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## Working Paper

# On her own account: How strengthening women's financial control impacts labor supply and gender norms

Economic Growth Center Discussion Paper, No. 1068

### Provided in Cooperation with:

Yale University, Economic Growth Center (EGC)

*Suggested Citation:* Field, Erica Marie; Pande, Rohini; Rigol, Natalia; Schaner, Simone; Moore, Charity Troyer (2019) : On her own account: How strengthening women's financial control impacts labor supply and gender norms, Economic Growth Center Discussion Paper, No. 1068, Yale University, Economic Growth Center, New Haven, CT

This Version is available at:

<https://hdl.handle.net/10419/227650>

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# On Her Own Account: How Strengthening Women's Financial Control Impacts Labor Supply and Gender Norms.\*

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September 10, 2019

## Abstract

Can greater control over earned income incentivize women to work and influence gender norms? In collaboration with Indian government partners, we provided rural women with individual bank accounts and randomly varied whether their wages from a public workfare program were directly deposited into these accounts or into the male household head's account (the status quo). Women in a random subset of villages were also trained on account use. In the short run, relative to women just offered bank accounts, those who also received direct deposit and training increased their labor supply in the public *and* private sectors. In the long run, gender norms liberalized: women who received direct deposit and training became more accepting of female work, and their husbands perceived fewer social costs to having a wife who works. These effects were concentrated in households with otherwise lower levels of, and stronger norms against, female work. Women in these households also worked more in the long run and became more empowered. These patterns are consistent with models of household decision-making in which increases in bargaining power from greater control over income interact with, and influence, gender norms.

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\*We thank Patrick Agte, Pooja Balasubramanian, Arielle Bernhardt, Vidushi Dhawan, Arti Dhar, Thomas Dreesen, Nikita Kohli, Savannah Noray, Sreelakshmi Papineni, KC Sampada, Elena Stacy, Natalie Theys, and Namita Tiwari for research assistance, Sitaram Mukherjee and Maithili Ramachandran for field management, and Eric Dodge and Akshat Goel for help with the MGNREGS MIS data. We are grateful to Esther Duflo, Pascaline Dupas, Helena Roy and numerous seminar participants for helpful comments. We thank IZA's Growth and Labour Markets in Low Income Countries Programme, the Bill and Melinda Gates Foundation, DFID, Harvard's Center for Population and Development Studies, the JPAL Governance Initiative, and Innovations for Poverty Action's Financial Services for the Poor Initiative for funding. This project is registered in the AEA RCT Registry (AEARCTR-0000115) and was approved by IRBs at Harvard University and IFMR India.

# 1 Introduction

Female labor force participation remains low and stagnant in many emerging economies, with India a particularly stark example. Despite robust economic growth, the female labor force participation (FLFP) rate has declined from 37 percent in 1990 to 28 percent in 2015, making Indian women some of the least employed in the world (ILO, 2015). Yet, nearly one third of Indian housewives express an interest in working (Fletcher et al., 2017). Simply bringing these women into the labor force would increase Indian FLFP by nearly 80 percent.<sup>1</sup> What stops so many women who want to work from joining the labor force?

One possibility is gender norms around work roles – in particular, the idea that a wife who works outside the home is a source of social stigma or shame for her husband, who is expected to earn enough to support his family (Boudet et al., 2012; Bernhardt et al., 2018). When internalized by women, such norms can directly lower their utility of working (see e.g. Akerlof and Kranton (2000)). And, when internalized by men, norms may reduce women’s work through intra-household channels (Bertrand et al., 2015). In this paper we ask whether policies that strengthen women’s control over their earnings increase their ability to overcome these norms and work outside the home, and, in turn, shift norms around women’s work.

To this end, we leverage a large-scale randomized controlled trial in 197 village clusters, known as gram panchayats (GPs), in the Northern part of Madhya Pradesh (MP)—an area with restrictive gender norms.<sup>2</sup> Our study was conducted in partnership with state and bank authorities and focused on India’s federal workfare program, the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), which provided rural households with a given amount of work per annum at a fixed wage.

The program status quo was for workers’ wages to be deposited into a bank account owned by the male household head. In a random subset of GPs in our study area, banks made a push to open individual accounts for women. In half of these GPs, we enabled direct deposit of MGNREGS wages in these accounts. Finally, we cross-randomized a short training program that gave women basic instructions for using last-mile banking providers.<sup>3</sup> Overall, our interventions disrupted the status quo by randomly varying whether women’s

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<sup>1</sup>Drawing women into the labor force may address other gender inequities. Female employment has been shown to delay marriage, increase female work aspirations, improve child health, and reduce the male:female sex ratio (Qian, 2008; Atkin, 2009; Jensen, 2012; Heath and Mobarak, 2015). In the United States, rapid growth in female labor force participation preceded important changes in norms regarding gender roles in both the economy and the household (Goldin, 2006).

<sup>2</sup>MP is the sixth largest and eighth poorest of India’s 29 states, with adult male and female rural labor force participation rates of 84 percent and 29 percent (close to the national averages) (RBI, 2016). GPs are the lowest level of government in India, and typically comprise of 2-5 villages in MP.

<sup>3</sup>“Last-mile” banking is defined as access to a bank kiosk (termed customer service point, or CSP) within 5 kilometers of home.

wages were directly deposited into their own bank accounts, giving them greater control over earnings, or deposited in their husbands' accounts as usual.

To isolate the effect of increasing women's control of own income while holding financial inclusion constant, we compare outcomes for women who only received bank accounts ("accounts only") to those who additionally received direct deposit of MGNREGS wages and bank account training ("direct deposit and training").<sup>4</sup> Using a combination of administrative data and household surveys, we obtain three sets of results.

First, adding direct deposit and training to bank account provision led to sizeable short- and long-run gains in female financial inclusion. Three years after the intervention we observe 0.13 and 0.19 standard deviation unit increases in an index of account use and an index of banking autonomy, respectively. The former focuses on a woman's account activity while the latter captures whether a woman goes to the bank on her own and is comfortable transacting independently. The gains in autonomy are particularly notable, given the limits on women's mobility and agency in our setting.

Second, direct deposit and training increased women's labor supply and led to associated empowerment gains among a subset of women. One year after implementing the interventions, treated women scored 0.16 standard deviation units higher on an index of labor market engagement. This reflects higher rates of MGNREGS and private sector work. Treatment effects are larger (at 0.21 standard deviation units) among women who were least attached to the labor market, proxied by never having worked for MGNREGS, at baseline. We refer to these women as "socially constrained" to reflect that they are less likely to work, less empowered, and their husbands are more likely to subscribe to norms against female work. Three years later, socially constrained women continued to show a 0.19 standard deviation units increase in the labor supply index. Alongside, they reported short- and long-run gains in socioeconomic empowerment, which included increased economic agency over purchases and, in the long run, greater mobility. After three years, their empowerment score was increased by 0.14 standard deviation units, effectively closing the empowerment gap between constrained and unconstrained women.

Finally, gender norms became more progressive in the longer run, though with differences across genders in terms of which norms liberalize. Using a series of attitudinal and vignette-based measures, we separately measured actual and perceived norms. Actual gender norms capture average personal beliefs about women and work. Perceived norms reflect individual perceptions of community members' beliefs about women and work. Three years after the intervention, the stated beliefs (actual norms) of direct deposit and training women were more

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<sup>4</sup>Supplementary analysis suggests that both treatment components—training and direct deposit facilities—mattered, but we are underpowered to separately identify contributions of the two components.

progressive than women in accounts-only areas, with an actual norms index 0.11 standard deviation units higher than other women. Women’s perceived norms showed some positive change: on average, they reported that the community is more accepting of working women. In contrast, while their husbands’ actual norms remained unchanged, men’s perceived norms significantly liberalized, with greater perceived acceptance of working women’s husbands, suggesting that women may in part be held back from working by men’s misperceptions of the stigma they would suffer. Consistent with our other results, norms shifts are concentrated among socially constrained women.

