working as agricultural laborer, doing housework, working as non-agricultural laborer and doing other kind of work during last 24 hours; converted to minutes	Number of minutes spent by adult household members on paid work in past 7 days (scaled to min/24h)
Household livestock revenue, month	Net profit from livestock (Goods consumed /sold+revenue from sales+number Born*median purchase price)-(Input costs+number of deaths*median purchase price) Note: no birth/death available in baseline; includes revenues from fishing	Value of animal products sold/consumed [quantity*median price at village level] + net value livestock sold [nb* (sale price - median purchase price)] + value livestock born (inputed) [nb*median value] - expenses - value livestock lost; also includes value of fish caught [kg*price for sale]; scaled to monthly values; NOT included in this measure is the total value of livestock purchases (considered an investment)	Gross earnings (USD) from: livestock and products sold (eg. animals, meat, milk, eggs, skin). Household level sale data is used when available, otherwise the median sale value of either livestock or product is used to value revenues.
Household agricultural income, month	Net profit from crops. (Amount Consumed or Sold)*Household's average sale price- Cost of all inputs scaled to monthly	Total value of harvest [quantity produced*median price at village level] substract out expenses; scaled to monthly values	Use household level sale price to value the income from harvest when household did sell crops, otherwise use median sale price to value total production of crop; subtract out expenses (hired labor, seeds, fertilizer, renting land); scaled to monthly values
Household non-farm micro-enterprise income, month	Net profit from self owned enterprise. Note this is calculated differently by endline because of different questions. For baseline (Number of goods sold*price sold at)-(Number of inputs used*input purchase price) For endline: Total revenue less total costs. For followup money received from sales plus value of consumption less value of inputs.	Monthly sales - expenses	Total profit (sales - expenditures) for a typical month in USD; total profits are calculated by aggregating over "normal" months, high- earning months and low-earning months. Expenditures include rent (per month), input cost, cost of labor, other expenses.
Household income from paid labor, month	Self reported income from paid work (Daily labor+formal employment+outside household "household" type work+tending animals in other household)	Income from wages outside of household (in cash and in kind); scaled to monthly values; imputed at household level	Total earnings from wages outside of the household; scaled to monthly
Self-reported economic status	Self-classification of household's current economic status in comparison to the rest of the village, using a scale of 1-10	Self-classification of household's current economic status in comparison to the rest of the village	Self-classification of household's current economic status in comparison to the rest of the village, using a scale of 1-10 using blocks to visualize different levels of economic status
Physical health index	Z-scores of dummy for missing more than 10 consecutive days of work in the last year, activities of daily living score and self perception of health score	Z-score of: self perception of health and work days lost in last 30 days because of illness	Z-score of: self perception of health; missed work days in last 30 days; average of Activities of Daily Living scores
Member has not missed any days due to illness, last month	Dummy for if household member missed more than 10 consecutive days of work in the last year due to health	Dummy variable for if adult member was unable to work because of ilness/injury	Binary (0/1) Question: Sickness prevented member from going to work or school
Average activities of Daily Living (ADL) Score	Average of three questions scaled by 1-Can't do, 2-Can do but only with help, 3- Difficult but can do with no help, 4-No difficulty. Questions are: Carrying heavy object (Skg bag), Walk Skm, Work all day in a field		Score of whether or not individual can complete the following three activities without help: walking 5 km, lifting heavy objects (10lb), working an entire day without rest (each component is Binary $(0/1) 0/1$ if individual can complete without help)
Self perception of physical health	Showed respondents a ladder with rungs 1-10 asked where they would place themselves in terms of satisfaction with their health if 10 is best and 1 is worst	Asks respondent (1-10 scale, least to most satisfied) about satisfaction with physical health	Asks respondent (1-5 scale, least to most satisfied) about satisfaction with physical health
Mental health index	Z Scores of the Life Satisfaction Score and the Index of Reported Symptoms of Mental Distress detailed below	Combined z-scores of life satisfaction index and report distress index, standardized	Combined z-scores of life satisfaction index and report distress index (detailed below), standardized
Self reported happiness	Z-Scores of ranking economic satisfaction from 1-10 (1 being the worst), emotional satisfaction from 1-5 with 1 being the worst	Asks respondent to rank (least to most satisfied) satisfaction with life.	Asks respondent (1-5 scale, least to most satisfied) about satisfaction with life
Stress Index	Z-Scores of how frequently they have been feeling sad, crying a lot, not wanting to do work and having restless sleep reported from 3-Not at All to 0-All of the time	Z-scores of questions regarding frequency of mental distress [0 to 4] including feeling sad, crying a lot, not wanting to eat, not wanting to work, having restless sleep; standardized	Z-scores of questions regarding frequency of mental distress (1-4 point scale), including feeling sad, crying a lot, not wanting to eat, not wanting to work, having restless sleep
Member has not experienced period of worry in last year	Dummy for not experiencing more than a month of worry, tension or axiety in the past year $(1 \text{ if } didn't \ 0 \text{ if } did)$		
Index of political involvement	Z-scores of voting in the last local election and number of times contacted	Z-scores of: did you attend village meetings, are you member of village	Z-score of: did you vote in the last elections; are you member of
Voted in last election	Binary $(0/1)$ for whether or not adult voted in the last election	committee, did you ever approach vinage elder	Binary (0/1) for whether or not adult voted in the last election
Member of political party			Binary (0/1) for whether or not adult is member of political party
Attended village meeting in last year			Binary (0/1) variable for whether or not adult regularly attended a village meeting in last year (1=yes, 0=no)
Has spoken with village members about village concerns	Binary (0/1) of whether or not adult approached village leader about own or village concerns in last year; taken from question regarding the number of times a member approached a village leader in the last year		

Analysis Variables	India	Pakistan	Peru
Women's decision-making index	Z-scores of a woman being the primary decision-maker in how much to spend on food, education, health, home improvement/repair and land sale/purchase	Z-score index measuring women's decision-making in the household for food, clothing, education, health, home improvement and land purchase	Z-score index measuring women's decision-making in the household: woman is primary decision-maker (0/1) for education, health, food, business management expenses
Food decision-making	How much influence do you have on food expenses within your household? (1= major influence, $0 = no$ or minor influence)	How much influence do you have on food expenses within your household? (1= major influence, $0 = no$ or minor influence)	How much influence do you have on food expenses within your household? (1= major influence, $0 = no$ or minor influence)
Education decision-making	How much influence do you have on education-expenses within your household? (1= major influence, $0 = no$ or minor influence)	How much influence do you have on education-expenses within your household? (1= major influence, $0 = no$ or minor influence)	How much influence do you have on education-expenses within your household? (1= major influence, $0 = no$ or minor influence)
Health decision-making	How much influence do you have on health expenses within your household? (1= major influence, 0 = no or minor influence)	How much influence do you have on health expenses within your household? (1= major influence, $0 = no$ or minor influence)	How much influence do you have on health expenses within your household? (1= major influence, $0 = no$ or minor influence)
Home improvement decision-making	How much influence do you have on home improvement/repair decision within your household? (1= major influence, 0 = no or minor influence)	How much influence do you have on home improvement decisions within your household? 1=major influence; 0= minor or no influence	How much influence do you have on home improvement expenses within your household? ($1 = major$ influence, $0 = no$ or minor influence)
Household finances and business decision-making	How much influence do you have on business expenses such as land sale purchase and decisions within your household? (1= major influence, 0 = no or minor influence)		How much influence do you have on business expenses and decisions within your household? ($1 = major$ influence, $0 = no$ or minor influence)

SOM Text 4: Spillover Analysis

All of the sites include randomly selected control households in treatment villages, and three of the sites only include such households. A possible concern is that any spillover effects of the program on control households will bias the estimated impact, either upwards or downwards. To assess the magnitude of such possible bias, three of the sites included a cross-village randomization as well as a within-village randomization. Tables S6a and S6b examine evidence of spillovers in endlines 1 and 2. The first two columns show the results of the specification used in the main section of the paper, restricted to these three countries. Columns (3) and (4) compare the treatment households to control households in control communities (thus avoiding comparison with any household that was subject to spillover). Columns (5) and (6) report the difference and associated q-values between control households and treatment households within treatment communities. Columns (7) and (8) report the comparison between the spillover households (control households in treatment communities) and the households in control communities. Focusing on column (7) first, the evidence for spillovers is not strong. Only two of the differences between spillover and pure control households are significant at the 10% level when using naïve p-values (all negative: income and revenue, mental health, and physical health), and none even at the 10% when using q-values at endline 1. At endline 2, three outcomes are significant at the 10% level when using naïve p-values (mental health, physical health, and women's empowerment), and only mental health remains significant at the 10% level when using q-values. Comparing column (3) to column (1), we can get a sense of how only using the pure control households would modify the conclusions in Ghana, Honduras and Peru. We would get a larger and more significant point estimate for consumption at endline 1, though would not have a significant point estimate at endline 2 for these three countries. The impact on food security would be weaker in both time periods, as would the impact on time working and physical health at endline 1. Other estimates stay similar, occasionally with higher q-values.

Before adjusting for multiple hypothesis testing, we find significant negative point estimates for spillovers on income and revenues (in endline 1, but not endline 2), physical health (both endlines), mental health (endline 2, but not endline 1) and women's empowerment (endline 2, but not endline 1). Three of these outcomes, physical health, mental health and women's empowerment, include self-reported subjective measures and may have been negatively affected by seeing some similar household (or woman) receive benefits they did not get. However, none of these comparisons is statistically significant at 95% after adjusting for multiple hypotheses testing.

SOM Text 5: Cost-Benefit Analysis Calculations

Administrative Data for Costs

Costs were provided by each of the implementing partners, following a template provided by researchers on the project. The organizations provided details of the total program costs and each line item, and the total number of participants in the program. Costs were then converted to a per-person basis.

All costs are assumed to exist at year 0 (rather than spread-out through the duration of the program), and are inflated to year-three net present value, with the equation:

Cost at year $3 = Cost_{t=0} * (1.05)^3$

Costs are then converted to Power Purchasing Parity (PPP) terms for cross-country comparison purposes.

Benefits

Overview

For our measurement of benefits, we include observed non-durable consumption, accumulated household assets, and estimated future consumption (including the purchase of durable goods). For years 1-3 of the program, we do not include durable good expenditures in our calculations, since any accumulated assets as a result of the program will be measured in our Household Asset ITT Treatment Effect. We do not include productive assets or savings in our measure of change in wealth, on the grounds that both of these asset types are likely to be used to finance future consumption.

For our estimates of future consumption, we use total consumption (i.e. including durable good expenditures) since this measure will incorporate any long-term changes in household asset wealth. We employ a Permanent Income Hypothesis, and thus assume that the consumption gains observed at year 3 exist in perpetuity.

We assume an annual discount rate of 5% for all calculations, and in the sensitivity section of Table 4 also show the same calculations using 7% and 10%.

Components

Year Two Annual Non-durable Consumption ITT Treatment Effect: We use the per capita ITT estimates for per capita non-durable consumption at endline 1 (i.e. two years into the program). We convert these estimates to Year Three values with the equation:

Year Two Consumption Benefit = Endline 1 Consumption ITT * (1.05)

Year One Annual Non-durable Consumption ITT Treatment Effect: We assume the ITT estimates observed at endline 1 also took place at endline 1.

Year Three Annual Non-durable Consumption ITT Treatment Effect: Here, we use the endline 2 data (i.e. three years after the introduction of the program), and multiply by the household size and by 12 to annualize values. Given that our time period of interest is year 3, we do not adjust these values to calculate net present value.

Household Asset Value ITT Treatment Effect: In four of the six sites, we use the ITT treatment effects reported in Column (6) of Table S5C-2, the endline 2 values of household assets. However, we do not ask directly about the value of assets in either Ghana or India. Instead, we rely on Column (5) of the same table, the household asset index.

To construct all of our asset indices, we rely on relative prices where available, and value asset ownership based on the relative value of all goods. Therefore, we can use the price data we have available in each site to estimate what an effect size is "worth" in terms of USD. We employ the following equation, using our data on asset weights in the index, γ , and asset prices, α .

HH Asset Value ITT = *HH Asset Index ITT* *
$$\frac{\gamma * asset_i}{1 \, effect \, size} * \frac{\alpha * USD}{1 \, asset_i}$$

Future Consumption ITT Treatment Effect: We assume that the total consumption treatment effect observed at endline 2 (i.e. year 3) continues in perpetuity. We first calculate total consumption by multiplying per capita total monthly consumption by the household size and annualizing the values. We then discount this consumption to reflect the fact our "future consumption" begins in year 4. We calculate consumption in perpetuity with the formula:

	Endline 2 Total Consumption ITT
Value of future consumption in normatuity -	(1.05)
value of future consumption in perpetuity –	0.05

We then calculate the net present value of the benefits as the sum of (a) the one-year non-durable consumption increases, (b) the two-year non-durable consumption increases, (c) the three-year non-durable consumption increases, (d) the three-year household asset value increase, and (e) the value of future consumption increases.

Cost-benefit analysis

Ratio: The benefit/cost ratio is calculated as the net present value of the benefits over the net present value of the costs, presented as our main measure of cost-benefit. As a robustness check, we also measure how the benefit/cost ratio changes when we instead apply discount rates of 7% and 10%.

Dissipation rate: as a further robustness check, we examine how the benefit/cost ratio changes if the treatment effect on consumption dissipates over time. We find the dissipation rate δ that

lowers benefits sufficiently such that they equal costs. Specifically, we find the δ that satisfies the following equation:

Let
$$C = Cost * (1.05)^3$$

and

$$B = Consum_{el1} * 1.05 + Consum_{el1} * 1.05 + Consum_{el2} + HH Asset_{el2}$$

Then,

$$C = B + \frac{\frac{Consum_{el2} * (1 - \delta)}{1.05}}{.05 + \delta}$$

The solution for δ can then be found with the following algebraic steps:

$$(.05 + \delta)(C - B) = \frac{Consum_{.el2}*(1 - \delta)}{1.05}$$
$$(.05 + \delta)(C - B)(1.05) = 1(Consum_{.el2}) - \delta(Consump_{.el2})$$
$$(0.05)(C - B)(1.05) + \delta(C - B)(1.05) + \delta(Consump_{.el2}) = Consump_{.el2}$$
$$\delta((1.05)(C - B) \mp Consump_{.el2}) = Consump_{.el2} - (.05)(C - B)(1.05)$$
$$\delta = \frac{Consump_{.el2} - (.07)(C - B)(1.07)}{(1.07)(C - B) + Consump_{.el2}}$$

We report the δ that satisfies this equation for each country in Table 4.