The labor impacts of our intervention are inconsistent with the predictions of a neoclassical model of labor supply with unitary decision making. Since direct deposit and training had no impact on market wages or account ownership, this model predicts that household labor supply should have been unaffected.<sup>5</sup> If we instead consider the framework of collective household bargaining, our intervention can be described as increasing a woman’s bargaining power within the household. Greater bargaining power should, however, lower rather than raise a woman’s labor supply via the associated income effect. The income effect associated with greater bargaining power for women is, for instance, cited as an explanation for the reduction in women’s work associated with sex ratio changes (Angrist, 2002), improved alimony rights (Rangel, 2006) and divorce laws friendlier to women (Chiappori et al., 2002; Stevenson, 2008).

Instead, our findings are consistent with collective models in which bargaining power gains from improving a woman’s ability to control her labor income interact with, and influence, gender norms within the household. We build on Akerlof and Kranton (2000), who propose a model in which individuals’ sense of “identity” dictates utility changes based on whether actions align or clash with identity norms. In our context, female work may violate identity norms of both women, who are expected to be housewives, and men, who are expected to be breadwinners (Bertrand et al., 2015). Increasing the bargaining power of a woman who does not desire work because it violates her own identity norms will not encourage her to enter the labor market. However, if normative costs internalized by men are binding, increasing female bargaining power may draw some women into the labor market who previously stayed at home to respect their husbands’ wishes. Direct deposit and training may have also increased women’s utility from work, either by improving their ability to control their own income (see, e.g., the non-cooperative model in Heath and Tan (2015)). Importantly, our framework predicts that if normative barriers are binding, labor supply impacts should be largest on the extensive margin – that is, among women least attached to the labor market at baseline – , which is what we find in practice.

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<sup>5</sup>We find no evidence that the direct deposit and training treatment eased savings constraints.

Our study sheds light on the link between economic policy, female labor force participation, and norms. To date, much of the work on FLFP norms in economics has focused on describing norms, their transmission, and their consequences.<sup>6</sup> A smaller literature studies the impact of interventions that explicitly attempt to change actual or perceived norms.<sup>7</sup> Here, perceived norms are typically thought to be easier to change than actual norms, which are often tied to deep-seated cultural beliefs (Tankard and Paluck, 2016). We demonstrate that large-scale policies that alter behavioral incentives, but do not explicitly target norms, can precipitate normative shifts over a relatively short time horizon.

Our study also speaks to a body of work that evaluates design modifications for social protection programs. Existing research largely focuses on the efficiency of program delivery (e.g. Muralidharan et al. (2016); Aker et al. (2016); Banerjee et al. (2016); Bachas et al. (2016) examines impacts on financial inclusion). Our contribution is to demonstrate how gender targeting can impact both program outcomes (e.g. work days provided through MGNREGS) and also have indirect effects on broader economic outcomes that have the potential to outlive the program (e.g. private-sector work, empowerment, and gender norms).

A final link is to a body of literature showing how conditional cash transfer programs that target women can increase female bargaining power (Almås et al., 2018; Bobonis, 2009, 2011; Attanasio and Lechene, 2014). To the best of our knowledge, none find increases in female labor force participation, possibly because the income transfers are sizable enough to reduce labor supply (Skoufias et al., 2013; Hasan, 2010). In contrast, other work finds that productive asset transfers (coupled with additional support) can increase the labor supply of women in very poor households across a range of country contexts (Bandiera et al., 2017; Banerjee et al., 2015; Bedoya et al., 2019). None of these studies ask whether the programs alter norms limiting women’s work, however.

The rest of the paper proceeds as follows: Section 2 describes gender norms, work opportunities, and MGNREGS in our study context, followed by a description of our experimental design. Section 3 lays out a conceptual framework for evaluating treatment effects and our empirical strategy. In Section 4 we discuss treatment impacts on financial agency, women’s work and empowerment. In Section 5 we evaluate the longer-run impacts on gender norms and Section 6 concludes.

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<sup>6</sup>See, e.g. Fernandez et al. 2004; Fernandez and Fogli 2009; Alesina et al. 2013; Bertrand et al. 2015.

<sup>7</sup>See Bursztyn et al. (2018) on FLFP norms, Dhar et al. (2018) on gender norms, and Green et al. (2019) on norms related to gender-based violence.

## 2 Experimental Context and Design

### 2.1 Rural Work Opportunities in India

Broadly, rural less-educated Indians have two work options: private-sector work (both self-employment and wage labor) and MGNREGS work. In our setting, self-employment consists of individuals working on their land or engaging in animal husbandry.<sup>8</sup> The most common off-farm private-sector employment for both genders is seasonal casual wage labor for a fixed daily or weekly wage, paid in cash. This work typically occurs on others' land or construction sites and almost always pays more per day than MGNREGS work.

The public workfare program, MGNREGS, entitles rural households to up to 100 days of work per year. On paper, the program is “demand-based”, in that individuals are supposed to place work requests with their local leader, who is obligated to arrange work opportunities. On the ground, the system is typically supply-driven: local leaders schedule work projects with some notion of worker demand (e.g. more projects occur in lean seasons), but not all households receive the opportunity to work (Dutta et al., 2012), and the 100 day cap is rarely binding.<sup>9</sup> Nevertheless, MGNREGS is one of the largest household-level redistribution programs in India and, indeed, the world (Subbarao et al., 2012).

MGNREGS mandates gender wage parity and provides work inside rural communities, an attractive proposition for mobility-constrained women. Despite this, its payment architecture runs the risk of discouraging female workers. In 2008, the Government of India directed states to transition from cash to electronic payment of MGNREGS wages into beneficiary-owned bank accounts. The initial status quo was to deposit wages for all working members of a household into a single account, almost always owned by the male head of household.

In late 2012, the Minister of Rural Development announced that a woman's MGNREGS wages should be deposited into her individual bank account (Chatterji, 2016; UNWOMEN, 2012). Appendix Figure B3 graphs the annual share of female MGNREGS workers whose wages are directly deposited into their individual account. For reference, we graph the national average, MP as a whole, and our study districts. It is clear that MP, and our study areas in particular, have been slow adopters of the policy, though the rate of individual payment has picked up since FY 2015-16.

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<sup>8</sup>Small businesses are rare: just four percent of women and seven percent of men reported any business activity in the year before our long-run survey.

<sup>9</sup>The fraction of households working less than 100 days in MGNREGS administrative data (conditional on working at all) in our study area ranges from 80 percent to 96 percent between 2013 and 2017. We also observe households working more than 100 days, with limited bunching at 100 days.



## 2.2 Gender Norms Regarding Work and Mobility

Aside from payment architecture, a key constraint on Indian women’s agency remains gender norms, especially when it comes to engaging with actors external to the household. The nationally representative 2011-2012 India Human Development Survey (IHDS) found that 52 percent of adult women stated that their husband has the most say as to whether the woman works. During our study we tracked women in a randomly selected set of villages where we undertook no interventions (henceforth the control group). Data from our long-run survey suggests that our study sample is even more conservative: 70 percent of control group women stated their husband was the primary decision-maker in their work, and just half of women had gone to the local market alone in the past year.

That said, there is substantial heterogeneity in actual and perceived gender norms. Figure 1, which graphs the distribution of actual and perceived gender norms across communities (e.g. GPs) for the control group, demonstrates this. Panel A plots actual norms, specifically the GP-wise distribution of the share of men (gray bars) and women (white bars) who agree with the statement “women cannot go out to work”. In the average GP, 23 percent of women and 34 percent of men agree with this statement, though there is substantial variation in average responses across communities. As norms are often maintained within caste and subcaste groups (Srinivas, 1995; Eswaran et al., 2013), this variation likely reflects—at least in part—variation in the caste mix across GPs.

Panel B plots perceived norms. We asked women what fraction of people in their community would speak badly about a woman who works; we asked men what fraction of people would think a husband is a bad provider if his wife worked.<sup>10</sup> Average perceived costs are non-trivial and higher for men: while women anticipated social sanctions from 39 percent of their neighbors, men anticipated social sanctions from 56 percent of their neighbors. Given the substantial role that men play in deciding whether their wives work, perceived norms among men are likely to be important in this setting.

## 2.3 Experimental Design

At the outset of our study, MP was in the midst of a state-wide push to ensure that all citizens had access to a “last-mile” bank customer service point (CSP). In our study areas, bank accounts could only be accessed at a CSP with an authenticated fingerprint.

While the banking drive coupled with the national directive to transition MGNREGS to

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<sup>10</sup>To simplify the question for respondents, the survey asked them to report a number out of 10. We then convert this number to a fraction. Throughout, we limit attention to control group communities with at least 20 male and female surveys.

individual direct deposits *theoretically* enabled women to have MGNREGS wages directly deposited into private, easy-to-access, secure accounts, officials were slow to target women. Thus, when we started the study in November 2013, we had wide scope to experimentally vary women’s access to individual bank accounts and whether those accounts were set up to receive direct deposits of MGNREGS wages. In our setting, enabling direct deposit facilities meant replacing the previous account number attached to a worker’s name in the MGNREGS system with a new account number.

## A. Sample

We purposely chose a cluster of four northern MP districts marked by severe gender inequities: sex ratios in these districts range from 0.84 to 0.90 females to every male (India Census, 2011) and, according to the 2015-2016 Indian DHS survey, just 36 percent of women report being able to travel outside the village alone (compared to a national average of 48 percent).<sup>11</sup> Appendix Figure B1 provides a timeline of experimental activities. First, we identified all GPs with functional CSPs in the study districts. We randomly assigned these 199 GPs to one of three groups: 66 GPs formed the control group, 68 GPs were to receive bank accounts for eligible women, and 65 GPs were to receive bank accounts and direct deposit of MGNREGS wage into their new accounts.<sup>12</sup>

Between November 2013 and January 2014, we conducted a baseline census of 14,088 households listed as having worked for MGNREGS in the past year. A married couple was eligible if at least one household member reported having ever worked for MGNREGS and the wife did not have an individual bank account.<sup>13</sup> We identified 5,851 eligible couples and two GPs without any eligible couples. These two GPs (both assigned to the control group) were dropped from our sample, leaving us with 197 GPs.

## B. Treatments

**Bank Accounts.** We individually informed eligible women in treatment GPs that they could open a bank account at their local CSP, free of charge, during an upcoming account opening drive. On the day of the drive, our team returned to the household to inform the

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<sup>11</sup>In drawing the sample frame, we first ranked districts by their sex ratio and literacy gender gap, and then chose the poorly performing districts of Gwalior, Morena, Sheopur, and Shivpuri.

<sup>12</sup>GP randomization was stratified by whether, at baseline, the GP had: below/above median number of households with joint bank accounts linked to MGNREGS direct deposit, below/above median percentage of individual MGNREGS accounts, and whether the GP was located in Sheopur district. All randomization was done by computer, in Stata.

<sup>13</sup>More specifically, since our baseline census sample was drawn from MGNREGS administrative records, eligibility required positive MGNREGS work history both according to programmatic administrative data and the household’s census report.

woman that she could visit the CSP with her documents (proof of address and a passport-sized photo) to open an account. The study team subsequently facilitated the account opening process at the CSP.

**Direct Deposit.** In the 65 GPs selected to receive the direct deposit treatment, our team submitted a request to enter each woman’s newly-opened individual bank account into the MGNREGS administrative system—meaning her wages would be directed into her new account rather than a household account. Women provided consent to initiate this process and were informed of its implications.<sup>14</sup>

**Accounts Training.** Reserve Bank of India regulatory guidelines required banks to conduct new customer information sessions designed to build trust in formal banking services and explain how to utilize CSP services, including depositing and withdrawing money and receiving government benefits (RBI, 2016). However, these sessions were rarely conducted, and our early qualitative work found that many women had a poor understanding of how to use their new accounts. We therefore supplemented our design with a customer training session inspired by the Reserve Bank of India curriculum.

In GPs selected for training, following the bank account opening camps, eligible women were invited to participate in a group-based information session about the local CSP and their bank account. The meetings typically lasted two hours. During the sessions, a facilitator used colored flashcards to tell the story of a fictional woman and her family and how she came to use a CSP account. The aim was to orient women to their local kiosk and provide basic information such as what an account could be used for (including saving and receiving benefit transfers) and why money was safe when kept at the CSP. The sessions also emphasized the time and cost savings of transacting at the CSP.

The training was randomized as a third, cross-cutting treatment in half the GPs selected for bank accounts or bank accounts and direct deposit. This created four treatment arms: accounts only, accounts and direct deposit, accounts and training, and accounts, direct deposit, and training.

By the end of 2014, all account openings and training sessions had been completed, but most women had not received account numbers and banking cards, and a number of accounts were awaiting direct deposit authorization.<sup>15</sup> We therefore conducted a second

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<sup>14</sup>Although women could, in theory, sign up for direct deposit on their own, in practice this was difficult because it required a trip to the block office (the administrative unit below the district) and filing a formal request. GP-level government officials also had the power to connect accounts to direct deposit on villagers’ behalf, but limited incentives to do so.

<sup>15</sup>These issues reflected multiple factors, including overloaded and slow bank servers, poor connectivity in study areas that delayed uploading of applicant details to bank servers, and the complexity of the setup

round of account opening and direct deposit drives between November 2014 and April 2015. During these drives we brought eligible women to the CSP kiosk, gave them their account numbers and bank cards, and conducted a practical demonstration of how to deposit and withdraw money from their account.<sup>16</sup> Women with direct deposit were again informed that any future MGNREGS wages would be paid into their CSP account.

### C. Intervention Catch-Up

Our study period overlapped with national changes to financial inclusion policies. First, in August 2014, after our treatments had been implemented, the federal government announced a financial inclusion campaign, known as Pradhan Mantri Jan Dhan Yojana (PMJDY). By December 2017 over 300 million bank accounts (27 million in Madhya Pradesh) had been opened.<sup>17</sup> By the time of our 2017 follow-up survey, 63 percent of women in the control group – all of whom were unbanked in 2013 – had a bank account. Since PMJDY targeted the unbanked, this complicates any comparison across control and treatment groups: treatment women were more likely to have an account, but were less likely to have PMJDY accounts. Hence, we drop the control group from our main analysis, and focus on the effects of direct deposit and training relative to accounts only. That is, we estimate the effect of increasing women’s financial control while holding (initial) ownership of financial instruments constant.

Second, while the levels remain low, the share of women with an individual account and direct deposit facilities increased steadily over our study period (recall Appendix Figure B3). Thus, there is a risk that direct deposit treatment effects are attenuated over time due to changes in the first stage.