Table S1a. Baseline Summary Statistics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Pooled	Ethiopia	Ghana	Honduras	India	Pakistan	Peru
Panel A. Consumption including health and durable goods spending							
Total per capita consumption, mean	69.13	47.49	53.97	46.27	39.88	132.55	99.46
	(0.68)	(1.40)	(0.77)	(0.62)	(0.76)	(3.88)	(1.23)
Total per capita consumption, median	57.36	36.60	43.35	39.67	34.37	97.21	87.69
Total daily per capita consumption, median	1.912	1.220	1.445	1.322	1.146	3.240	2.923
Share of households below \$1.25/day	0.43	0.66	0.53	0.60	0.73	0.12	0.10
Panel B. Consumption not including health and durable goods spending							
Total per capita consumption, mean	60.36	44.90	53.46	35.47	32.13	103.79	90.11
	(0.94)	(1.42)	(0.77)	(0.88)	(0.55)	(6.61)	(1.12)
Total per capita consumption, median	52.36	34.94	43.00	34.76	28.86	83.14	81.28
Total daily per capita consumption, median	1.745	1.165	1.433	1.159	0.962	2.771	2.709
Share of households below \$1.25/day	0.48	0.69	0.54	0.69	0.84	0.18	0.14
Panel C. World Bank Poverty Lines							
World Bank share in country below \$1.25/day line	0.19	0.37	0.29	0.17	0.24	0.13	0.03
Year of World Bank poverty data	N/A	2011	2006	2011	2011	2011	2012

Notes:

1. All monetary values are reported in 2014 USD, Purchasing Power Parity (PPP) terms.

2. The consumption aggregate used in our data differs from the format recommended by Angus Deaton and Salman Zaidi's World Bank document, "Guidelines for Construction Consumption Aggregates for Welfare Analysis", which is commonly used for Living Standard Measurement Studies. In particular, we include medical expenditures and durable good purchases. Therefore, in Panel B we offer a consumption measure that excludes these measures to offer a figure comparable to World Bank Data.

3. The national poverty lines listed for the pooled sample are weighted by observation rather than by country. For each country, we therefore multiple the incidence of poverty in that country by the share of observations in our total sample belonging to that country.

Table S1b: Orthogonality

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Total per capita consumption, standardized	Food Security Index	Asset Index	Financial Inclusion Index	Total Time Spent Working, Standardized	Incomes and Revenues Index	Physical Health Index	Mental Health Index	Political Involvement Index	Women's Empowerment Index
Panel A: T-test comparing means of baseline characteristics, by treatment status										
Control Mean (standard error)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(0.0124)	(0.0124)	(0.0124)	(0.0124)	(0.0110)	(0.0124)	(0.0098)	(0.0112)	(0.0102)	(0.0123)
Treatment Mean (standard error)	-0.0323	-0.0033	0.0277	-0.0320	-0.0291	0.0188	0.0105	0.0298	-0.0249	-0.0314
	(0.0140)	(0.0165)	(0.0188)	(0.0169)	(0.0132)	(0.0190)	(0.0128)	(0.0149)	(0.0124)	(0.0151)
P-value from t-test of equality of means	0.0979	0.8735	0.2019	0.1217	0.0904	0.3887	0.5130	0.1092	0.1226	0.1077
Panel B: OLS regression, with controls for site										
Treatment	-0.0310	0.005	0.0180	-0.027	-0.026	0.015	0.008	0.03	-0.022	-0.03
	(0.020)	(0.021)	(0.022)	(0.021)	(0.018)	(0.022)	(0.016)	(0.019)	(0.016)	(0.020)
Observations	10213	10310	10318	10334	13983	10344	16991	12559	15992	10922
R-Squared	0.0000	0.0000	0.0010	0.0010	0.0000	0.0010	0.0010	0.0000	0.0000	0.0010
Panel C: Regression of Treatment on all family outcome index variables										
F-test from regression of treatment on all 10										
outcome variables listed above	0.738									
p-value	0.689									

Table S1c: Orthogonality by Country, Comparison of Means

Tuble blet of insgemanty by country, ee	(1)	(2)	(2)	(4)	(5)	(6)	(7)	(0)	(0)	(10)
	(1)	(2)	(3)	(4)	(5)	(6)	(/)	(8)	(9)	(10)
	Total per capita consumption, standardized	Food Security Index	Asset Index	Financial Inclusion Index	Total Time Spent Working, Standardized	Incomes and Revenues Index	Physical Health Index	Mental Health Index	Political Involvement Index	Women's Empowerment Index
D .(
Ethiopia										
Control Mean (standard error)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(0.0463)	(0.0463)	(0.0463)	(0.0463)	(0.0391)	(0.0463)	(0.0391)	(0.0391)	(0.0391)	(0.0507)
Treatment Mean (standard error)	-0.0774	0.0193	0.1694	-0.0968	-0.0661	0.0675	-0.0747	0.0098	0.0130	-0.0980
	(0.0315)	(0.0466)	(0.0663)	(0.0350)	(0.0392)	(0.0475)	(0.0407)	(0.0379)	(0.0389)	(0.0498)
p-value from t-test of equality of means	0.1689	0.7688	0.0359	0.0966	0.2325	0.3092	0.1858	0.8573	0.8136	0.1681
Ghana										
Control Mean (standard error)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000
	(0.0227)	(0.0227)	(0.0227)	(0.0227)		(0.0227)	(0.0228)		(0.0229)	(0.0227)
Treatment Mean (standard error)	-0.0368	0.0957	-0.0131	-0.0247		0.0044	0.0488		0.0005	0.0218
	(0.0357)	(0.0430)	(0.0254)	(0.0255)		(0.0510)	(0.0394)		(0.0390)	(0.0395)
p-value from t-test of equality of means	0.4044	0.0387	0.7518	0.5537		0.9289	0.2810		0.9914	0.6293
Honduras										
Control Mean (standard error)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(0.0250)	(0.0250)	(0.0250)	(0.0250)	(0.0176)	(0.0250)	(0.0175)	(0.0196)	(0.0196)	(0.0258)
Treatment Mean (standard error)	0.0226	-0.0199	-0.0281	0.0929	-0.0291	-0.0107	-0.0087	0.0509	-0.0085	0.0223
	(0.0346)	(0.0356)	(0.0181)	(0.0666)	(0.0251)	(0.0315)	(0.0267)	(0.0286)	(0.0285)	(0.0371)
p-value from t-test of equality of means	0.6010	0.6488	0.4608	0.1132	0.3461	0.8003	0.7816	0.1402	0.8041	0.6217
India (Bandhan)										
Control Mean (standard error)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
,	(0.0463)	(0.0463)	(0.0463)	(0.0463)	(0.0352)	(0.0463)	(0.0331)	(0.0352)	(0.0331)	(0.0331)
Treatment Mean (standard error)	-0.0109	-0.0575	0.0748	-0.0277	-0.0037	0 1344	0.1138	0.0550	-0.0683	-0.0631
	(0.0354)	(0.0444)	(0.0514)	(0.0315)	(0.0337)	(0.0853)	(0.0355)	(0.0354)	(0.0318)	(0.0297)
p-value from t-test of equality of means	0.8506	0.3702	0.2830	0.6162	0.9399	0.1781	0.0202	0.2725	0.1374	0.1552
Pakistan										
Control Mean (standard error)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000
Control Weah (standard error)	(0.0404)	(0.0397)	(0.0396)	(0.0397)	(0.0258)	(0.0396)	(0.0254)		(0.0254)	(0.0359)
Treatment Mean (standard error)	-0.0345	-0.0852	0.0651	-0.0844	-0.0740	-0.0415	0.0132		-0.0428	-0.0257
Treatment Wear (standard erfor)	(0.0319)	(0.0385)	(0.0735)	(0.0221)	(0.0237)	(0.0341)	(0.0244)		(0.0246)	(0.0352)
p-value from t-test of equality of means	0.5015	0.1235	0.4401	0.0609	0.0343	0.4256	0.7078		0.2261	0.6099
_										
Peru										
Control Mean (standard error)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(0.0271)	(0.0267)	(0.0267)	(0.0266)	(0.0224)	(0.0266)	(0.0223)	(0.0224)	(0.0224)	(0.0298)
Treatment Mean (standard error)	-0.0720	0.0215	-0.0311	-0.0853	0.0351	0.0062	-0.0351	0.0072	-0.0142	-0.0627
	(0.0328)	(0.0371)	(0.0358)	(0.0279)	(0.0333)	(0.0338)	(0.0307)	(0.0300)	(0.0277)	(0.0380)
p-value from t-test of equality of means	0.1043	0.6374	0.4898	0.0416	0.3679	0.8890	0.3527	0.8486	0.6974	0.2004

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Total per capita consumption, standardized	Food Security Index	Asset Index	Financial Inclusion Index	Total Time Spent Working, Standardized	Incomes and Revenues Index	Physical Health Index	Mental Health Index	Political Involvement Index	Women's Empowerment Index
Ethiopia	-0.077	0.02	0.17**	-0.097*	-0.0660	0.067	-0.075	0.0098	0.013	-0.098
	(0.056)	(0.066)	(0.081)	(0.058)	(0.055)	(0.066)	(0.056)	(0.054)	(0.055)	(0.071)
Observations	925	925	925	925	1317	925	1317	1316	1317	783
R-Squared	0.002	0.000	0.005	0.003	0.001	0.001	0.001	0.000	0.000	0.002
Ghana	-0.0370	0.096**	-0.0130	-0.0250	0.0490		0.0044	0.0120	0.0005	0.0220
	(0.0440)	(0.0460)	(0.0420)	(0.0420)	(0.0450)		(0.0490)	(0.0450)	(0.0450)	(0.0450)
Observations	2602	2604	2606	2601	2579		2605	2560	2572	2617
R-Squared	0.000	0.002	0.000	0.000	0.000		0.0000	0.0000	0.0000	0.0000
Honduras	0.0230	-0.0200	-0.0280	0.0930	-0.0290	-0.0110	-0.0087	0.0510	-0.0085	0.0220
	(0.0430)	(0.0440)	(0.0380)	(0.0590)	(0.0310)	(0.0420)	(0.0310)	(0.0350)	(0.0340)	(0.0450)
Observations	2376	2376	2376	2375	4746	2376	4836	3850	3867	2224
R-Squared	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.000
India	-0.0110	-0.0580	0.0750	-0.0280	-0.0037	0.1300	0.11**	0.0550	-0.0680	-0.0630
	(0.0580)	(0.0640)	(0.0700)	(0.0550)	(0.0490)	(0.1000)	(0.0490)	(0.0500)	(0.0460)	(0.0440)
Observations	978	978	978	978	1729	978	1950	1729	1950	1950
R-Squared	0.000	0.001	0.001	0.000	0.000	0.002	0.003	0.001	0.001	0.001
Pakistan	-0.0340	-0.0850	0.0650	-0.084*	-0.074**	-0.0420	0.0130		-0.0430	-0.0260
	(0.0510)	(0.0550)	(0.0840)	(0.0450)	(0.0350)	(0.0520)	(0.0350)		(0.0350)	(0.0500)
Observations	1250	1289	1295	1294	3078	1299	3189		3189	1594
R-Squared	0.000	0.002	0.000	0.003	0.001	0.000	0.000		0.000	0.000
Peru	-0.0720	0.0210	-0.0310	-0.085**	0.0350	0.0062	-0.0350	0.0072	-0.0140	-0.0630
	(0.0440)	(0.0460)	(0.0450)	(0.0420)	(0.0390)	(0.0440)	(0.0380)	(0.0370)	(0.0360)	(0.0490)
Observations	2082	2138	2138	2161	3113	2161	3120	3104	3097	1754
R-Squared	0.001	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.001

Table S1d: Orthogonality by Country, Baseline Characteristics on Treatment

Table S1e: Orthogonality by Country, Joint Test of Significance

	(1)	(2)	(3)	(4)	(5)	(6)
	Ethiopia	Ghana	Honduras	India	Pakistan	Peru
Joint F-test of treatment on all family outcome variables	1.128	0.846	0.838	1.914	1.039	1.173
p-value	0.338	0.573	0.591	0.0398	0.406	0.304

Table S1f: Pooled AttritionDependent Variable: Completed Survey, OLS

	Endline 1	Endline 2
Panel A.	0.00700	0.0005
Treatment Status	0.00790	0.0095
N	(0.0034)	10487
R-Squared	0.16	0.20
Surveyed mean	0.940	0.20
Panel B	0.910	0.91
Treatment Status	0.0073	0.009
	(0.0054)	(0.0060)
Consumption per capita, standardized	0.00	0.00
	(0.003)	(0.003)
Food Security Index	0.000	-0.001
	(0.003)	(0.003)
Asset index	0.0068***	0.0080***
	(0.0023)	(0.0025)
Financial Inclusion Index	-0.00087	-0.00160
	(0.0023)	(0.0026)
Time spent working, standardized	0.0009	-0.0010
1 0,	(0.0035)	(0.0039)
Incomes and Revenues Index	0.00	0.0053**
	(0.002)	(0.003)
Physical Health Index	0.0024	0.004
	(0.003)	(0.003)
Mental Health Index	0.00	-0.0065**
	(0.0028)	(0.0032)
Political Involvement Index	0.001	0.0075**
	(0.003)	(0.003)
Women's Empowerment Index	-0.0046*	-0.0080***
	(0.003)	(0.003)
N	10499	10487
R-Squared	0.17	0.21
Attrition mean	0.940	0.910
Panel C.		
Treatment Status	0.0087	0.0091
	(0.0069)	(0.0078)
Baseline characteristics	Yes	Yes
Baseline characteristics interacted with Treatment	Yes	Yes
N	10499	10487
R-Squared	0.17	0.21
Attrition mean	0.94	0.91
p-value from test that Treatment and all other variables above interacted with Treatment are jointly 0	0.75	0.17

Table S1g: Attrition by Country, Endline 1Dependent Variable: Completed Survey, OLS

	F I · · ·	al			D 11	5
	Ethiopia	Ghana	Honduras	India	Pakistan	Peru
Panel A.						
Treatment Status	-0.00027	0.00071	0.019*	0.00093	0.021	0.001
	(0.0068)	(0.0052)	(0.011)	(0.022)	(0.020)	(0.014)
N	925	2606	2403	983	1299	2283
R-Squared	0.006	0.0340	0.023	0.30	0.12	0.035
Surveyed mean	0.99	0.99	0.95	0.83	0.83	0.92
Panel B.						
Treatment Status	-0.00110	0.00150	0.019*	-0.0031	0.019	-0.0016
	(0.0061)	(0.0052)	(0.011)	(0.022)	(0.020)	(0.013)
Consumption per capita, standardized	-0.0041	-0.00120	0.0042	0.022	-0.0019	0.00
	(0.0037)	(0.00200)	(0.0047)	(0.014)	(0.012)	(0.0064)
Food Security Index	0.0039	-0.0014	-0.0004	-0.022*	0.0000	0.01
	(0.0033)	(0.00200)	(0.0046)	(0.013)	(0.011)	(0.0060)
Asset index	-0.00063	0.00230	0.0050	-0.00031	-0.0015	0.033***
	(0.0027)	(0.0020)	(0.0051)	(0.011)	(0.0068)	(0.0064)
Financial Inclusion Index	0.0029	0.00	0.0050	-0.01	-0.023*	-0.01
	(0.0035)	(0.00200)	(0.0034)	(0.013)	(0.013)	(0.0063)
Time spent working, standardized	0.0000	0.00000	0.0086	0.017	0.01	-0.011*
	(0.0035)	0.00000	(0.0071)	(0.015)	(0.015)	(0.0062)
Incomes and Revenues Index	-0.00082	0.000690	-0.0029	-0.003	-0.002	-0.005
	(0.0032)	(0.00180)	(0.0047)	(0.007)	(0.011)	(0.0065)
Physical Health Index	-0.0002	0.0010	0.0085	0.031**	-0.00044	-0.0054
	(0.0038)	(0.00190)	(0.0063)	(0.015)	(0.014)	(0.0070)
Mental Health Index	-0.00087	-0.00150	-0.0027	0.015	0.00000	-0.016**
	(0.0039)	(0.00200)	(0.0051)	(0.015)	0.000000	(0.0070)
Political Involvement Index	0.00001	0.0028000	0.00370	0.013	0.0078	-0.00380
	(0.0038)	(0.00190)	(0.0055)	(0.016)	(0.016)	(0.0064)
Women's Empowerment Index	0.00097	-0.00260	-0.0043	0.0010	-0.0093	-0.0067
	(0.0036)	(0.0020)	(0.0047)	(0.015)	(0.012)	(0.0066)
Ν	925	2606	2403	983	1299	2283
R-Squared	0.23	0.06	0.03	0.31	0.14	0.06
Surveyed mean	0.99	0.99	0.95	0.83	0.83	0.92
Panel C.						
Treatment Status	-0.00120	-0.00074	0.01700	-0.0010	0.0110	0.0090
	(0.0068)	(0.005)	(0.011)	(0.022)	(0.022)	(0.015)
Baseline characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Baseline characteristics interacted with Treatment	Yes	Yes	Yes	Yes	Yes	Yes
Ν	925	2606	2403	983	1299	2283
R-Squared	0.23	0.09	0.04	0.32	0.16	0.07
Surveyed mean	0.99	0.99	0.95	0.83	0.83	0.92
	0.77	0.77	0.70	0.00	0.00	0.72
p-value from test that Treatment and all other variables above interacted with Treatment are jointly 0	0.97	0.99	0.38	0.45	0.54	0.59

Table S1h: Attrition by Country, Endline 2Dependent Variable: Completed Survey, OLS

Dependent Variable: Completed Survey, OLS						
	Ethiopia	Ghana	Honduras	India	Pakistan	Peru
Panel A.						
Treatment Status	0.0059	0.0051	0.0180	0.0210	0.0140	-0.0037
	(0.0088)	(0.0130)	(0.0130)	(0.0180)	(0.0180)	(0.0160)
N	925	2606	2401	984	1299	2272
R-Squared	0.025	0.138	0.022	0.316	0.421	0.028
Surveyed mean	0.98	0.94	0.93	0.89	0.79	0.90
Panel B.						
Treatment Status	0.00500	0.00560	0.02100	0.01700	0.01000	-0.00520
	(0.0082)	(0.0130)	(0.0130)	(0.0180)	(0.0180)	(0.0160)
Consumption per capita, standardized	-0.0017	-0.0046	-0.0033	0.0150	0.0170	-0.0031
	(0.0050)	(0.0049)	(0.0056)	(0.0110)	(0.0110)	(0.0074)
Food Security Index	0.0049	-0.0066	0.0057	-0.0053	-0.0067	0.0018
	(0.0045)	(0.0048)	(0.0055)	(0.0100)	(0.0100)	(0.0069)
Asset index	0.00140	-0.00210	0.00790	0.00550	0.00770	0.025***
	(0.0036)	(0.0050)	(0.0061)	(0.0089)	(0.0060)	(0.0075)
Financial Inclusion Index	0.0039	-0.012**	0.0015	0.0028	-0.0026	-0.0020
	(0.0048)	(0.0050)	(0.0040)	(0.0110)	(0.0110)	(0.0073)
Time spent working, standardized	-0.0030	0.0000	0.017**	0.0069	-0.0021	-0.014*
	(0.0048)	0.0000	(0.0085)	(0.0120)	(0.0140)	(0.0072)
Incomes and Revenues Index	0.00003	0.0074*	0.00300	0.00170	0.01100	0.00860
	(0.0043)	(0.0044)	(0.0057)	(0.0060)	(0.0098)	(0.0076)
Physical Health Index	-0.0003	0.0038	0.013*	0.025**	0.0005	-0.0012
	(0.0051)	(0.0048)	(0.0075)	(0.0130)	(0.0120)	(0.0081)
Mental Health Index	0.00450	-0.00380	0.00510	-0.00760	0.00000	-0.026***
	(0.0052)	(0.0049)	(0.0060)	(0.0120)	0.0000	(0.0081)
Political Involvement Index	0.00120	0.013***	0.015**	0.00760	0.02000	-0.00430
	(0.0051)	(0.0048)	(0.0066)	(0.0130)	(0.0140)	(0.0074)
Women's Empowerment Index	0.00003	-0.00700	-0.018***	0.00990	-0.022**	0.00480
	(0.0048)	(0.0049)	(0.0056)	(0.0120)	(0.0110)	(0.0077)
N	925	2606	2401	984	1299	2272
R-Squared	0.17	0.15	0.04	0.32	0.44	0.05
Surveyed mean	0.98	0.94	0.93	0.89	0.79	0.90
Panel C.						
Treatment Status	0.0046	0.0078	0.0220	0.0180	0.0055	-0.0065
	(0.0092)	(0.0130)	(0.0130)	(0.0180)	(0.0190)	(0.0170)
Baseline characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Baseline characteristics interacted with Treatment	Yes	Yes	Yes	Yes	Yes	Yes
N	925	2606	2401	984	1299	2272
R-Squared	0.18	0.16	0.04	0.33	0.45	0.06
Surveyed mean	0.98	0.94	0.93	0.89	0.79	0.90
p-value from test that Treatment and all other variables above interacted with Treatment are jointly 0	0.97	0.58	0.88	0.76	0.85	0.35

	(1)	(2)	(3)	(4)
	Total Consumption per capita, month	Food consumption per capita, month	Nonfood consumption per capita, month	Durable good expenditure per capita, month
Treatment (ITT): Endline 1	4.55***	3.87***	0.61	-0.029
	(1.22)	(0.84)	(0.74)	(0.16)
Observations	9,688	9,687	9,684	9,688
R-squared	0.46	0.46	0.21	0.108
Control mean	78.8	51.6	25.3	1.92
F-test: equality of ITT coefficients across sites	1.70	0.88	3.69	1.04
p-value: test of equality of coefficients across sites	0.130	0.49	0.003	0.390
Countries included	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER
Treatment (ITT): Endline 2	3.36***	2.62***	0.83	-0.11
	(1.18)	(0.69)	(0.76)	(0.23)
Observations	9,495	9,493	9,503	9,494
R-squared	0.38	0.41	0.20	0.080
Control mean	68.8	41.2	25.0	2.13
F-test: equality of ITT coefficients across sites	2.79	1.64	3.04	3.48
p-value: test of equality of coefficients across sites	0.016	0.140	0.010	0.004
Countries included	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER

Table S2a: Per Capita Consumption

Notes:

1. Results presented are intent-to-treat estimates, including country Dummy variables, controls for the household's value at baseline and controls for every variable used in block stratification and in re-randomization procedures

2. Dummy variables are included for Endline 1 regressions of whether the data used includes each wave of short survey data

3. All values reported in 2014 USD, Purchasing Power Parity (PPP) terms

4. Column (1) is the sum of columns (2) through (4).

Table S2b: Food Security

	(1)	(2)	(3)	(4)	(5)	
	Everyone in the household gets enough food everyday	No adults skipped meals	No one in the household went a whole day without food	No children skipped meals	Everyone in the household regularly eats two meals per day	
Treatment (ITT): Endline 1	0.035**	0.042***	0.032***	0.027***	0.023**	
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	
Observations	4477	9606	9604	9467	2792	
R-squared	0.35	0.29	0.21	0.28	0.12	
Control mean	0.42	0.51	0.83	0.73	0.90	
F-test: equality of ITT coefficients across sites	2.03	1.16	5.07	0.60	1.78	
p-value: test of equality of coefficients across sites	0.11	0.33	0.000	0.70	0.15	
Countries Included	ETH PAK GHA	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH IND PAK	
Treatment (ITT): Endline 2	0.056***	0.043***	0.020**	0.036***	0.024**	
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	
Observations	5243	9484	9482	9285	2804	
R-squared	0.28	0.25	0.19	0.29	0.09	
Control mean	0.40	0.48	0.84	0.72	0.92	
F-test: equality of ITT coefficients across sites	6.22	2.39	1.18	0.79	2.65	
p-value: test of equality of coefficients across sites	0.000	0.036	0.320	0.560	0.047	
Countries Included	ETH IND PAK GHA	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH IND PAK	

Notes:

1. Results presented are intent-to-treat estimates, including country Dummy variables, controls for the household's value at baseline and controls for every variable used in both block stratification and in re-randomization procedures

Table S2c: Asset Ownership

	(1)	(2)	(3) (4)		(5)	(6)
	Asset Index	Total Asset Value	Productive Asset Index	Productive Asset Value	Household Asset Index	Household Asset Value
Treatment (ITT): Endline 1	0.26***	340***	0.27***	296***	0.038*	6.030
Observations	(0.023) 9720	(50.1) 5238	(0.024) 9720	(43.8) 5238	(0.021) 9684	(11.5) 5226
R-squared	0.251	0.564	0.227	0.593	0.316	0.366
Control mean	0.000	2620	0.000	1964	0.000	630
F-test: equality of ITT coefficients across sites	14.3	34.3	14.0	34.5	1.16	3.32
p-value: test of equality of coefficients across sites	0.000	0.000	0.000	0.000	0.33	0.019
Countries Included	ETH HND IND PAK GHA PER	ETH HND PER	ETH HND IND PAK GHA PER	ETH HND PER	ETH HND IND PAK GHA PER	ETH HND PER
Treatment (ITT): Endline 2	0.25***	281***	0.25***	215***	0.083***	15.8
	(0.024)	(47.5)	(0.025)	(36.3)	(0.022)	(14.00)
Observations	9508	6181	9508	6191	9488	6170
R-squared	0.23	0.44	0.22	0.46	0.26	0.40
Control mean	0.000	2300	0.000	1576	0.000	634
F-test: equality of ITT coefficients across sites	23.9	25.8	21.0	25.1	5.12	4.68
p-value: test of equality of coefficients across sites	0.000	0.000	0.000	0.000	0.000	0.001
Countries Included	ETH HND IND PAK GHA PER	ETH HND PAK PER	ETH HND IND PAK GHA PER	ETH HND PAK PER	ETH HND IND PAK GHA PER	ETH HND PAK PER

Notes:

1. Results presented are intent-to-treat estimates, including country Dummy variables, controls for the household's value at baseline and controls for every variable used in both block stratification and in re-randomization procedures

2. Columns (2), (4) and (6) are reported in 2014 USD, Purchasing Power Parity (PPP) terms.

3. Columns (1), (3) and (5) report indices that weight assets based on their relative values, and are standardized to each country's control group mean in every time period. See SOM Text 1 for details of the calculations used to construct the asset indices.

Table S2d: Financial Inclusion

	(1) (2)		(3)	(4)	(5)	
	Total amount borrowed, last 12 months	Amount borrowed from informal sources, last 12 months	Amount borrowed from formal sources, last 12 months	Total savings	Total amount deposited in savings, last month	
Treatment (ITT): Endline 1	3.72	-0.4	3.81	151***	7.25***	
	(15.4)	(18.1)	(4.66)	(12.1)	(1.3)	
Observations	9707	7158	7158	7815	7115	
R-squared	0.14	0.114	0.054	0.15	0.09	
Control mean	181	218	28.1	97.1	12.5	
F-test: equality of ITT coefficients across sites	1.30	0.65	1.60	134	20.6	
p-value: test of equality of coefficients across sites	0.26	0.66	0.16	0.000	0.000	
Countries Included	ETH HND IND PAK GHA PER	ETH HND IND PAK PER	ETH HND IND PAK PER	ETH HND GHA PER	ETH HND IND PAK PER	
Treatment (ITT): Endline 2	-12.90	-41.3*	22.7***	75.0***	3.64*	
	(20.7)	(24.4)	(5.72)	(11.5)	(2.06)	
Observations	9475	7037	7038	7581	7040	
R-squared	0.15	0.12	0.10	0.099	0.097	
Control mean	254	323	30.6	78.4	21.1	
F-test: equality of ITT coefficients across sites	3.68	2.47	8.8	20.4	1.25	
p-value: test of equality of coefficients across sites	0.003	0.030	0.000	0.000	0.28	
Countries Included	ETH HND IND PAK GHA PER	ETH HND IND PAK PER	ETH HND IND PAK PER	ETH HND GHA PER	ETH HND IND PAK PER	

Notes:

1. Results presented are intent-to-treat estimates, including country Dummy variables, controls for the household's value at baseline and controls for every variable used in both block stratification and in re-randomization procedures

2. Dummy variables are included for Endline 1 regressions of whether the data used includes each wave of short survey data

3. All values are reported in 2014 USD, Purchasing Power Parity (PPP) terms.

4. Total amount borrowed includes formal borrowing, informal borrowing and borrowing where the source was not specified.

Table S2e: Use of Time

	(1)	(2)	(3)	(4)	(5)
	Total minutes spent on productive activities in last day	Minutes spent on agriculture in last day	Minutes spent tending livestock in last day	Minutes spent on own business in last day	Minutes spent on paid labor in last day
Treatment (ITT): Endline 1	17.5***	3.77**	14.5***	1.18	-2.92
	(3.57)	(1.91)	(1.68)	(1.60)	(2.65)
Observations	15327	15137	15090	15289	15307
R-squared	0.19	0.23	0.34	0.16	0.14
Control mean	169	43.6	53.5	19.0	55.2
F-test: equality of ITT coefficients across sites	6.89	1.15	36.7	0.96	1.14
p-value: test of equality of coefficients across sites	0.000	0.33	0.000	0.44	0.34
Countries included	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER
Treatment (ITT): Endline 2	11.2***	4.70**	7.65***	0.69	-2.380
	(3.72)	(2.06)	(1.86)	(1.71)	(2.63)
Observations	14501	14397	14284	14424	14493
R-squared	0.18	0.26	0.34	0.14	0.15
Control mean	185	52.4	56.7	21.1	56.8
F-test: equality of ITT coefficients across sites	2.44	1.12	14.4	0.37	0.83
p-value: test of equality of coefficients across sites	0.032	0.34	0.000	0.87	0.53
Countries included	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER

Notes:

1. Results presented are intent-to-treat estimates, including country Dummy variables, controls for the household's value at baseline and controls for every variable used in both block stratification and in re-randomization procedures