### D. Data and Randomization Balance Check

We use five data sources to evaluate the impact of our interventions on women’s economic activity. The first is our baseline census, which collected information on bank account ownership and MGNREGS participation. The need to rapidly screen a large number of households meant that the census did not collect detailed demographic or labor force data.

The next two sources of data are the short-run and long-run follow-up surveys. The short-run survey was conducted between August and December 2015—roughly one year after the

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process, which required coordination by actors at multiple administrative layers.

<sup>16</sup>Each woman was given INR 50 to attend the camp. She was given the opportunity to deposit and withdraw some amount of this money to gain hands-on experience with banking at the CSP kiosk.

<sup>17</sup><https://data.gov.in/resources/stateut-wise-number-pmjdy-accounts-20122017-ministry-finance>. Accessed May 28, 2019. Under PMJDY, banks were required to offer low-cost accounts with standardized benefits, including access to a debit card, accident and life insurance, and an overdraft facility. Overall, these PMJDY accounts featured more benefits than the no-frills accounts opened in our intervention.

first wave of account openings was completed. We randomly selected 4,500 eligible women and their husbands who could still be matched to the MGNREGS system to be surveyed, stratifying by GP. The surveys included modules on bank account ownership and banking activities, participation in MGNREGS, and private-sector labor force participation. The female survey collected additional data on proxies of female empowerment such as decision-making and mobility, and data on mental health and violence against women.

We conducted a long-run survey between April and October 2017, three years after the first wave of account opening. The short- and long-run surveys covered similar topics, though we shortened the banking modules in the latter to undertake new data collection on norms governing female work. Attrition for both survey waves was low: we interviewed 93 percent of sampled women during the first follow-up and 92 percent of sampled women during the second follow-up. There is no differential attrition by treatment arm (Appendix Table B1).

Our final two sources of data are administrative. Banking data for accounts opened under the auspices of the experiment are only available from one of our two banking partners, but this banking partner serves 81 percent of our sample.<sup>18</sup> The data run from the date of account opening up until April 30, 2018 and include a record of every transaction posted to 1,603 female-owned accounts. Administrative data on MGNREGS work activities from the program management information system (MIS) are available through November 17, 2017. These data include information on when an individual worked, how much s/he was paid, and what account the wages were deposited into. We assume a woman was paid into an individually-owned account if no one else in the household shares that account number.<sup>19</sup>

Appendix Table B2 presents averages of predetermined individual, household, and GP-level characteristics and tests whether averages vary by treatment status. The “accounts only” group is the primary reference group in column 1. On average, eligible women (Panel A) were 40 years old at the first follow up and just 11 percent report that they can read and write. Fifty-six percent of the husbands of eligible women (Panel B) reported that they can read and write.<sup>20</sup>

During the census 64 percent of women reported that they had worked for MGNREGS at least once before, with 16 percent of women reporting that they worked for the program in the past year. The administrative data suggest higher participation rates (for instance, 52 percent of women were listed as having worked in MGNREGS administrative data in the

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<sup>18</sup>Ninety-nine percent of women interviewed consented to our use of their administrative data.

<sup>19</sup>These data were scraped in 2016 and 2017 from the public MGNREGS website. The data structure capturing account numbers changed between the 2016 and 2017 scrapes. The Online Appendix – available [here](#) – provides additional detail on how we infer individual account ownership from available account number data in the two scrapes.

<sup>20</sup>Literacy rates in our sample are lower than GP-wide averages recorded in the 2011 Indian Census (Panel D); this gap is especially striking for women.

year before the census). This difference likely reflects, in part, over-reporting of work on the part of local leaders, an important form of program leakage (Niehaus and Sukhtankar, 2013).

As a balance check, columns (2)-(4) report coefficients on dummy variables for each treatment package laid on top of bank accounts: “direct deposit”, “training” and “direct deposit and training”. Predetermined characteristics serve as outcome variables and all regressions control for strata and district fixed effects. Column (5) presents the p-value from an F-test of whether the treatment group coefficients are jointly equal to zero. Overall, the randomization is well-balanced, with just two out of 28 p-values from the joint test significant at the 10 percent level or less. Balance is also good for the direct deposit and training versus accounts only comparison we focus on; here just one comparison is significant at the 10 percent level or less.

### 3 Framework

Direct deposit and training worked to increase a woman’s control over her earned income: direct deposit ensured MGNREGS wages were sent to her own account instead of her husband’s, while training gave her the skills needed to operate that account. From an intra-household perspective, this would boost female decision making power. Specifically, both direct deposit and training could increase a woman’s outside option by making her more financially self-sufficient: given the rarity of divorce in our context, the relevant outside option would be resorting to a non-cooperative equilibrium where spouses maintain “separate spheres” and do not share resources (Lundberg and Pollak, 1993). For example, consider a case where a woman wants to spend additional money on school supplies for the children. If her husband knows there is no way she can make the purchase on her own, he may deny her request. If he knows she will make the purchase anyway if they disagree, he may consent.

With this in mind, we use a simple model of female labor supply to highlight how the intrahousehold effects of direct deposit and training might impact two sets of outcomes. First, how does increasing a woman’s control over earned income impact her labor supply and economic empowerment? And second, how might higher female labor supply, which challenges traditional norms, interact with and influence gender norms in the community? We discuss how alternative channels could impact these outcomes in Section 6.

#### A. Model Setup

**The Outside Option:** We assume the woman’s outside option is a function of the vector  $z$ .  $z$  could include a range of factors, such as non-labor income shares, relative wages, and

the strength of the woman’s social network in the village. We assume direct deposit and training increase elements of  $z$  by increasing financial control.

**Preferences:** The household consists of a husband and wife. Each spouse  $i \in F, M$  receives utility from private consumption ( $c^i$ ) and leisure ( $l^i$ ) according to the utility function  $u^i(c^i, l^i)$ .<sup>21</sup>

**Norms:** Both spouses incur two types of norms-based utility costs if the wife works. First, costs associated with *actual* gender identity norms: these injunctive norms reflect personal beliefs about what women should do.<sup>22</sup> For instance, if a woman works this could violate gender identity norms that “the wife takes care of the household” and “the husband is the breadwinner” (Akerlof and Kranton, 2000). A working woman and her husband incur an actual norms cost  $\alpha^i \geq 0$ .

Second, when a woman works both spouses face norms costs imposed by those community members who disapprove of women working. Following Tankard and Paluck (2016), we assume that these norms costs are uncertain and may be misperceived. Let the vector  $\alpha$  denote actual norms in the community. Spouse  $i$  may put different weights on the beliefs of different community members (e.g. by closeness in the community network, gender, or economic influence). Hence, we assume  $i$ ’s perceived norms cost is given by  $\omega_i' E_i[\alpha]$ , where  $\omega_i$  is a vector of importance weights. When norms are misperceived,  $\omega_i' E_i[\alpha] \neq \omega_i' \alpha$ .

The total norms cost borne by spouse  $i$  is therefore  $\gamma^i = \alpha^i + \omega_i' E_i[\alpha]$ . If individuals correctly perceive the actual norms of all community members, then  $\gamma^i = \alpha^i + \omega_i' \alpha$ . However, as Figure 1 shows, in our setting community norm costs are misperceived and, in line with the data, we focus on the case where individuals overestimate community opposition to working women such that  $\gamma^i > \alpha^i + \omega_i' \alpha$ .

A woman will fully internalize her own norms costs, and may also internalize some of the costs borne by her husband (through a household decision-making channel).