2. Dummy variables are included for Endline 1 regressions of whether the data used includes each wave of short survey data

3. Column (1) is the sum of columns (2) through (5).

Table S2f: Incomes and Revenues

	(1)	(2)	(3)	(4)	(5)	
	Household livestock revenue, month	Household agricultural income, month	Household Non- farm Micro- enterprise Income, month	Household Income from Paid Labor, month	Self-reported economic status (1/10)	
Treatment (ITT): Endline 1	30.6***	7.69***	4.65	3.78	0.33***	
	(3.94)	(1.91)	(3.01)	(3.39)	(0.05)	
Observations	9712	9665	9687	8637	7100	
R-squared	0.37	0.22	0.05	0.42	0.21	
Control mean	73.5	37.1	12.80	93.2	3.74	
F-test: equality of ITT coefficients across sites	49.1	4.29	0.99	2.88	17.1	
p-value: test of equality of coefficients across sites	0.000	0.001	0.42	0.013	0.000	
Countries Included	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND GHA PER	ETH HND IND PAK PER	
Treatment (ITT): Endline Three	30.2***	3.52**	5.42	4.75	0.30***	
	(4.74)	(1.73)	(3.97)	(3.22)	(0.05)	
Observations	9494	7043	9481	9471	7035	
R-squared	0.32	0.18	0.05	0.26	0.16	
Control mean	80.6	40.5	14.10	69.9	3.65	
F-test: equality of ITT coefficients across sites	8.0	3.39	1.79	1.17	16.0	
p-value: test of equality of coefficients across sites	0.000	0.005	0.110	0.32	0.000	
Countries Included	ETH HND IND PAK GHA PER	ETH HND IND PAK PER	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND PAK PER	

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Notes:

1. Results presented are intent-to-treat estimates, including country Dummy variables, controls for the household's value at baseline and controls for every variable used in both block stratification and in re-randomization procedures

2. Dummy variables are included for Endline 1 regressions of whether the data used includes each wave of short survey data

3. Columns (1) to (4) are reported in 2014 USD, Purchasing Power Parity (PPP) terms.

4. See SOM Text 1 for the components included in each type of revenues and income

Table S2g: Physical and Mental Health

	Physical Health Mental Health					
	(1)	(2)	(3)	(4)	(5)	(6)
	Member has not missed any days due to illness, last month	Activities of Daily Living Score	Self-perception of physical health (1-5)	Self-reported happiness (1- 10)	Stress Index	Member has not experienced a period of worry in last year
Treatment (ITT): Endline 1	-0.0022	0.017***	0.0270	0.14***	0.049**	-0.0043
Olasardiana	(0.0071)	(0.0057)	(0.022)	(0.025)	(0.022)	(0.011)
Observations	15504	12436	12/4/	12485	12449	5369
R-squared	0.33	0.20	0.18	0.14	0.070	0.50
Control mean	0.74	0.82	3.06	2.99	0.000	0.52
F-test: equality of ITT coefficients across sites	2.38	3.58	1.79	7.92	3.63	3.15
p-value: test of equality of coefficients across sites	0.036	0.003	0.110	0.000	0.003	0.024
Countries included	ETH HND IND PAK GHA PER	ETH HND IND GHA PER	ETH HND IND PAK PER	ETH HND IND GHA PER	ETH HND IND GHA PER	ETH IND GHA
Treatment (ITT): Endline 2	0.000	0.0097	0.035*	0.066***	0.062***	0.0009
	(0.009)	(0.0059)	(0.021)	(0.020)	(0.023)	(0.012)
Observations	14820	12283	12295	14595	12295	5521
R-squared	0.10	0.25	0.20	0.17	0.075	0.41
Control mean	0.78	0.80	3.06	3.13	0.000	0.54
F-test: equality of ITT coefficients across sites	0.61	0.84	2.01	1.44	3.40	1.19
p-value: test of equality of coefficients across sites	0.69	0.52	0.07	0.21	0.005	0.31
Countries included	ETH HND IND PAK GHA PER	ETH HND IND GHA PER	ETH HND IND PAK PER	ETH HND IND PAK GHA PER	ETH HND IND GHA PER	ETH IND GHA

Notes:

1. Results presented are intent-to-treat estimates, including country Dummy variables, controls for the household's value at baseline and controls for every variable used in both block stratification and in re-randomization procedures 2. See SOM Text 1 for the components included in the Activities of Daily Living Score and the absence of symptoms of mental distress index.

Table S2h: Political Involvement and Women's Empowerment

		Political In	wolvement			Won	nen's Empower	npowerment		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
	Voted in last election	Member of political party	Attended village meeting in last year	Has spoken with village leaders about village concerns	Woman has major say on food decisions	Woman has major say on education decisions	Woman has major say on health decisions (personal and family)	Woman has major say on home improvement decisions	Woman has major say in how to manage household finances	
Treatment (ITT): Endline 1	-0.01	0.050***	0.025***	0.012	0.01	0.02	0.016*	0.028***	0.00	
Observations	8303	9426	(0.0090)	(0.010)	(0.0092)	(0.0092)	10316	3796	(0.011) 8521	
R-squared	0.45	0.27	0.18	0.16	0.38	0.36	0.36	0.31	0.30	
Control mean	0.61	0.13	0.42	0.21	0.55	0.48	0.55	0.16	0.44	
F-test: equality of ITT coefficients across sites	0.98	11.2	3.12	0.92	2.36	2.03	1.72	3.60	0.61	
p-value: test of equality of coefficients across sites	0.40	0.0	0.008	0.43	0.038	0.071	0.13	0.013	0.69	
Countries Included	HND IND PER	ETH HND PAK PER	ETH HND PAK GHA PER	ETH IND PAK	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH HND IND PAK GHA PER	ETH IND PAK	ETH HND IND GHA PER	
Treatment (ITT): Endline 2	0.004	0.029***	0.028***	0.026** (0.011)	0.000	0.0065	0.0100	0.013	0.0029	
Observations	8284	8824	12847	5544	8118	7873	8474	2099	6701	
R-squared	0.35	0.13	0.13	0.20	0.37	0.37	0.33	0.35	0.21	
Control mean	0.57	0.18	0.36	0.23	0.63	0.52	0.60	0.26	0.51	
F-test: equality of ITT coefficients across sites	5.01	4.50	2.27	2.50	1.45	0.99	0.63	1.26	0.43	
p-value: test of equality of coefficients across sites	0.002 HND	0.001 ETH HND	0.045 ETH HND	0.058 ETH	0.20 ETH HND	0.42 ETH HND	0.67 ETH HND	0.28 ETH	0.78 ETH HND	
Countries Included	IND PER	PAK PER	PAK GHA PER	ÍND PAK	PAK GHA PER	PAK GHA PER	PAK GHA PER	PAK	GHA PER	

Notes:
1. Results presented are intent-to-treat estimates, including country Dummy variables, controls for the household's value at baseline and controls for every variable used in block stratification and in rerandomization procedures

Table S3. Bounded Attrition

	Endline 1			Endline 2				
	Bounding Estimates use Pooled Attrition Rates		Bounding Estimates use Country-Specific Attrition Rates		Bounding Estimates use Pooled Attrition Rates		Bounding Estimates use Country-Specific Attrition Rates	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Indexed Outcomes	Lower Bound, Standardized Mean Treatment Effect	Upper Bound, Standardized Mean Treatment Effect	Lower Bound, Standardized Mean Treatment Effect	Upper Bound, Standardized Mean Treatment Effect	Lower Bound, Standardized Mean Treatment Effect	Upper Bound, Standardized Mean Treatment Effect	Lower Bound, Standardized Mean Treatment Effect	Upper Bound, Standardized Mean Treatment Effect
Total per capita consumption, standardized	0.099***	0.186***	0.085***	0.133***	0.112***	0.145***	0.065***	0.144***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Food security index (5 components)	0.067***	0.131***	0.089***	0.123***	0.109***	0.115***	0.103***	0.138***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Asset index	0.242***	0.337***	0.215***	0.275***	0.246***	0.270***	0.181***	0.261***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Financial inclusion index (4 components)	0.366***	0.452***	0.330***	0.391***	0.211***	0.244***	0.128***	0.232***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Total time spent working, standardized	0.098***	0.127***	0.073***	0.123***	0.036*	0.079***	0.027	0.082***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Incomes and revenues index (5 components)	0.354***	0.439***	0.336***	0.404***	0.265***	0.285***	0.185***	0.303***
	(0.04)	(0.04)	(0.04)	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)
Physical health index (3 components)	0.036*	0.069***	0.027	0.082***	0.021	0.061***	0.012	0.077***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Mental health index (3 components)	0.093***	0.127***	0.078***	0.141***	0.071***	0.119***	0.058***	0.130***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Political Involvement index (4 components)	0.065***	0.090***	0.045**	0.096***	0.045**	0.080***	0.039*	0.079***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Women's empowerment index (5 components)	-0.014	0.094***	0.012	0.042*	-0.085***	0.080***	-0.013	0.024
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)

Notes:

(1) All indexed outcomes are measured at the household level. Adult-level outcomes are averaged at the household level, whereas in the main tables they are reported at the individual level.

(2) The pooled specification (columns 1, 2, 5, 6) trims the full sample based on the pooled attrition rates for each indexed family outcome. For every outcome measured at a given round, the bounded sample is constructed by trimming either the highest or lowest observations from the group with the higher surveyed rate for that variable and round to ensure equal surveyed rates for both treatment and control groups.

(a) The country specification (columns 3, 4, 7, 8) trims the full sample for that country is constructed by trimming either the highest or lowest observations from the group with the higher surveyed rate for that variable and round to ensure equal surveyed rates for both treatment and control groups in that country. The pooled bounded sample is thus made up of the country-specific bounded samples.

Table S4a: Indexed Family Outcome Variables and Aggregates, Ethiopia

	Endline 1		Endl	ine 2
	(1) (2)		(3)	(4)
	Standardized		Standardized	
	Mean	q-value for all	Mean	q-value for all
	Treatment	10 hypotheses	Treatment	10 hypotheses
Indexed Outcomes	Effect		Effect	
Total per capita consumption, standardized	0.239***	0.001	0.347***	0.001
	(0.068)		(0.074)	
Food security index (5 components)	0.139**	0.037	0.186***	0.004
	(0.061)		(0.061)	
Asset index	0.499***	0.001	0.604***	0.001
	(0.059)		(0.065)	
Financial inclusion index (4 components)	1.907***	0.001	0.799***	0.001
	(0.107)		(0.111)	
Total time spent working, standardized	0.331***	0.001	0.225***	0.001
	(0.067)		(0.063)	
Incomes and revenues index (5 components)	1.438***	0.001	0.293***	0.001
	(0.191)		(0.074)	
Physical health index (3 components)	-0.034	0.592	0.041	0.504
	(0.054)		(0.049)	
Mental health index (3 components)	0.047	0.477	-0.037	0.581
	(0.053)		(0.058)	
Political Involvement index (4 components)	0.070	0.208	0.111**	0.048
	(0.048)		(0.052)	
Women's empowerment index (5 components)	-0.007	0.891	-0.005	0.920
	(0.051)		(0.054)	

Notes:

1. Results presented are mean standardized intent-to-treat estimates, including controls for the household's value at baseline and controls for geographic units used for block stratification

Table S4b: Indexed Family Outcome Variables and Aggregates, Ghana

	Endline 1		End	line 2
	(1) (2) Standardized		(3)	(4)
			Standardized	
	Mean	q-value for all	Mean	q-value for all
	Treatment	10 hypotheses	Treatment	10 hypotheses
Indexed Outcomes	Effect		Effect	
Total per capita consumption, standardized	0.097**	0.068	0.136***	0.018
	(0.049)		(0.050)	
Food security index (5 components)	0.065	0.168	0.077*	0.144
	(0.044)		(0.045)	
Asset index	0.247***	0.001	0.342***	0.001
	(0.049)		(0.057)	
Financial inclusion index (4 components)	0.261***	0.001	0.341***	0.001
	(0.060)		(0.080)	
Total time spent working, standardized	0.026	0.638	0.042	0.558
	(0.056)		(0.049)	
Incomes and revenues index (5 components)	0.156***	0.004	0.330***	0.001
	(0.049)		(0.063)	
Physical health index (3 components)	0.114**	0.053	-0.011	0.847
	(0.053)		(0.055)	
Mental health index (3 components)	0.177***	0.003	0.035	0.665
	(0.052)		(0.057)	
Political Involvement index (4 components)	0.179***	0.003	0.099*	0.144
	(0.054)		(0.055)	
Women's empowerment index (5 components)	0.045	0.438	0.029	0.665
	(0.053)		(0.054)	

Notes:

1. Results presented are mean standardized intent-to-treat estimates, including controls for the household's value at baseline and controls for geographic units used for block stratification and variables used in re-randomization to ensure balance

2. Dummy variables are included for Endline 1 regressions for whether the values include each wave of short survey data

Table S4c: Indexed Family Outcome Variables and Aggregates, Honduras

	Endline 1		Endl	ine 2	
	(1) (2)		(3)	(4)	
	Standardized		Standardized		
	Mean	q-value for all	Mean	q-value for all	
	Treatment	10 hypotheses	Treatment	10 hypotheses	
Indexed Outcomes	Effect		Effect		
Total per capita consumption, standardized	0.011	0.839	-0.070	0.306	
	(0.049)		(0.049)		
Food security index (5 components)	0.136***	0.011	0.088*	0.203	
	(0.047)		(0.051)		
Asset index	0.010	0.839	-0.096**	0.149	
	(0.051)		(0.048)		
Financial inclusion index (4 components)	0.199***	0.002	0.063	0.429	
	(0.055)		(0.060)		
Total time spent working, standardized	0.086***	0.020	0.038	0.429	
	(0.033)		(0.036)		
Incomes and revenues index (5 components)	0.237***	0.001	0.230***	0.002	
	(0.051)		(0.060)		
Physical health index (3 components)	0.067*	0.124	0.036	0.456	
	(0.037)		(0.040)		
Mental health index (3 components)	0.138***	0.003	0.099**	0.091	
	(0.041)		(0.042)		
Political Involvement index (4 components)	-0.024	0.653	-0.013	0.820	
	(0.037)		(0.039)		
Women's empowerment index (5 components)	0.033	0.653	0.003	0.952	
	(0.049)		(0.053)		

Notes:

1. Results presented are mean standardized intent-to-treat estimates, including controls for the household's value at baseline and controls for geographic units used for block stratification and variables used in re-randomization to ensure balance

2. Dummy variables are included for Endline 1 regressions for whether the values include each wave of short survey data

Table S4d: Indexed Family Outcome Variables and Aggregates, India

	Endline 1		Endl	ine 2
	(1) (2)		(3)	(4)
	Standardized		Standardized	
	Mean	q-value for all	Mean	q-value for all
	Treatment	10 hypotheses	Treatment	9 hypotheses
Indexed Outcomes	Effect		Effect	
Total per capita consumption, standardized	0.296***	0.001	0.228***	0.002
	(0.080)		(0.066)	
Food security index (5 components)	0.238***	0.002	0.278***	0.001
	(0.068)		(0.063)	
Asset index	0.650***	0.001	0.712***	0.001
	(0.089)		(0.096)	
Financial inclusion index (4 components)	0.214*	0.141	0.222***	0.007
	(0.129)		(0.077)	
Total time spent working, standardized	0.279***	0.001	0.119***	0.010
	(0.049)		(0.044)	
Incomes and revenues index (5 components)	0.608***	0.001	0.666***	0.001
	(0.114)		(0.099)	
Physical health index (3 components)	0.160**	0.025	-0.017	0.746
	(0.065)		(0.051)	
Mental health index (3 components)	0.077	0.220	0.058	0.305
	(0.060)		(0.053)	
Political Involvement index (4 components)	-0.007	0.888	0.141***	0.004
	(0.050)		(0.046)	
Women's empowerment index (5 components)	0.087	0.211		
	(0.063)			

Notes:

1. Results presented are mean standardized intent-to-treat estimates, including controls for the household's value at baseline and controls for geographic units used for block stratification

Table S4e: Indexed Family Outcome Variables and Aggregates, Pakistan

	Endline 1		Endl	line 2
	(1) (2)		(3)	(4)
	Standardized		Standardized	
	Mean	q-value for all	Mean	q-value for all
	Treatment	9 hypotheses	Treatment	10 hypotheses
Indexed Outcomes	Effect		Effect	
Total per capita consumption, standardized	0.171***	0.018	0.117*	0.230
	(0.064)		(0.067)	
Food security index (5 components)	0.117**	0.055	0.058	0.404
	(0.056)		(0.059)	
Asset index	0.325***	0.001	0.170**	0.056
	(0.063)		(0.067)	
Financial inclusion index (4 components)	0.011	0.846	-0.052	0.488
	(0.058)		(0.068)	
Total time spent working, standardized	0.017	0.741	0.042	0.390
	(0.038)		(0.038)	
Incomes and revenues index (5 components)	0.101	0.190	0.128*	0.230
	(0.069)		(0.076)	
Physical health index (3 components)	-0.095**	0.048	-0.002	0.959
	(0.043)		(0.047)	
Mental health index (3 components)			0.054	0.366
			(0.044)	
Political Involvement index (4 components)	0.172***	0.001	0.120***	0.056
	(0.043)		(0.044)	
Women's empowerment index (5 components)	0.168***	0.004	0.077	0.271
	(0.052)		(0.051)	

Notes:

1. Results presented are mean standardized intent-to-treat estimates, including controls for the household's value at baseline and controls for variables used in block stratification

Table S4f: Indexed Family Outcome Variables and Aggregates, Peru

	Endline 1		Endl	ine 2
	(1) (2)		(3)	(4)
	Standardized		Standardized	
	Mean	q-value for all	Mean	q-value for all
	Treatment	10 hypotheses	Treatment	10 hypotheses
Indexed Outcomes	Effect		Effect	
Total per capita consumption, standardized	0.048	0.627	0.096*	0.215
	(0.048)		(0.056)	
Food security index (5 components)	0.020	0.756	0.064	0.265
	(0.052)		(0.045)	
Asset index	0.102**	0.081	0.060	0.265
	(0.042)		(0.042)	
Financial inclusion index (4 components)	0.016	0.756	0.051	0.515
	(0.048)		(0.061)	
Total time spent working, standardized	0.012	0.756	-0.029	0.584
	(0.039)		(0.045)	
Incomes and revenues index (5 components)	0.122***	0.081	0.108*	0.215
	(0.047)		(0.061)	
Physical health index (3 components)	0.085**	0.155	0.100**	0.165
	(0.043)		(0.047)	
Mental health index (3 components)	0.059	0.541	0.174***	0.002
	(0.048)		(0.047)	
Political Involvement index (4 components)	0.021	0.756	-0.006	0.891
	(0.042)		(0.046)	
Women's empowerment index (5 components)	-0.026	0.756	0.058	0.503
	(0.059)		(0.062)	

Notes:

1. Results presented are mean standardized intent-to-treat estimates, including controls for the household's value at baseline and controls for geographic units used for block stratification and variables used in re-randomization to ensure balance

2. Dummy variables are included for Endline 1 regressions for whether the values include each wave of short survey data

Table S5a-1: Per Capita Consumption by Country, Endline 1

	(1)	(2)	(3)	(4)	
	Total	Food	Nonfood	Durable good	
	Consumption	consumption per	consumption per	r expenditure per	
	per capita,	capita, month	capita, month	capita, month	
Ethiopia	6.83***	2.42	3.67***	0.41	
· · · · · · · · · · · · · · · · · · ·	(1.93)	(1.48)	(0.85)	(0.33)	
Observations	915	915	915	915	
R-squared	0.06	0.03	0.05	0.02	
Control mean	41.7	27.1	13.4	1.2	
Baseline mean	47.5	33.10	14.4		
Ghana	2.82**	2.18**	0.44	0.05	
	(1.42)	(1.04)	(0.76)	(0.037)	
Observations	2525	2525	2525	2525	
R-squared	0.19	0.18	0.10	0.07	
Control mean	40.8	30.1	10.3	0.34	
Baseline mean	54.4	44.90	9.5	0.47	
Honduras	0.61	3.45**	-2.55	-0.51	
	(2.70)	(1.51)	(1.85)	(0.64)	
Observations	2287	2286	2282	2287	
R-squared	0.14	0.12	0.07	0.07	
Control mean	79.6	45.1	30.5	4.1	
Baseline mean	46.3	34.10	10.9	1.51	
India (Bandhan)	6.51***	4.96***	1.77**	-0.31	
	(1.75)	(1.17)	(0.88)	(0.37)	
Observations	816	816	816	816	
R-squared	0.28	0.27	0.17	0.18	
Control mean	47.8	32.6	13.0	2.2	
Baseline mean	39.9	26.30	12.7	0.97	
Pakistan	8.86***	3.92**	4.25**	0.48	
	(3.31)	(1.78)	(2.05)	(0.34)	
Observations	1041	1041	1041	1042	
R-squared	0.16	0.15	0.13	0.06	
Control mean	86.9	52.9	31.9	2.2	
Baseline mean	133.0	78.60	50.3	3.72	
Peru	4.18	5.70*	-1.58	-0.08	
	(4.14)	(3.22)	(2.43)	(0.15)	
Observations	2104	2104	2105	2103	
R-squared	0.22	0.23	0.08	0.10	
Control mean	147.0	101.0	44.9	1.8	
Baseline mean	104.0	77.90	24.4		

Notes:

1. Results presented are intent-to-treat estimates, including controls for the household's value at baseline and controls for

every variable used in block stratification and in re-randomization procedures

2. Dummy variables are included for whether the values include each wave of short survey data

3. All values reported in 2014 USD, Purchasing Power Parity (PPP) terms

4. Column (1) is the sum of columns (2) through (4).
Table S5a-2: Per Capita Consumption by Country, Endline 2

	(1)	(2)	(3)	(4)
	Total	Food	Nonfood	Durable good
	Consumption	consumption	consumption	expenditure per
	per capita,	per capita,	per capita,	capita, month
	month	month	month	1.0.4////
Ethiopia	7.3/***	2.02**	3.97***	1.04***
	(1.58)	(0.86)	(0.95)	(0.30)
Observations	908	908	908	908
R-squared	0.11	0.09	0.06	0.03
Control mean	40.4	25.9	13.9	0.6
Baseline mean	47.5	33.10	14.4	
Ghana	3.22***	2.41***	0.55	0.03
	(1.19)	(0.81)	(0.66)	(0.04)
Observations	2434	2434	2438	2442
R-Squared	0.16	0.16	0.08	0.10
Control mean	30.40	20.00	8.63	0.34
Baseline mean	54.40	44.90	9.50	0.47
Honduras	-4.45	-0.60	-2.28	-1.72**
	(3.11)	(1.28)	(2.26)	(0.85)
Observations	2229	2227	2229	2229
R-squared	0.12	0.09	0.08	0.06
Control mean	76.8	38.6	34.3	3.96
Baseline mean	46.3	34.10	10.90	1.51
India (Bandhan)	6.18***	3.02***	2.55***	0.55
	(1.78)	(1.11)	(0.86)	(0.41)
Observations	879	879	879	879
R-squared	0.28	0.27	0.29	0.17
Control mean	57.5	36.6	18.9	1.95
Baseline mean	39.9	26.30	12.70	0.97
Pakistan	5.98*	2.91	2.84	0.07
	(3.40)	(1.80)	(2.09)	(0.47)
Observations	1016	1016	1016	1016
R-squared	0.12	0.11	0.12	0.08
Control mean	85.1	50.4	31.5	3.17
Baseline mean	133.0	78.60	50.3	3.72
Down	C 10*	6 75**	0.07	0.10
гени	0.18^{*}	0.23**	-0.07	0.19
Observations	(3.59)	(2.58)	(2.10)	(0.46)
Observations	2029	2029	2033	2020
K-squared	0.12	0.12	0.08	0.04
Control mean	119.0	/5.8	40.3	2.74
Baseline mean	104.0	77.90	24.4	

Notes:

1. Results presented are intent-to-treat estimates, including controls for the household's value at baseline and controls for

every variable used in block stratification and in re-randomization procedures

2. All values reported in 2014 USD, Purchasing Power Parity (PPP) terms

3. Column (1) is the sum of columns (2) through (4).

Table S5b-1: Food Security by Country, Endline 1

	(1)	(2)	(3)	(4)	(5)
	Everyone in the household gets enough food everyday	No adults skipped meals	No one in the household went a whole day without food	No children skipped meals	Everyone in the household regularly eats two meals per day
Ethiopia	0.039	0.063**	0.029*	0.045**	0.018
	(0.031)	(0.030)	(0.017)	(0.022)	(0.018)
Observations	914	910	910	910	909
R-squared	0.067	0.064	0.030	0.042	0.015
Control mean	0.64	0.66	0.91	0.85	0.91
Baseline mean	0.34	0.37	0.74	0.49	0.83
Ghana	0.0280	0.0210	0.039*	0.0035	
Shaha	-0.0200	-0.0200	-0.0230	-0.0250	
Observations	2501	2501	2499	2500	
R-squared	0.26	0.20	0.14	0.15	
Control mean	0.20	0.26	0.71	0.45	
Baseline mean	0.15	0.12	0.50	0.43	
Buschile fileun	0.15	0.12	0.00	0.11	
Honduras		0.060***	0.021*	0.034*	
		(0.023)	(0.013)	(0.019)	
Observations		2255	2255	2188	
R-squared		0.084	0.076	0.045	
Control mean		0.67	0.92	0.82	
Baseline mean		0.61	0.82	0.79	
India (Bandhan)		0.080***	0.13***	0.013	0.013
		(0.025)	(0.030)	(0.027)	(0.019)
Observations		814	814	815	815
R-squared		0.21	0.26	0.26	0.25
Control mean		0.11	0.68	0.81	0.91
Baseline mean		0.09	0.28	0.62	0.77
Pakistan	0.039	0.063**	0.029*	0.045**	0.018
	(0.031)	(0.030)	(0.017)	(0.022)	(0.018)
Observations	914	910	910	910	909
R-squared	0.067	0.064	0.030	0.042	0.015
Control mean	0.64	0.66	0.91	0.85	0.91
Baseline mean	0.34	0.37	0.74	0.49	0.83
Daru		0.030	0.063**	0.020*	
1 e1u		(0.039	(0.003	(0.029)	
Observations		014	(0.050)	(0.017)	
Duservations P squared		914 0.067	910 0.064	0.030	
R-squareu		0.007	0.004	0.030	
Control Illeall Baseline mean		0.04	0.00	0.91	
Daschille Illeall		0.34	0.57	0.74	

Notes:

1. Results presented are intent-to-treat estimates, including controls for the household's value at baseline and controls for every

variable used in block stratification and in re-randomization procedures

Table S5b-2: Food Security by Country, Endline 2

	(1)	(2)	(3)	(4)	(5)
	Everyone in the household gets enough food everyday	No adults skipped meals	No one in the household went a whole day without food	No children skipped meals	Everyone in the household regularly eats two meals per day
Ethiopia	0.077**	0.051*	0.041***	0.047**	0.03
	(0.03)	(0.03)	(0.02)	(0.02)	(0.02)
Observations	907	907	906	904	906
R-squared	0.05	0.03	0.05	0.04	0.01
Control mean	0.64	0.69	0.92	0.83	0.92
Baseline mean	0.34	0.37	0.74	0.49	0.83
Ghana	0.0140	0.0290	0.0300	0.0310	
	-0.0220	-0.0210	-0.0230	-0.0240	
Observations	2438	2438	2437	2436	
R-Squared	0.15	0.20	0.18	0.21	
Control mean	0.25	0.23	0.73	0.44	
Baseline mean	0.15	0.12	0.50	0.41	
Honduras		0.038	0.021	0.027	
		(0.02)	(0.02)	(0.02)	
Observations		2224	2224	2113	
R-squared		0.10	0.07	0.07	
Control mean		0.58	0.90	0.80	
Baseline mean		0.61	0.82	0.79	
India (Bandhan)	0.14***	0.13***	0.038*	0.061***	0.026**
	(0.03)	(0.03)	(0.02)	(0.02)	(0.01)
Observations	877	877	877	877	877
R-squared	0.22	0.21	0.18	0.24	0.16
Control mean	0.43	0.43	0.85	0.90	0.95
Baseline mean	0.11	0.09	0.28	0.62	0.77
Pakistan	0.02	-0.01	-0.01	0.049**	0.02
	(0.03)	(0.03)	(0.03)	(0.02)	(0.02)
Observations	1021	1021	1021	1021	1021
R-squared	0.11	0.14	0.14	0.10	0.10
Control mean	0.69	0.68	0.72	0.81	0.89
Baseline mean	0.33	0.31	0.34	0.57	0.75
Peru		0.04	0.01	0.02	
		(0.02)	(0.01)	(0.02)	
Observations		2017	2017	1934	
R-squared		0.17	0.05	0.13	
Control mean		0.58	0.94	0.87	
Baseline mean		0.73	0.90	0.00	