**Labor Endowment and Wages:** A woman divides her time endowment of 1 between leisure, private sector work ( $h_P^F$ ), and MGNREGS ( $h_N^F$ ). The official MGNREGS wage is  $w_N$ , while the official wage in the private sector is  $w_P^F$ . To capture the seasonal nature of MGNREGS and private sector work, we assume a woman can provide no more than  $\bar{N}_s$  units of labor in sector  $s$ . Putting this all together, we assume that the woman solves the

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<sup>21</sup>We assume  $u^i(c^i, l^i)$  is twice continuously differentiable, strictly increasing, and concave in both its arguments. The price of the consumption good is normalized to 1.

<sup>22</sup>In the psychology literature, a norm refers to “attributes of groups that generate expectations for the behavior of group members” Prentice (2007). Injunctive norms refer to beliefs about what people should do, while descriptive norms describe what people actually do.

following problem in deciding whether to work:

$$\begin{aligned} \max_{h_s^F, c^F} u^F(1 - h_N^F - h_P^F, c^F) - \left( \gamma^F + \frac{1 - \mu(z)}{\mu(z)} \gamma^M \right) 1(h_P^F + h_N^F > 0) \quad (1) \\ c^F \leq (1 - \tau_N(z)) w_N h_N^F + (1 - \tau_P(z)) w_P h_P^F + \phi^F(z) \\ h_s^F \geq 0 \\ \text{and} \quad h_s^F \leq \bar{N}_s \end{aligned}$$

where  $1(\cdot)$  is the indicator function,  $\mu(z) \in [0, 1]$  represents the relative weight a woman places on her own norms costs versus her husband's,  $\tau_s(z) \in [0, 1]$  is the share of the woman's earnings in sector  $s$  that is appropriated by her husband, and  $\phi^F(z)$  is a net transfer from the husband to the wife, which could be positive or negative. These parameters may depend on a woman's outside option, with a higher outside option corresponding to higher  $\mu$ , lower  $\tau_s$ , and higher  $\phi^F$ . We use this setup as a reduced form to nest two alternative household decision-making regimes:

- *Efficient Collective Bargaining.* Assuming the household is efficient, the husband will not tax his wife's earnings and utility will be transferred between husband and wife through  $\phi^F(z)$ . Appendix A shows how the outcome of a collective bargaining model, modified to include norms costs, can be represented by the solution to the above problem with  $\tau_N = \tau_P = 0$ .
- *Inefficient Wage Taxation.* If, however, the household is inefficient, then the husband may "tax" away some of his wife's earnings. We follow (Heath and Tan, 2015) and assume that as a woman's outside option increases, the tax rates on her earnings may decline. To isolate this channel, we assume that under this regime a woman's outside option has no impact on  $\phi^F$  and  $\mu = 1$  (absent cooperation, the woman does not account for her husband's norms costs).

In deciding whether to work, a woman will compare her utility when she pays the norms costs and chooses the optimal amount of labor in each sector to her utility when she does not work and avoids all norms costs. She will always first choose to work in the higher-paying sector and only work in the other sector if the hours constraint in the higher-paying sector is binding.

Our framework highlights two key channels through which direct deposit and training might alter labor supply. We reference *bargaining power* when discussing outside option shifts under the (efficient) collective regime, and *autonomy* when discussing outside option shifts under the wage taxation regime:



**Channel 1–Greater Bargaining Power:** In the collective model, an increase in a woman’s outside option raises the weight placed on her (relative to her husband’s) preferences, i.e. increases  $\mu$ . Increasing her bargaining power also increases the share of non-labor income she receives ( $\phi^F$ ).

**Channel 2–Lower Wage Taxation:** In non-cooperative households, the intervention could reduce wage taxation. Here there are two possibilities. The first is that only the tax rate on MGNREGS wages ( $\tau_N$ ) declines (e.g. if the household uses rules of thumb like “I control all money that is deposited into my bank account”). A second possibility is that both  $\tau_P$  and  $\tau_N$  decline (e.g. if an increase in autonomy leads to reduced wage taxation regardless of how a woman is paid).

Note that our intervention focused on financial inclusion and did not provide women information about either prevalent or appropriate norms around women’s work. That said, being a government program it had some potential moral weight and may have implicitly promoted the notion that it is appropriate for women to work for MGNREGS and make banking transactions. However, given the intervention’s focus and its light-touch nature, we believe direct effects of the intervention itself on  $\gamma^i$  were unlikely.

## B. How Will Women’s Labor Supply Change?

First, consider channel 1, an increase in bargaining power (and, therefore,  $\mu$ ). This would reduce the weight that women place on norms costs borne by their husbands, which would draw some non-working women into the labor market—specifically women who were not working due to the preferences of their husbands. At the same time, greater bargaining power will increase the transfer from husband to wife ( $\phi^F$ ). This would have an income effect, and work to reduce female labor supply.

Next consider channel 2, a reduction in wage taxation. A higher effective female wage creates both an income and a substitution effect, hence impacts on labor supply are ambiguous. However, if the reduction in wage taxation were specific to MGNREGS wages, then work for MGNREGS would likely increase, while work for the private sector would decrease.

It follows that *predicted impacts for women who were already working are ambiguous*. We can, however, formulate a clear prediction for women who were not working prior to intervention, and therefore will only be moved by channels that make work more attractive:

***Labor Supply Prediction (1)*** *Direct deposit and training can draw non-working women into the labor force through either an increase in bargaining power or a reduction in wage taxation.*

The framework offers guidance for distinguishing between channels: if the intervention broadly shifted female outside options (higher bargaining power/an increase in autonomy that reduces  $\tau_N$  and  $\tau_P$ ), we would expect to see positive downstream impacts on women’s empowerment and agency, as well as an increase in both public and private sector work among non-working women. If the intervention only increased the returns to MGNREGS, work for the program should increase at the expense of private sector work.

### C. How Will Norms Change?

Over time, extensive margin impacts on labor supply could be amplified if norms costs fall. Understanding the longer-run normative impacts of direct deposit and training, and how impacts vary by gender, is also important for building our understanding of how social policies can shape norms and for assessing welfare. If, for example, the interventions only operated through a bargaining power channel then this would imply a transfer of utility from men to women. If, instead, norms and their associated social costs are malleable, then our interventions could create a long-lasting Pareto improvement within the household—particularly if norms costs borne by both genders are reduced.

Multiple experiences – including that of working, having one’s spouse work, or seeing more women working in one’s community – could shift actual and/or perceived norms. First, consider *actual norms*, or  $\alpha^i$  in our model. For a woman, the act of working can alter the gender identity norms she internalizes. For example, she may begin to take pride in bringing in earned income or realize that her children do not suffer when she works. More broadly, she may endogenously update her personal values to align with her new behavior or “identity”. Since men do not necessarily need to adopt new behaviors when their wives start working, we anticipate larger declines in the actual norm cost of  $\alpha^i$  for women than men. Further, while new attitudes could spill over onto non-complier women through social learning (Fogli and Veldkamp, 2011; Fernandez, 2013), we anticipate these changes to be largest for women who alter their labor supply behavior in response to the intervention. We summarize this as:

***Norms Hypothesis (1)*** *Direct deposit and training can engender a shift to more progressive actual norms about women’s work, particularly among women drawn into the labor force.*

Next, consider *perceived norms*, with the associated social cost of  $\omega_i' E_i [\alpha]$ . Changes in *perceived norms* could occur if individuals update their beliefs about others’ actual norms either directly (by communicating with others) or indirectly (by observing women working

and the type of community sanctions incurred). Perceived norms may be particularly prone to change if they are misaligned with actual norms. Here we anticipate larger changes among individuals who believe norms are more conservative than they actually are (Bursztyn et al., 2018). Figure 1 Panel B shows that a significant fraction of the male and female populations misperceive the actual social cost of women working, with misalignment particularly pronounced for men. Our final hypothesis is therefore:

***Norms Hypothesis (2)*** *If there is social learning, direct deposit and training can cause perceived norms to liberalize. Changes should be larger among groups who, as a baseline, misperceive actual norms as more restrictive than they are.*

Comparing gender-specific changes in actual and perceived norms can provide suggestive evidence on channels of influence. For instance, if women, but not men, change actual norms then it is likely that the act of working is an important channel for updating gender norms related to women’s work. Shifts in perceived norms provide evidence of social learning; if these shifts are larger among groups with larger misperceptions (e.g. men), it suggests scope for misperceptions to correct when there is a shift in equilibrium female labor supply.