Table S5c-1: Asset Ownership by Country, Endline 1

_	(1)	(2)	(3)	(4)	(5)	(6)
-	Assat Indax	Total Asset	Productive	Productive	Household	Household
	Asset Index	Value	Asset Index	Asset Value	Asset Index	Asset Value
Ethiopia	0.50***	1,037***	0.51***	832***	0.082	50.9***
	(0.06)	(104.00)	(0.06)	(83.90)	(0.06)	(17.60)
Observations	915	915	915	915	915	910
R-squared	0.26	0.17	0.26	0.17	0.23	0.04
Control mean	0.00	1,379	0.00	1,030	0.00	172
Baseline mean	0.08		0.09		-0.01	
Ghana	0.25***		0.25***		0.07	
	(0.05)		(0.05)		(0.05)	
Observations	2584		2584		2583	
R-squared	0.32		0.28		0.42	
Control mean	0.00		0.00		0.00	
Baseline mean	0.00		0.00		0.00	
Honduras	0.01	106**	0.02	104**	-0.047	-17.50
	(0.05)	(53.70)	(0.05)	(45.70)	(0.04)	(20.20)
Observations	2259	2261	2259	2261	2255	2255
R-squared	0.11	0.31	0.08	0.26	0.32	0.27
Control mean	0.00	1.417	0.00	780.00	0.00	640.00
Baseline mean	-0.01	548.00	-0.01	342.00	0.00	201.00
India (Bandhan)	0.65***		0.66***		0.08	
	(0.09)		(0.09)		(0.07)	
Observations	817		817		816	
R-squared	0.29		0.30		0.18	
Control mean	0.00		0.00		0.00	
Baseline mean	0.04		0.04		-0.03	
Pakistan	0 33***		0 35***		0.07	
1 unstan	(0.06)		(0.07)		(0.05)	
Observations	1083		1083		1054	
R-squared	0.18		0.16		0.36	
Control mean	0.00		0.10		0.00	
Baseline mean	0.00		0.04		0.00	
Dasenne mean	0.05		0.04		0.01	
Peru	0.10**	168*	0.10**	172*	0.018	11.30
	(0.04)	(101.00)	(0.04)	(92.80)	(0.05)	(18.60)
Observations	2062	2062	2062	2062	2061	2061
R-squared	0.37	0.37	0.37	0.40	0.27	0.21
Control mean	0.00	4,369	0.00	3,588	0.00	774
Baseline mean	0.02	3,845	0.02	3,110	-0.02	728

Notes:

1. Results presented are intent-to-treat estimates, including controls for the household's value at baseline and controls for every variable used in block stratification and in re-randomization procedures

2. Columns (2), (4) and (6) are reported in 2014 USD, Purchasing Power Parity (PPP) terms.

3. Columns (1), (3) and (5) report indices that weight assets based on their relative values, and are standardized to each country's control group mean in every time period. See SOM Text 1 for details of the calculations used to construct the asset indices

Table S5c-2: Asset Ownership by Country, Endline 2

	(1)	(2)	(3)	(4)	(5)	(6)
	A agent In dev	Total Asset	Productive	Productive	Household	Household
	Asset muex	Value	Asset Index	Asset Value	Asset Index	Asset Value
Ethiopia	0.60***	1,077***	0.60***	851***	0.20***	62.9***
	(0.07)	(109.00)	(0.07)	(87.40)	(0.06)	(15.80)
Observations	908	908	908	908	908	908
R-squared	0.25	0.17	0.25	0.17	0.19	0.05
Control mean	0.00	1,580	0.00	1,175.00	0.00	177.00
Baseline mean	0.08		0.09		-0.01	
Ghana	0.34***		0.34***		0.16***	
	(0.06)		(0.06)		(0.05)	
Observations	2442		2442		2442	
R-Squared	0.30		0.27		0.37	
Control mean	0.00		0.00		0.00	
Baseline mean	0.00		0.00		0.00	
Honduras	-0.096**	13.00	-0.06	32.30	-0.087**	-19.90
	(0.05)	(65.10)	(0.05)	(56.00)	(0.04)	(18.20)
Observations	2226	2229	2226	2229	2225	2225
R-squared	0.08	0.26	0.08	0.23	0.06	0.30
Control mean	0.00	1 558	0.00	1.002	0.00	545
Baseline mean	-0.01	548	-0.01	342	0.00	201
basemie mean	0.01	540	0.01	5-12	0.00	201
India (Bandhan)	0.71***		0.70***		0.20***	
	(0.10)		(0.10)		(0.07)	
Observations	879		879		877	
R-squared	0.29		0.28		0.20	
Control mean	0.00		0.00		0.00	
Baseline mean	0.04		0.04		-0.03	
Pakistan	0 17**	270***	0 18**	163***	0.04	6 55
1 anstan	(0.07)	(103.00)	(0.07)	(62 50)	(0.05)	(7.61)
Observations	1027	1017	1027	1027	1017	1017
R-squared	0.15	0.12	0.14	0.12	0.41	0.32
Control mean	0.00	918	0.00	436.00	0.00	150.00
Basalina maan	0.00	510	0.04	+50.00	0.01	150.00
Basenne mean	0.05		0.04		0.01	
Peru	0.06	92.00	0.05	58.60	0.084*	37.10
	(0.04)	(104.00)	(0.04)	(79.40)	(0.05)	(43.20)
Observations	2026	2027	2026	2027	2019	2020
R-squared	0.33	0.28	0.33	0.34	0.27	0.13
Control mean	0.00	3,886.00	0.00	2,780.00	0.00	1,071.00
Baseline mean	0.02	3,845.00	0.02	3,110.00	-0.02	728.00

Notes:

1. Results presented are intent-to-treat estimates, including controls for the household's value at baseline and controls for every variable used in block stratification and in re-randomization procedures

2. Columns (2), (4) and (6) are reported in 2014 USD, Purchasing Power Parity (PPP) terms.

3. Columns (1), (3) and (5) report indices that weight assets based on their relative values, and are standardized to each country's control group mean in every time period. See SOM Text 1 for details of the calculations used to construct the asset indices

Table S5d-1: Financial Inclusion by Country, Endline 1

	(1)	(2)	(3)	(4)	(5)
		Amount	Amount		Total amount
	Total amount	borrowed from	borrowed from		deposited in
	borrowed, last	informal	formal	Total savings	savings, last
	12 months	sources, last	sources, last		month
Ethionia	15 2**	12 months	21 0**	707***	26 2***
Еторіа	(19.10)	(12,70)	(12,40)	(22.10)	(2, (0))
	(18.10)	(13.70)	(12.40)	(32.10)	(3.09)
Observations	915	915	915	915	915
R-squared	0.044	0.036	0.027	0.37	0.102
Control mean	117.00	98	18.60	75.80	8.36
Baseline mean	42.10	4.21	37.90		
Chana	5 12			16 9***	
Gnana	(4.80)			(2.00)	
Observations	(4.80)			(3.09)	
Observations	2522			2520	
R-squared	0.099			0.074	
Control mean	17.30			7.15	
Baseline mean	22.90			3.85	
Honduras	3 48	15.40	-9.21	55 ()***	3 85**
nonuurus	(25.70)	(22.80)	(7.27)	(10.50)	(1.93)
Observations	2279	2254	2254	2279	2254
P squared	0.11	0.082	0.00	0.060	0.044
Control moon	217.00	183	20.30	60.80	6.73
	217.00	165	29.30 55.40	126	0.73
Baseline mean	140.00	91.00	55.40	150	0.73
India (Bandhan)	-20.00	-15.90	-0.021		1.85**
	(33.90)	(28.00)	(6.17)		(0.90)
Observations	817	817	817		817
R-squared	0.24	0.18	0.21		0.20
Control mean	332.00	223	55.80		1.57
Baseline mean	217.00	210.00	6.85		3.05
Pakistan	-57.60	-62.00	-0.03		0.79
	(66.00)	(66.50)	(4.20)		(0.71)
Observations	1073	1071	1071		1073
R-squared	0.16	0.15	0.16		0.056
Control mean	492.00	485	6.06		1.29
Baseline mean	997.00	926.00	12.20		0.77
Peru	28.10	25.50	2.64	1.97	-0.56
	(44.20)	(42.60)	(14.20)	(34.10)	(4.02)
Observations	2101	2101	2101	2101	2056
R-squared	0.068	0.056	0.027	0.050	0.047
Control mean	227	194	30.50	266	28
Baseline mean	141.00	129.0	11.10	44.10	13.90

Notes:

1. Results presented are intent-to-treat estimates, including controls for the household's value at baseline and controls for every

variable used in block stratification and in re-randomization procedures

2. Dummy variables are included for whether the values include each wave of short survey data

3. All values are reported in 2014 USD, Purchasing Power Parity (PPP) terms.

4. Total amount borrowed includes formal borrowing, informal borrowing and borrowing where the source was not specified.

	(1)	(2)	(3)	(4)	(5)
	Total amount borrowed, last 12 months	Amount borrowed from informal sources, last 12 months	Amount borrowed from formal sources, last 12 months	Total savings	Total amount deposited in savings, last month
Ethiopia	61.3***	24.9**	36.2**	272***	8.16*
	(19.70)	(9.72)	(16.90)	(36.10)	(4.27)
Observations	908	908	908	908	908
R-squared	0.038	0.049	0.024	0.085	0.030
Control mean	147	116	29.80	73.10	6.50
Baseline mean	42	4.21	37.90		
Ghana	13.1*			10.5***	
	(7.51)			(2.39)	
Observations	2437			2435	
R-Squared	0.048			0.098	
Control mean	22.50			5.49	
Baseline mean	22.90			3.85	
Honduras	4.02	5.15	-0.33	31.70	1.440
	(33.90)	(32.90)	(11.90)	(21.70)	(1.83)
Observations	2224	2223	2224	2221	2220
R-squared	0.12	0.10	0.09	0.066	0.061
Control mean	336	295	44.50	82.10	8.62
Baseline mean	146	91.00	55.40	136	0.73
India (Bandhan)	115***	25.00	90.4***		4.16
	(38.30)	(33.60)	(15.30)		(3.32)
Observations	879	879	879		879
R-squared	0.22	0.24	0.22		0.197
Control mean	287.00	231	53.90		20.70
Baseline mean	217.00	210.00	6.85		3.05
Pakistan	-193**	-203**	2.93		3.790
	(97.00)	(96.80)	(5.79)		(8.25)
Observations	1011	1011	1011		1016
R-squared	0.13	0.12	0.41		0.060
Control mean	825.00	812	12.70		13.50
Baseline mean	997.00	926.00	12.20		0.77
Peru	-52.40	-60.10	11.70	45.1*	2.560
	(57.80)	(56.90)	(11.90)	(23.80)	(4.30)
Observations	2016	2016	2016	2017	2017
R-squared	0.07	0.07	0.03	0.053	0.064
Control mean	291	271.00	14.80	175.00	42.90
Baseline mean	141.00	129.00	11.10	44.10	13.90

Table S5d-2: Financial Inclusion by Country, Endline 2

Notes:

1. Results presented are intent-to-treat estimates, including controls for the household's value at baseline and controls for every variable used in block

stratification and in re-randomization procedures

2. All values are reported in 2014 USD, Purchasing Power Parity (PPP) terms.

3. Total amount borrowed includes formal borrowing, informal borrowing and borrowing where the source was not specified.

Table S5e-1: Use of Time by Country,	Endline 1				
	(1)	(2)	(3)	(4)	(5)
	Total minutes spent on productive activities in last day	Minutes spent on agriculture in last day	Minutes spent tending livestock in last day	Minutes spent on own business in last day	Minutes spent on paid labor in last day
Ethiopia	57	21 5**	33 6***	6 51*	-3 71
Emopia	(11.60)	(8.99)	(7.30)	(3.38)	(6.09)
Observations	897	897	897	897	897
P squared	0.11	0.12	0.07	0.03	0.03
Control mean	225.00	96.40	80.30	2.86	45.00
Basalina maan	118.00	18.40	39.70	2.65	43.00 57.00
Basenne mean	118.00	18.40	39.70	2.03	57.00
Ghana	5.28	0.82	1.99***	1.75	-0.24
	(11.20)	(9.40)	(0.63)	(8.00)	(1.89)
Observations	2377	2377	2377	2377	2376
R-squared	0.17	0.14	0.09	0.10	0.10
Control mean	147.00	102.00	0.36	38.50	6.69
Baseline mean	0.00	0.00	0.00	0.00	0.00
Honduras	9.42*	3.34	2.18**	-1.09	4.88
	(5.35)	(2.62)	(0.89)	(2.56)	(4.44)
Observations	4585	4404	4357	4563	4574
R-squared	0.14	0.11	0.05	0.10	0.12
Control mean	114.00	25.00	10.80	11.00	69.10
Baseline mean	165.00	76.70	3.08	11.20	79.60
India (Bandhan)	58.6***	1.32	64.7***	6.26	-13.70
	(10.30)	(1.62)	(4.95)	(6.99)	(8.84)
Observations	1505	1505	1505	1505	1505
R-squared	0.21	0.16	0.27	0.22	0.20
Control mean	216.00	4.31	32.40	61.20	118.00
Baseline mean	169.00	1.36	15.70	19.20	133.00
Pakistan	4.07	3.11	6.74*	-1.58	-6.21
	(9.19)	(4.58)	(3.54)	(2.86)	(7.86)
Observations	2672	2675	2674	2676	2675
R-squared	0.15	0.23	0.11	0.08	0.08
Control mean	172.00	44.00	36.50	11.20	80.10
Baseline mean	140.00	39.20	31.10	10.00	59.60
Dam	9.52	0.77	3 08	1 00	-1 48
1 01 14	(7.71)	(3.30)	(5.50)	(2.17)	-1.40
Observations	3201	3270	3780	(2.17)	3280
P squared	0.060	0.002	0.13	0.063	0.055
R-squattu	232.00	23 10	160.00	0.005	42 70
Control Incan	252.00	23.10	7 28	9.01 11.70	42.70
Daschlie liteall	25.50		1.20	11.70	10.10

Notes:

1. Results presented are intent-to-treat estimates, including controls for the household's value at baseline and controls for every variable used in block stratification and in re-randomization procedures

2. Dummy variables are included for whether the values include each wave of short survey data

3. Column (1) is the sum of columns (2) through (5).

4. In Ghana, the adult survey was asked almost exclusively to women. In other sites, adult survey was asked to both men and women.

Very few respondents in Ghana tended to livestock.