## D. Summary

Our discussion identified several points of guidance for the empirical analysis. First, labor supply impacts are most likely to be observed among women least attached to the labor market. Second, examining impacts on private versus public sector work, and on women’s empowerment, can help differentiate between channels. Third, norms costs—and direct deposit and training’s effects on these costs—may differ by gender. Separately studying effects on actual norms, perceived norms, and gender-specific variation effects can provide suggestive evidence on the factors that influence norms evolution.

### 3.1 Empirical Strategy

Our main analysis uses the following regression specification:

$$y_{ig} = \gamma_0 + \gamma_1 train_g + \gamma_2 deposit_g + \gamma_3 deposit \times train_g + \mu_s + \lambda_d + x'_{ig} \delta + \varepsilon_{ig} \quad (2)$$

Where  $y_{ig}$  is the outcome of interest for individual  $i$  in GP  $g$ ,  $deposit_g$  indicates that GP  $g$  was randomly selected to receive direct deposit, and  $train_g$  indicates selection for training. All regressions include controls for strata fixed effects ( $\mu_s$ ) and district fixed effects ( $\lambda_d$ ). The vector  $x_{ig}$  contains controls selected using Double LASSO from all variables listed in Table

B2 (Belloni et al., 2014). In the Online Data Appendix, we present the full list of controls and indicate the subset selected by Double LASSO for each regression in the main tables. The error term ( $\varepsilon_{ig}$ ) is clustered at the GP level.

We focus on the impact of direct deposit and training, given by  $\theta = \gamma_1 + \gamma_2 + \gamma_3$ . Appendix Tables B3-B6 report the coefficients on  $\gamma_1$ ,  $\gamma_2$ , and  $\gamma_3$  for the main outcome variables. The results suggest that both interventions mattered; however, we are under-powered to identify the separate effects of direct deposit, training, and the complementarity between the two.

Guided by our framework, we report average intent to treat effects and also effects by baseline labor market status. Here, we split the sample based on our best-available baseline measure of a woman’s work history: her report of whether she ever worked for MGNREGS.<sup>23</sup> In Table 1 we present data from the long-run survey for the control group to show that this variable captures important differences in broader female labor force participation and—consistent with our conceptual framework—men’s attitudes towards female work. We therefore refer to women with no baseline MGNREGS experience as “socially constrained” because we conjecture that they face higher normative barriers to work.

Baseline non-workers (the socially constrained) were 10 percentage points less likely to have worked for pay in the past year and earned 22 percent less in the past month as compared to unconstrained women. Consistent with this, the constrained scored 0.20 and 0.08 standard deviation units lower on indices of private sector and MGNREGS work, which measure activity along both the intensive and extensive margin. Constrained women also scored 0.09 standard deviations lower on our empowerment index, which captures economic activity, self-reported decision making power, and mobility. While we observe no significant cross-group differences in women’s actual and perceived norms, husbands of constrained women reported significantly more conservative perceived norms: they believed that their communities were less accepting of both working women and working women’s husbands. Interestingly, there was no significant difference in actual norms between the two groups: this suggests that misperceptions may be greater among husbands of socially constrained women.

Next, we use 2016 Indian Demographic and Health Survey (DHS) data to create a broad measure of caste-based gender norms and test whether socially constrained women belong to castes with more restrictive gender norms. Since the DHS does not directly ask about injunctive FLFP norms, we focus on descriptive norms (how much women in different caste groups work). Using measures of women’s labor force participation we construct a standardized “DHS work norms” index, which varies at the subcaste level.<sup>24</sup> As with other work

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<sup>23</sup>Appendix Tables B7 and B8 verify balance among the two subsamples.

<sup>24</sup>We limit the DHS women’s sample to the Northern “Hindi Belt” states of Madhya Pradesh, Chhattisgarh,

indices, higher values indicate higher FLFP. Table 1 shows that socially constrained women belonged to subcastes with lower FLFP. This finding holds even after an adjustment for differences in female education and household wealth.

Of course, constrained and unconstrained women also differ on other dimensions: the constrained are younger, better educated, and less likely to have a bank account. Consistent with the fact that constrained women are less likely to work, their households have lower incomes even though there is no difference in their husbands' earnings.

## 4 Impacts on Women's Economic and Social Lives

### 4.1 Women's Control of MGNREGS Wages

Our treatments had high levels of take-up. In non-control GPs we opened accounts for 74 percent of all eligible women; in training GPs 75 percent of eligible women attended the training; and in direct deposit GPs, we successfully enrolled 82 percent of new account holders in direct deposit. We find no significant differences in account opening rates across treatment arms, which is to be expected given that women were not informed about direct deposit or training until after the account opening decision was made.

Bank administrative data confirm that the provision of direct deposit facilities altered MGNREGS wage payment patterns. Panel A of Figure 2 graphs the share of women ever receiving an MGNREGS deposit in an individual account opened during the enrollment camp. This reflects a combination of receiving direct deposit *and* working for the program. Panel B reports the cumulative value of MGNREGS deposits sent to project accounts.<sup>25</sup>

While direct deposit clearly increased the likelihood of women receiving MGNREGS wages, the effect is much larger when combined with training. These impacts are persistent, large, and meaningful. By the time of the three-year follow-up survey, the average woman in direct deposit and training had received roughly INR 3,000 in MGNREGS wage payments in her individual account. Conditional on receiving at least one deposit, the average total wage payment was just over INR 7,000 (\$108 at the 2017 exchange rate of INR 65 per \$US). This amounts to 152 percent of total annual wage earnings for the same group, measured

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Bihar, Gujarat, Rajasthan, and Jharkhand. For this sample, we standardize a series of FLFP indicators and then calculate means by subcaste, adjusting the caste-specific means to account for variation in sample size by calculating empirical Bayes' estimates. We also construct a version of the index where FLFP indicators are first regressed on dummies for female educational attainment, husband's educational attainment, and the DHS wealth index. We standardize residuals from these regressions and then calculate adjusted means in an effort to purge the FLFP index of variation driven by socioeconomic status. We merge this subcaste-based measure onto our own survey data.

<sup>25</sup>We cannot directly identify MGNREGS deposits in the administrative data—instead we define a deposit to be an MGNREGS deposit if it is a multiple of the MGNREGS daily wage.

at the year three follow up. Given the magnitude of these payments, it is plausible that the intervention could have shifted women’s bargaining position in the household.

Appendix Table B10 shows treatment effects on the outcomes in Figure 2 in a regression framework. The direct effects—particularly when combined with training—are substantial and significant. The bank data have two limitations, however: first, they may not detect all individual payments for women with multiple accounts. Second, they do not cover the 19 percent of the sample served by our second banking partner. We, therefore, also use MGNREGS MIS administrative data to calculate individual wage payments up through November 30, 2017. A comparison of these results to those that leverage the bank account data through the same time period are very similar, though point estimates on total wage payments are smaller in the MIS data.