Table S5e-2: Use of Time by Country, Endline 2

	(1)	(2)	(3)	(4)	(5)
	Total minutes spent on productive activities in last day	Minutes spent on agriculture in last day	Minutes spent tending livestock in last day	Minutes spent on own business in last day	Minutes spent on paid labor in last day
Ethiopia	42.5***	20.8**	29.1***	3.96	-10.60
	(12.00)	(10.20)	(7.49)	(2.84)	(6.49)
Observations	891	891	891	891	891
R-squared	0.11	0.09	0.05	0.03	0.05
Control mean	245.00	125.00	75.70	3.59	40.40
Baseline mean	118.00	18.40	39.70	2.65	57.00
Ghana	10.00	10.90	0.97	2.65	-3.73
	-11.70	-10.80	-0.77	-6.18	-2.77
Observations	2279	2279	2279	2279	2279
R-Squared	0.188	0.195	0.061	0.082	0.054
Control mean	171.000	136.000	0.860	27.200	6.910
Baseline mean	0.000	0.000	0.000	0.000	0.000
Honduras	6.51	1.94	2.15*	-1.28	3.61
	(6.18)	(3.03)	(1.17)	(3.34)	(4.90)
Observations	4363	4262	4152	4322	4356
R-squared	0.11	0.08	0.02	0.06	0.13
Control mean	125.00	28.00	14.00	15.80	68.30
Baseline mean	165.00	76.70	3.08	11.20	79.60
India (Bandhan)	24.6***	-0.11	28.7***	2.81	-7.12
	(9.16)	(1.86)	(3.58)	(6.08)	(8.37)
Observations	1759	1759	1759	1759	1759
R-squared	0.16	0.10	0.24	0.21	0.18
Control mean	225.00	5.81	27.70	60.80	131.00
Baseline mean	169.00	1.36	15.70	19.20	133.00
Pakistan	9.77	5.72	3.86	-0.15	-1.37
	(8.91)	(4.52)	(3.97)	(3.65)	(7.12)
Observations	2309	2317	2316	2316	2314
R-squared	0.12	0.13	0.10	0.14	0.07
Control mean	168.00	35.90	41.10	20.80	71.20
Baseline mean	140.00	39.20	31.10	10.00	59.60
Peru	-6.32	0.82	-7.19	0.27	-3.82
	(9.93)	(4.19)	(7.49)	(2.46)	(5.53)
Observations	2,900	2,889	2,887	2,857	2,894
R-squared	0.07	0.07	0.10	0.06	0.09
Control mean	264.00	29.10	176.00	12.10	47.70
Baseline mean	25.30	0.00	7.28	11.70	10.10

Notes:

1. Results presented are intent-to-treat estimates, including controls for the household's value at baseline and controls for every variable used in block stratification and in re-randomization procedures

2. Column (1) is the sum of columns (2) through (5).

3. In Ghana, the adult survey was asked almost exclusively to women. In other sites, adult survey was asked to both men and women.

	(1)	(2)	(3)	(4)	(5)
	Household livestock revenue, month	Household agricultural income, month	Household Non-farm Micro- enterprise Income, month	Household Income from Paid Labor, month	Self-reported economic status (1/10)
Ethiopia	107***	4.20**	9.98**	-2.33	1.13***
	(7.24)	(1.91)	(4.07)	(2.45)	(0.15)
Observations	915	915	915	915	913
R-squared	0.26	0.08	0.02	0.03	0.09
Control mean	27.0	21.4	3.39	29	3.73
Baseline mean	7.55	14.8	0.00	8.3	3.74
Ghana	1.31	0.61	5.32***	0.84*	
	(1.23)	(0.62)	(1.82)	(0.48)	
Observations	2519	2531	2522	2525	
R-squared	0.13	0.38	0.06	0.03	
Control mean	9.2	6.5	6.90	1.88	
Baseline mean		31.8	9.73	3.12	
Honduras	11.7***	14.1**	-3.43	22.3**	0.42***
	(1.89)	(6.78)	(7.00)	(10.30)	(0.11)
Observations	2285	2258	2281	2277	2250
R-squared	0.07	0.11	0.05	0.29	0.11
Control mean	10.5	71.0	22.40	217	3.19
Baseline mean	3.25	-2.1	-0.45	84.8	2.45
India (Bandhan)	48.0***	-0.42	2.77	6.62	0.21***
	(7.98)	(0.43)	(3.44)	(5.46)	(0.07)
Observations	815	817	798	817	814
R-squared	0.27	0.25	0.27	0.20	0.25
Control mean	13.0	0.0	25.20	57	2.77
Baseline mean	0.00	0.2	-0.76	0.1	1.97
Pakistan	1.86	7.17	4.30		-0.16
	(4.49)	(4.79)	(10.60)		(0.14)
Observations	1074	1083	1068		1067
R-squared	0.15	0.12	0.05		0.09
Control mean	13.5	16.9	-14.70		5.57
Baseline mean	18.80	0.018			3.16
Peru	36.7**	12.9***	12.50	-9.70	0.16*
	(17.40)	(4.55)	(9.23)	(8.43)	(0.10)
Observations	2104	2061	2103	2103	2056
R-squared	0.19	0.12	0.04	0.11	0.10
Control mean	285.0	65.5	20.20	113	3.92
Baseline mean	33.90	37.8	13.20	45.9	

Notes:

1. Results presented are intent-to-treat estimates, including controls for the household's value at baseline and controls for every

variable used in block stratification and in re-randomization procedures 2. Dummy variables are included for whether the values include each wave of short survey data

3. Columns (1) to (4) are reported in 2014 USD, Purchasing Power Parity (PPP) terms.

4. See SOM Text 1 for the components included in each type of revenues and income

Table S5f-2: Incomes and	Revenues by	Country,	Endline 2
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	(1)	(2)	(3)	(4)	(5)
	Household livestock revenue, month	Household agricultural income, month	Household Non-farm Micro- enterprise Income, month	Household Income from Paid Labor, month	Self-reported economic status (1/10)
Ethiopia	26.6***	5.90***	-0.82	-2.20	0.90***
	(5.38)	(2.05)	(2.71)	(2.30)	(0.12)
Observations	908	908	908	908	907
R-squared	0.08	0.16	0.01	0.06	0.10
Control mean	25.4	29.8	14.20	26	4.33
Baseline mean	7.55	14.8	0.00	8.3	3.74
Ghana	13.6***		6.13***	0.24	
	(2.43)		(1.92)	(0.67)	
Observations	2436		2438	2438	
R-Squared	0.21		0.08	0.04	
Control mean	27.00		6.73	2.39	
Baseline mean			9.73	3.12	
Honduras	14.9***	11.5***	8.25	12.10	0.31***
	(4.15)	(4.07)	(9.12)	(7.97)	(0.11)
Observations	2229	2225	2225	2216	2221
R-squared	0.03	0.12	0.03	0.15	0.07
Control mean	27.7	51.6	22.40	159	3.27
Baseline mean	3.25	-2.1	-0.45	84.8	2.45
India (Bandhan)	61.7***	0.45	15.0***	3.96	0.28***
	(8.34)	(0.87)	(5.80)	(2.46)	(0.08)
Observations	879	879	877	879	877
R-squared	0.24	0.13	0.23	0.19	0.23
Control mean	16.6	0.4	37.70	4	3.37
Baseline mean	0.00	0.2	-0.76	0.1	1.97
Pakistan	27.1***	0.63	-7.29	10.40	-0.052
	(9.94)	(2.88)	(20.70)	(13.70)	(0.12)
Observations	1017	1009	1014	1015	1014
R-squared	0.29	0.18	0.04	0.08	0.08
Control mean	43.4	14.7	2.14	72	4.65
Baseline mean	18.80	0.02		155.0	3.16
Peru	43.3**	-3.31	11.0*	4.850	0.16*
	(20.70)	(4.83)	(6.48)	(8.75)	(0.09)
Observations	2025	2022	2019	2015	2016
R-squared	0.14	0.10	0.05	0.07	0.10
Control mean	264.0	53.70	12	97.90	3.56
Baseline mean	33.90	37.80	13.2	45.90	0.00

Notes:

1. Results presented are intent-to-treat estimates, including controls for the household's value at baseline and controls for every variable used in block stratification and in re-randomization procedures

2. Columns (1) to (4) are reported in 2014 USD, Purchasing Power Parity (PPP) terms.

3. See SOM Text 1 for the components included in each type of revenues and income

Table S5g-1: Physical and Mental Health by Country, Endline 1

Twole beg ivingstem and mentalities	in sjeconicij,	Physical Health	1	Mental Health				
	(1)	(2)	(3)	(4)	(5)	(6)		
	Member has not missed any days due to illness, last month	Activities of Daily Living Score	Self-perception of physical health (1-5)	Self-reported happiness (1- 10)	Stress Index	Member has not experienced a period of worry in last		
Ethiopia	-0.003	-0.014	-0.018	0.14**	-0.020	0.002		
	(0.011)	(0.015)	(0.062)	(0.067)	(0.055)	(0.019)		
Observations	1531	1518	1518	1537	1537	1537		
R-squared	0.004	0.079	0.069	0.058	0.016	0.012		
Control mean	0.95	0.86	3.62	3.52	0.00	0.86		
Baseline mean	0.91	0.87	3.94	3.52	0.00	0.85		
Ghana	0.011 (0.028)	0.041*** (0.015)		0.16*** (0.050)	0.12** (0.052)	0.032 (0.022)		
Observations	2277	2336		2373	2333	2332		
R-squared	0.085	0.20		0.144	0.104	0.091		
Control mean	0.63	0.85		2.83	0.00	0.21		
Baseline mean	0.71	0.88		2.61	0.00	0.00		
Honduras	0.012	0.020**	0.07	0.15***	0.12***			
	(0.015)	(0.010)	(0.051)	(0.055)	(0.041)			
Observations	4542	3999	3992	3994	3999			
R-squared	0.029	0.148	0.036	0.051	0.035			
Control mean	0.82	0.84	3.24	3.22	0.00			
Baseline mean	0.96	0.67		3.34	0.00			
India (Bandhan)	0.031** (0.013)	0.024* (0.014)	0.022 (0.034)	0.13*** (0.041)	0.11* (0.057)	-0.042*** (0.016)		
Observations	1505	1505	1504	1502	1502	1500		
R-squared	0.15	0.31	0.18	0.18	0.22	0.14		
Control mean	0.020	0.65	2.29	2.42	0.00	0.93		
Baseline mean	0.02	0.60	2.31	1.66	0.02	0.80		
Pakistan	-0.046**		-0.041					
	(0.018)		(0.042)					
Observations	2662		2,655					
R-squared	0.058		0.078					
Control mean	0.79		3.40					
Baseline mean	0.56		2.86					
Peru	0.006 (0.016)	0.02 (0.012)	0.11** (0.047)	0.14*** (0.049)	-0.062 (0.046)			
Observations	2987	3078	3078	3077	3078			
R-squared	0.038	0.11	0.106	0.094	0.054			
Control mean	0.84	0.82	2.70	2.83	0.00			
Baseline mean	0.94	0.67	2.61	2.60				

Notes:

1. Results presented are intent-to-treat estimates, including controls for the household's value at baseline and controls for every variable used in block stratification and in re-randomization procedures

2. See SOM Text 1 for the components included in the Activities of Daily Living Score and the absence of symptoms of mental distress index.

3. In Ghana, the adult survey was asked almost exclusively to women. In other sites, adult survey was asked to both men and women.

Table S5g-2: Physical and Mental Health by Country, Endline 2

	;	Physical Health	'n	Mental Health				
	(1)	(2)	(3)	(4)	(5)	(6)		
	Member has not missed any days due to illness, last month	Activities of Daily Living Score	Self-perception of physical health (1-5)	Self-reported happiness (1- 10)	Stress Index	Member has not experienced a period of worry in last		
Ethiopia	0.007	0.020	-0.038	0.079	-0.056	-0.023*		
2	(0.010)	(0.014)	(0.057)	(0.056)	(0.059)	(0.014)		
Observations	1469	1460	1460	1471	1471	1470		
R-squared	0.009	0.055	0.101	0.044	0.022	0.025		
Control mean	0.96	0.88	3.73	3.55	0.00	0.94		
Baseline mean	0.91	0.87	3.94	3.52	0.00	0.85		
Ghana	-0.011 (0.027)	0.005 (0.014)		-0.01 (0.047)	0.05 (0.055)	0.02 (0.024)		
Observations	2215	2291		2287	2292	2291		
R-Squared	0.071	0.204		0.087	0.110	0.130		
Control mean	0.68	0.88		3.06	0.00	0.29		
Baseline mean	0.71	0.88		2.61	0.00	0.00		
Honduras	0.002	0.000	0.067	0.051	0.13***			
	(0.016)	(0.008)	(0.051)	(0.054)	(0.042)			
Observations	4389	3867	3866	3864	3867			
R-squared	0.017	0.11	0.040	0.054	0.057			
Control mean	0.800	0.89	3.260	3.25	0.000			
Baseline mean	0.96	0.67		3.34	0.000			
India (Bandhan)	-0.037 (0.034)	0.013 (0.014)	0.033 (0.027)	0.049 (0.036)	-0.0026 (0.054)	0.01 (0.024)		
Observations	1611	1760	1759	1759	1760	1760		
R-squared	0.22	0.29	0.18	0.15	0.18	0.21		
Control mean	0.69	0.64	2.55	2.77	0.00	0.69		
Baseline mean	0.02	0.60	2.31	1.66	0.02	0.80		
Pakistan	0.004 (0.019)		-0.013 (0.048)	0.053 (0.043)				
Observations	2311		2305	2309				
R-squared	0.079		0.057	0.050				
Control mean	0.76		3.40	3.74				
Baseline mean	0.56		2.86					
Peru	0.023 (0.020)	0.012 (0.017)	0.11*** (0.044)	0.15*** (0.043)	0.12** (0.049)			
Observations	2,825	2,905	2,905	2,905	2,905			
R-squared	0.029	0.083	0.127	0.103	0.051			
Control mean	0.800	0.660	2.570	2.710	0.000			
Baseline mean	0.940	0.670	2.610	2.600	0.000			

Notes:

1. Results presented are intent-to-treat estimates, including controls for the household's value at baseline and controls for every variable used in block stratification and in re-randomization procedures

2. See SOM Table 1 for the components included in the Activities of Daily Living Score and the absence of symptoms of mental distress index.

3. In Ghana, the adult survey was asked exclusively to women. In other sites, adult survey was asked to both men and women.

Table S5h-1: Political Involvement and Women's Empowerment by Country, Endline 1

Sen 11 i onden mitorien		Political Involvement				Women's Empowerment				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
	Voted in last election	Member of political party	Attended village meeting in last year	Has spoken with village leaders about village concerns	Woman has major say on food decisions	Woman has major say on education decisions	Woman has major say on health decisions (personal and family)	Woman has major say on home improvement decisions	Woman has major say in how to manage household finances	
Ethiopia		0.044*	0.036	-0.0074	-0.026	-0.0086	-0.013	0.028	-0.011	
		(0.024)	(0.024)	(0.023)	(0.029)	(0.028)	(0.029)	(0.026)	(0.026)	
Observations		1,536	1,537	1,537	874	855	874	873	863	
R-squared		0.072	0.063	0.050	0.14	0.34	0.29	0.39	0.38	
Control mean		0.35	0.61	0.300	0.73	0.49	0.56	0.41	0.400	
Baseline mean		0.30	0.35	0.18	0.48	0.41	0.45	0.41	0.38	
Ghana			0.089*** (0.027)		0.007 (0.028)	0.039 (0.028)	0.006 (0.027)		0.04 (0.026)	
Observations			2335		2319	2266	2617		2264	
R-squared			0.13		0.09	0.09	0.07		0.17	
Control mean			0.57		0.51	0.37	0.58		0.410	
Baseline mean			0.55		0.45	0.33	0.50		0.36	
Honduras	-0.01 (0.018)	-0.011* (0.007)	0.0079		0.0290	0.0007	0.039* (0.024)		-0.014	
Observations	3720	2182	3998		2174	2169	2173		2170	
R-squared	0.053	0.028	0.034		0.07	0.08	0.08		0.12	
Control mean	0.28	0.02	0.49		0.67	0.67	0.68		0.41	
Baseline mean	0.20	0.10			0.190	0.17	0.190		0.12	
India (Bandhan)	-0.025 (0.018)			0.031 (0.024)	0.021 (0.018)	0.020 (0.015)	0.025 (0.017)	0.018 (0.015)	0.015 (0.014)	
Observations	1505			1505	1505	1505	1505	1505	1505	
R-squared	0.29			0.14	0.11	0.15	0.13	0.12	0.13	
Control mean Baseline mean	0.82			0.35	0.093	0.072	0.075	0.059	0.053	
Basenne mean	0.75			0.45	0.17	0.15	0.10	0.10	0.11	
Pakistan		0.13***	0.015	0.010	0.056***	0.059***	0.050***	0.049***		
		(0.021)	(0.014)	(0.012)	(0.018)	(0.017)	(0.016)	(0.016)		
Observations		2630	2664	2657	1429	1316	1421	1418		
R-squared		0.17	0.079	0.059	0.16	0.17	0.196	0.201		
Control mean		0.27	0.13	0.087	0.13	0.098	0.10	0.098		
Baseline mean		0.17	0.27	0.28	0.23	0.17	0.16	0.14		
Peru	0.0076 (0.012)	-0.0048 (0.0084)		0.017 -0.020	-0.0220 (0.018)	-0.007 (0.022)	-0.006 (0.021)		0.008 (0.024)	
Observations	3078	3078		3078	1725	1705	1726		1719	
R-squared	0.04	0.041		0.07	0.058	0.095	0.081		0.081	
Control mean	0.91	0.044		0.33	0.90	0.83	0.85		0.76	
Baseline mean		0.007							0.21	

Notes:
1. Results presented are intent-to-treat estimates, including controls for the household's value at baseline and controls for every variable used in block stratification and in re-randomization procedures

2. In Ghana, the adult survey was asked exclusively to women. In other sites, adult survey was asked to both men and women.

Table S5h-2: Political Involvement and Women's Empowerment by Country, Endline 2

Tuble 5511-2. I onteen involve	incht and Wonten 5 Em	Political h	nvolvement	R 2		Wo	men's Empowern	nent	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Voted in last election	Member of political party	Attended village meeting in last year	Has spoken with village leaders about village concerns	Woman has major say on food decisions	Woman has major say on education decisions	Woman has major say on health decisions (personal and family)	Woman has major say on home improvement decisions	Woman has major say in how to manage household finances
Ethiopia		0.054**	0.052**	0.0078	0.025	-0.011	-0.0087	-0.0076	-0.020
		(0.025)	(0.026)	(0.021)	(0.028)	(0.029)	(0.030)	(0.028)	(0.029)
Observations		1,471	1,468	1,471	819	823	835	832	758
R-squared		0.060	0.057	0.063	0.090	0.29	0.26	0.35	0.36
Control mean		0.33	0.52	0.22	0.78	0.49	0.56	0.45	0.39
Baseline mean		0.300	0.35	0.18	0.48	0.41	0.45	0.41	0.38
Ghana			0.049* (0.028)		-0.048* (0.026)	0.03 (0.024)	0.03 (0.026)		0.03 (0.028)
Observations			2294		2272	2220	2617		2195
R-Squared			0.12		0.14	0.11	0.10		0.08
Control mean			0.450		0.370	0.230	0.440		0.280
Baseline mean			0.55		0.45	0.33	0.50		0.36
Honduras	-0.032* (0.019)	0.0071 (0.015)	0.017 (0.020)		-0.0072 (0.021)	0.0170 (0.022)	0.001 (0.020)		-0.0059 (0.026)
Observations	3618	2141	3867		2136	2136	2136		2134
R-squared	0.058	0.040	0.043		0.06	0.06	0.06		0.07
Control mean	0.32	0.087	0.42		0.83	0.78	0.83		0.60
Baseline mean	0.20	0.095			0.19	0.17	0.19		0.12
India (Bandhan)	0.072*** (0.024)			0.048** (0.022)					
Observations	1760			1762					
R-squared	0.14			0.11					
Control mean	0.48			0.44					
Baseline mean	0.75			0.43					
Pakistan		0.065*** (0.019)	0.011 (0.017)	0.019 (0.013)	0.007 (0.023)	0.032 (0.021)	0.023 (0.019)	0.025 (0.019)	
Observations		2307	2312	2311	1272	1084	1269	1267	
R-squared		0.18	0.093	0.061	0.19	0.19	0.23	0.20	
Control mean		0.21	0.17	0.10	0.26	0.15	0.15	0.13	
Baseline mean		0.17	0.27	0.28	0.23	0.17	0.16	0.14	
Peru	-0.013 (0.01)	-0.0140 (0.02)		0.030 (0.02)	0.034* (0.02)	-0.021 (0.03)	0.020 (0.02)		0.0200 (0.03)
Observations	2906	2905		2906	1619	1610	1617		1614
R-squared	0.034	0.063		0.071	0.083	0.087	0.102		0.125
Control mean	0.910	0.190		0.260	0.890	0.820	0.850		0.760
Baseline mean	0.000	0.007							0.210

Notes:

1. Results presented are intent-to-treat estimates, including controls for the household's value at baseline and controls for every variable used in both block stratification and in re-randomization procedures 2. In Ghana, the adult survey was asked exclusively to women. In other sites, adult survey was asked to both men and women.

	Treatment households vs. all control households		Treatment households vs. households in control communities		Within village comparison: treatment households vs. control households within treatment villages		Spillovers: control households in treatment communities vs. control communities	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Standardized		Standardized		Standardized		Standardized	
	Mean	q-value for all	Mean	q-value for all	Mean	q-value for all	Mean	q-value for all
Indexed Outcomes	Treatment Effect	10 hypotheses	Treatment Effect	10 hypotheses	Treatment Effect	10 hypotheses	Treatment Effect	10 hypotheses
Total per capita consumption, standardized	0.050*	0.092	0.085**	0.045	0.050*	0.101	0.036	0.456
	(0.028)		(0.036)		(0.028)		(0.035)	
Food security index (5 components)	0.075***	0.013	0.017	0.856	0.072**	0.017	-0.059	0.456
	(0.028)		(0.042)		(0.028)		(0.043)	
Asset index	0.118***	0.001	0.111***	0.011	0.116***	0.001	-0.017	0.682
	(0.028)		(0.037)		(0.028)		(0.033)	
Financial inclusion index (4 components)	0.156***	0.001	0.175***	0.001	0.156***	0.001	0.024	0.603
	(0.031)		(0.036)		(0.032)		(0.034)	
Total time spent working, standardized	0.047**	0.062	0.006	0.873	0.048**	0.06	-0.035	0.456
	(0.023)		(0.037)		(0.023)		(0.035)	
Incomes and revenues index (5 components)	0.176***	0.001	0.072*	0.148	0.174***	0.001	-0.094**	0.176
	(0.028)		(0.040)		(0.029)		(0.039)	
Physical health index (3 components)	0.082***	0.003	0.019	0.731	0.084***	0.002	-0.062**	0.192
	(0.025)		(0.029)		(0.025)		(0.030)	
Mental health index (3 components)	0.118***	0.001	0.107***	0.004	0.115***	0.001	-0.005	0.868
	(0.027)		(0.032)		(0.027)		(0.031)	
Political Involvement index (4 components)	0.028	0.284	-0.009	0.863	0.029	0.266	-0.048	0.456
-	(0.025)		(0.032)		(0.025)		(0.037)	
Women's empowerment index (5 components)	0.018	0.559	0.064	0.192	0.018	0.568	0.045	0.456
	(0.031)		(0.041)		(0.031)		(0.040)	

Table S6a: Spillover Effects in Endline 1, Ghana, Honduras and Peru

Notes:

1. Results presented are mean standardized intent-to-treat estimates, including country dummies, controls for the household's value at baseline and controls for every variable used in both block stratification and in re-randomization procedures

2. Dummy variables are included for Endline 1 regressions of whether the data used includes each wave of short survey data

3. In Column 1, standard errors are clustered at the "randomization unit", ie at the household level for households in treatment villages, but at the village level for those in pure control villages. In Columns 3 and 7, standard errors are clustered at the village level. In column 5, standard errors are clustered at the household level.

4. See SOM Text 2 for the components of each index

	Treatment households vs. all control households		Treatment households vs. households in control communities		Within village comparison: treatment households vs. control households within treatment villages		Spillovers: control households in treatment communities vs. control communities	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Indexed Outcomes	Standardized Mean Treatment Effect	q-value for all 10 hypotheses	Standardized Mean Treatment Effect	q-value for all 10 hypotheses	Standardized Mean Treatment Effect	q-value for all 10 hypotheses	Standardized Mean Treatment Effect	q-value for all 10 hypotheses
Total per capita consumption, standardized	0.048	0.156	0.06	0.276	0.048	0.154	0.003	0.97
	(0.030)		(0.037)		(0.030)		(0.035)	
Food security index (5 components)	0.076***	0.012	0.054	0.493	0.074***	0.015	-0.026	0.877
	(0.027)		(0.051)		(0.027)		(0.052)	
Asset index	0.093***	0.003	0.074**	0.147	0.092***	0.004	-0.035	0.776
	(0.028)		(0.037)		(0.028)		(0.035)	
Financial inclusion index (4 components)	0.143***	0.001	0.190***	0.001	0.142***	0.001	0.028	0.858
	(0.038)		(0.043)		(0.039)		(0.036)	
Total time spent working, standardized	0.015	0.599	0.023	0.721	0.013	0.662	0.001	0.97
	(0.025)		(0.038)		(0.025)		(0.038)	
Incomes and revenues index (5 components)	0.224***	0.001	0.210***	0.001	0.222***	0.001	-0.018	0.877
	(0.036)		(0.044)		(0.036)		(0.032)	
Physical health index (3 components)	0.047*	0.134	-0.016	0.721	0.046*	0.142	-0.057*	0.229
	(0.027)		(0.029)		(0.027)		(0.030)	
Mental health index (3 components)	0.109***	0.001	-0.004	0.997	0.109***	0.001	-0.108***	0.062
	(0.028)		(0.038)		(0.028)		(0.039)	
Political Involvement index (4 components)	0.007	0.787	0.000	0.997	0.006	0.819	-0.012	0.963
	(0.026)		(0.041)		(0.027)		(0.041)	
Women's empowerment index (5 components)	0.028	0.491	-0.046	0.493	0.025	0.561	-0.076*	0.229
	(0.032)		(0.041)		(0.033)		(0.042)	

Notes:

1. Results presented are mean standardized intent-to-treat estimates, including country dummies, controls for the household's value at baseline and controls for every variable used in both block stratification and in re-randomization procedures

2. In Column 1, standard errors are clustered at the "randomization unit", ie at the household level for households in treatment villages, but at the village level for those in pure control villages. In Columns 3 and 7, standard errors are clustered at the village level. In column 5, standard errors are clustered at the household level.

3. See SOM Text 2 for the components of each index

Table S7: Program Costs per Participant, USD Exchange Rates 2014

	Ethiopia	Ghana	Honduras	India	Pakistan	Peru
Direct Transfer Costs	360	311	381	199	461	596
Asset Cost	360	206	283	124	235	464
Food stipend	0	105	98	75	205	131
Total supervision costs	557	1294	860	116	-	1826
Salaries of Implementing Organization Staff	102	911	422	84	-	1347
Materials	10	55	59	0	-	30
Training	249	20	64	5	-	60
Travel Costs	51	134	111	5	-	30
Other Supervision Expenses	145	175	204	21	-	359
Total Direct Costs	918	1605	1241	315	1054	2421
Start-up expenses	13	61	55	11	-	25
Indirect Costs	123	469	110	32	106	251
Total Costs, calculated as if all incurred immediately at beginning of Year 0	1054	2135	1406	358	1160	2697
Total Costs, Inflated to Year 3 at 5% annual discount rate	1220	2472	1627	414	1343	3122

Notes:

This tables presents the same information as Panel A of Table 4 in the main tables. It instead presents the information in exchange rate terms, to provide a better sense to potential implementing agencies of the costs associated with this program.

The implementing partner in Honduras initially allocated all start-up costs and indirect costs into their direct supervision line items. We assume 5% of costs were committed to start-up, and 10% to indirect costs, while preserving the total costs equal to the organization's full budget for the project. In Pakistan, there were five implementing partners, each with different allocations of the non-direct costs. The total represents the average across these organizations. In India, note that the compliance rate was 51.5%; the costs above are total program costs divided by number of participants that received treatment, not number of participants that were offered treatment, thus providing a conservative estimate for the benefit-cost ratio.

Table S8: Asset Robustness Check

		Endline 1		Endline 2				
	(1)	(2)	(3)	(4)	(5)	(6)		
	Correlation: Reported Asset Value and Asset Index	Correlation: Asset Value and Asset Index, using values only from other sites	Correlation: Actual value and asset indices of indices held in multiple sites, using only asset values from other sites	Correlation: Reported Asset Value and Asset Index	Correlation: Asset Value and Asset Index, using values only from other sites	Correlation: Actual value and asset indices of indices held in multiple sites, using only asset values from other sites		
Ethiopia	0.833	0.810	0.851	0.875	0.847	0.873		
Honduras	0.872	0.712	0.759	0.865	0.682	0.789		
Pakistan	N/A	N/A	N/A	0.958	0.774	0.772		
Peru	0.988	0.890	0.908	0.935	0.805	0.869		

Notes:

(1) See SOM Text 1 Assets section for an explanation of how the asset index is constructed.

(2) Columns 1 and 4 show the correlation between asset value and asset index for the four countries where we have asset value information.

(3) Columns 2 and 5 show the correlation between asset value and asset index, if we were to only use price information from the other countries when constructing this index. It provides an estimate of how accurate each country's asset index would be at predicting the country's true asset value if price information for that country were not available.

(4) Columns 3 and 6 provide a second test of the information provided in columns 2 and 5. It again shows how closely the true asset value is correlated with asset indices constructed without price information from that country's site. In this case, asset value is calculated using only assets held in multiple countries. It therefore shows accurate the other countries' relative asset values are at predicting the same sorts of assets for the country in question.

Figures S1: Country Timelines





Figure S1b



Figure S1c



Figure S1d



Figure S1e



Figure S1f





Figure S2: Pooled Average Intent-to-Treat Effects, Endline 1 at a Glance

This figure summarizes the treatment effects presented in Tables S2a- S2h. Here, treatment effects on continuous variables are presented in standard deviation units. Each line shows the OLS point estimate and 95% confidence interval for that outcome. Figure S3: Average Intent-to-Treat Effects by Country, Endline 1 at a Glance



This figure summarizes the treatment effects presented in Appendix Tables S3a-S3f. Here, all treatment effects are presented as standardized z-score indices. Each line shows the standardized index outcome and its 95% confidence interval.