Given evidence that our treatments altered women’s control over their earnings, we now examine impacts on broader measures of financial inclusion, labor supply, empowerment, and norms. To alleviate concerns about multiple testing, we follow Kling et al. (2007) and divide outcomes into families and then aggregate within family into a standardized index. Appendix Tables C1-C9 present impacts on index components.

## 4.2 Women’s Financial Inclusion

Columns (1) and (2) of Table 2 present impacts on a female bank account use index, which aggregates survey-based measures of individual account ownership, account use in the past six months, and balances. Direct deposit and training led to a 0.13 standard deviation units increase in this index in both the short- and long-run (Panel A). A time series of bank administrative data shows that average daily balances grew over time, with a persistent gap between accounts only and direct deposit and training (Appendix Figure B2).

Do these impacts also reflect meaningful changes in agency? Table 2, column 3, reports results for a banking autonomy index, which aggregates survey data on whether the respondent visits the bank alone or without male supervision and is comfortable doing so. It also includes a measure of whether the respondent thinks women can visit the CSP without a male relative’s supervision. Overall, direct deposit and training significantly increased female banking autonomy by 0.19 standard deviation units. In column (4) we find a positive, but not significant, overall increase in the CSP knowledge index, which measures whether women have ever heard of the CSP and what types of transactions they know about. Panels B and C show results for the subset of socially constrained women (those who had not worked for MGNREGS at baseline) and unconstrained women (those who had worked). All impacts are significant and larger for constrained women. We formally reject equality of treatment effects

for the constrained and unconstrained for all outcomes except short-run account use. These larger effect sizes are notable, as constrained women’s outcomes lag those of unconstrained women in accounts only. In fact, direct deposit and training completely closes these gaps in account use, banking autonomy, and CSP knowledge.

Against this background, we now examine how the treatments impacted women’s participation in the labor market.

### 4.3 Women’s Labor Market Engagement

Columns (1) and (2) in Table 3 consider an overall standardized index of labor supply in the short-run and long-run, respectively. This index is the average of subindices for MGNREGS, the private sector, and general labor supply that is not differentiated by sector of work.<sup>26</sup>

Column (1), Panel A shows that in the full sample direct deposit and training significantly increased labor supply by 0.16 standard deviation units in the short run. The results for MGNREGS and private labor supply sub-indices in columns (3) and (5) show that the aggregate effect is driven by both more work for MGNREGS (a 0.19 standard deviation unit increase) and in the private sector (a 0.17 standard deviation unit increase). Columns (2), (4) and (6) show that these aggregate impacts attenuate in the long run and are no longer statistically significant.

In Panel B, we consider the sub-sample of socially constrained women. The intervention increased labor supply for constrained women by 0.21 standard deviation units in the short run (column 1) and this increase persisted in the longer run (column 2). Strikingly, the long-run effects for constrained women are entirely driven by the private sector.<sup>27</sup> We reject equality of treatment effects for constrained and unconstrained women in the long run for both overall labor supply and the private sector subindex.

In contrast, the intervention boosted unconstrained women’s labor supply in the short run, but not the long run (Panel C). Why do effects persist only for constrained women?

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<sup>26</sup>The *MGNREGS sub-index* includes (i) MIS-based short-term (past month) and longer-term (past 12 months) work indicators as well as wages earned over those periods and (ii) work indicators for the same time periods based on self-reported survey data. The *private sector sub-index* includes an indicator for work, total earnings in the past year and a dummy for whether the woman’s occupation/main status is a worker. The *general labor supply sub-index* includes an indicator for work in the past month, earnings in the past month, and total months worked over the past year. It includes survey questions which did not differentiate whether work was for MGNREGS or the private sector. We include earnings as a proxy of intensive margin labor supply, since we find no significant impacts on market wages (see Appendix Table B17).

<sup>27</sup>To evaluate the concern that some women mistakenly identified MGNREGS work as private-sector work, we examine women’s report of payment method for each type of work. At both follow ups, less than 1.5 percent of women reported receiving non-MGNREGS payments into a bank account, and our results are robust to recoding private-sector work to zero if it is paid into a bank account. Moreover, our qualitative field work found that villagers clearly distinguish MGNREGS work from other types of casual work, as the recruitment and payment systems are very different.

A first potential explanation is that ongoing (independent) government efforts to transition women to MGNREGS direct deposit enabled unconstrained women in accounts only to catch up to their peers in direct deposit and training. Figure 4 graphs the share of MGNREGS wages paid into individual accounts by quarter according to the MIS data.<sup>28</sup> Very few women in accounts only gained access to direct deposit until 2017, when the MP government began to conduct direct deposit enrollment camps. These camps increased rates of direct deposit receipt—especially among unconstrained women—shortly before our long-run survey. This suggests that any long-run impacts we find on labor supply and norms may underestimate the benefits of direct deposit and training, especially for unconstrained women.

A second (alternative) explanation is that, in the longer run, greater bargaining power led to an income effect among unconstrained women and this, in turn, discouraged work. This is plausible: the fact that direct deposit and training increased private-sector labor supply suggests a broad improvement in women’s outside options, as opposed to a more narrow increase in the effective MGNREGS wage.

One way to distinguish between these alternative explanations is to examine impacts on women’s empowerment: if catch up is driven solely by an income effect, then unconstrained women in direct deposit and training should be more empowered than their peers in accounts only.<sup>29</sup> To that end, we now consider impacts on downstream outcomes, starting with proxies of female empowerment, to further explore these hypotheses.

#### 4.4 Women’s Empowerment

In many settings, economic and social empowerment reinforce each other (Kabeer, 1999). An empowerment feedback loop is a critical mechanism through which increased financial control for women can translate into sustained long-term engagement with the market economy. There is, of course, no guarantee that such a feedback loop exists across all domains of empowerment: for example in Bangladesh, Bandiera et al. (2017) find that an asset transfer coupled with skills training targeted to very poor women significantly increased female labor supply, financial inclusion, and mental health, but had no significant impact on decision agency. Although this could, in part, reflect the inherently difficult task of quantifying household decision-making dynamics, it also underscores the importance of measuring empowerment across multiple dimensions of women’s lives.

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<sup>28</sup>As we can only infer direct deposit status when women work, we cannot directly measure the share of all sample women who are signed up for direct deposit in a given quarter.

<sup>29</sup>Another test would be to examine time trends in labor force participation: policy catch up would suggest an overall upward trend in FLFP, while an income effect would suggest a downward trend. However, there were other changes in the economic environment between the short- and long-run surveys—including the 2016 banknote demonitization—which makes examining time trends difficult.



Table 4 presents impacts on economic and social empowerment. To quantify impacts on empowerment, we create three sub-indices. The “purchase subindex” proxies women’s economic autonomy by aggregating a series of questions about whether she made different types of purchases, either at all or (in a separate set of dummy variables) with her own money in the past year.<sup>30</sup> The mobility subindex aggregates a series of dummy variables indicating a woman visited a series of locations in the past year and in the past 30 days.<sup>31</sup> Finally, the self-reported decision-making sub-index aggregates two dummy variables indicating the woman reported having a say in whether she works and how her own income and benefits payments are spent. The aggregate empowerment index (see columns 1 and 2 of Table 4) is a simple average of the three sub-indices.

Panel A of Table 4 shows impacts for the whole sample. We cannot reject the null of no overall impact on empowerment, despite a marginally significant short-run impact on the purchases index. Panel B shows impacts for constrained women. Here, we find significant impacts on overall empowerment that grow in magnitude at the three-year follow up, where direct deposit and training increased the index by 0.14 standard deviation units relative to accounts only. Columns 3-8 show that results are driven by the purchases sub-index in the short run, and purchases and mobility in the long run.

In contrast, we find no significant impact on any empowerment measures for unconstrained women, who start with higher baseline levels of empowerment. We formally reject equal effects for constrained and unconstrained women for the purchases sub-index in the short and long run, as well as the aggregate empowerment index and mobility sub-index in the long run. Although the long-run null effect for unconstrained women is consistent with catch up (i.e., through the government’s efforts to initiate individual direct deposit payments across the state), the null effect in the short run (when unconstrained women in direct deposit and training were working more) is not. This could be due to power—the confidence interval on the short-run effect for the unconstrained is  $[-0.05, 0.11]$ —or that unconstrained women were induced to enter the labor force for another reason, such as a shift in wage taxation that was not driven by a change in outside options.

To summarize, direct deposit and training drew women into the labor market, and catalyzed greater economic agency among constrained women. Appendix Table B11 shows that the intervention had no major implications—positive or negative—for gender-based violence and mental health.<sup>32</sup> Returning to our conceptual framework, the private sector labor sup-

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<sup>30</sup>Purchase categories include groceries, eating out, clothing, child health, home improvement, and festivals. See the Online Appendix for additional detail.

<sup>31</sup>The locations are the village market, the district market, her natal home, the local child care center, and the public health center.

<sup>32</sup>In the longer run, we observe a modest 0.081 standard deviation unit decline in the mental health

ply and empowerment effects suggest that the intervention increased constrained women’s outside options, helping them overcome their husbands’ preferences that they not work.

## 5 Impacts on Gender Norms

In our conceptual framework, we posit that if the act of working changes the gender norms that women (or possibly their husbands) adhere to, then actual norm costs can fall (norms hypothesis 1). We anticipate the largest reductions in these costs among women who were drawn into the labor force by the intervention. If these women overestimate norms against female work in the broader community, perceived norms costs should also fall (norms hypothesis 2). Social learning could also lower these costs (e.g. among unconstrained households). As Figure 1 shows that in our setting men misperceive community norms by more, we anticipate larger declines for this group. In this section we describe the data we collected on norms and then evaluate these hypotheses empirically.

### 5.1 Data Collection and Measurement

We conducted extensive qualitative work to inform our norms-related survey modules. Motivated by the conceptual framework, one of our key goals was to structure questions to capture not just beliefs about whether women should work, but also gender-specific norms costs. To do this, we designed three modules. The first covered *personal preferences* and was not gender disaggregated. Here, we asked individuals whether they believed women should be able to work outside the home. Then, we asked whether they wanted their sons to marry women who wish to work and their daughters to marry men who permitted them to work.

Second, we developed a *vignettes module*, which was designed to elicit attitudes towards working women and their husbands, holding other household characteristics constant. The vignette featured two hypothetical households, composed of a husband, wife, two children, and paternal grandparents. Respondents were told that both families belonged to the respondent’s caste and lived in the respondent’s village. The only difference between the two families was that one wife worked for pay, while the other stayed at home. We used pictures to make the families salient to the respondents. Then we asked respondents to compare the husbands and wives in the two households. Here, we asked which woman was the better wife, mother, and caretaker. To capture perceived norms we asked which woman got more respect in the community. Then we asked which man was the better husband, provider, and

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index. However, Appendix Table B12 shows that this result is sensitive to index construction: when we code a “poor” mental health outcome as feeling a certain way “some of the time” or more (column 2) or “a little” or more, the treatment effect disappears.

who got more community respect. The Online Appendix provides an English translation of the vignette module.

The final module was designed to measure the intensity of *perceived norms costs by gender*. Here, we asked respondents what fraction of individuals in the community would speak badly of a woman who worked outside the home, and what fraction of respondents would think a man was a bad provider if his wife worked for pay.

## 5.2 Actual Norms

To measure actual norms, defined as average beliefs about what people “should” do (Prentice, 2007), we first combine the three variables from the personal preferences module into a standardized “personal preferences” index. Next we calculate two indices to measure the extent to which individuals negatively judge working women and their husbands.

The “acceptance of working women” index aggregates vignette judgments of whether the working woman is the better wife, the better mother, and the better caretaker. The “acceptance of working women’s husbands” index aggregates vignette responses to which man is the better provider and the better husband. The “actual norms index” averages the personal preferences and acceptance indices to create a single measure of actual norms in our sample. In all cases, higher values correspond to greater acceptance of female work. To facilitate cross-gender comparison, we standardize all index components relative to women in the accounts only group.

Table 5 presents results. Women’s responses are in columns (1)-(4), while men’s responses are in columns (5)-(8). Among women, actual norms liberalize by 0.11 standard deviation units, significant at the 1 percent level. We interpret this as a reduction, on average, in a woman’s actual norm costs  $\alpha^F$ . A comparison of Panels B and C shows that this effect is driven by socially constrained women, who began with lower labor supply and more normative barriers to work. In accounts only, for example, there is a 0.14 standard deviation units gap between constrained and unconstrained women. Direct deposit and training completely closes this gap, with actual norms liberalizing by 0.22 standard deviation units among constrained women. Columns (2)-(4) show that point estimates on the personal preferences and acceptance indices are very similar. Thus, the liberalization of actual norms (or, equivalently, the reduction in norm costs) are concentrated in the group that exhibited sustained growth in labor force attachment subsequent to the intervention. This is consistent with the idea that the act of working reoriented constrained women’s gender identity norms.

In contrast, columns (5)-(8) show that point estimates for men are much smaller in magnitude and never statistically significant. This could occur if men personally saw limited

gains from their wives working, or if personal behavior change (rather than spousal change) is needed to shift gender identity norms. Since men report slightly more progressive personal preferences, this works to close the actual norms gap between men and women.<sup>33</sup>

### 5.3 Perceived Norms

Here we focus on perceived norms costs by gender. First we form gender-specific “perceived acceptance” indices, which standardize and aggregate the vignette question on community respect and the “fraction of the community who judges” question. Then we average the male and female indices to create an overall “perceived norms” index. Again, all index components are standardized relative to women in accounts only and constructed so that higher values correspond to fewer costs to female work.

Table 6 presents results for perceived norms. In terms of our framework, we interpret more liberal perceived norms as a reduction in  $\omega_i' E_i[\alpha]$ . By comparing treatment effects on perceived norms to those on actual norms (Table 5), we can get a sense of whether the misperception gap ( $\omega_i' E_i[\alpha] - \omega_i' \alpha$ ) goes up, down, or remains unchanged.<sup>34</sup> For women, we find no significant differences on the overall perceived norms index, though perceived acceptance of working women is higher by 0.08 standard deviation units (significant at the 5 percent level). This is similar in magnitude to the impacts on actual norms in Table 5. Overall, these results are consistent with either women learning about shifts in others’ views and/or generalizing from their own changing views regarding women’s work.

Columns (4)-(6) show that, unlike actual norms, perceived norms liberalize among men, largely due to a greater acceptance of working women’s *husbands*. These results are meaningful in magnitude, with 0.12 and 0.17 standard deviation units higher perceived acceptance among husbands of unconstrained and constrained women respectively.

These impacts for men are especially notable given that men report substantially more restrictive perceived norms: in accounts only the perceived acceptance of husbands index is 0.33 standard deviation units lower among men, while the perceived acceptance of wives index is 0.14 standard deviation units lower. Our data also imply that men’s perceived norms are conservative relative to actual norms: in accounts only, men report that 57 percent of the community will negatively judge the husband of a working woman; yet only 33 percent of men report that women cannot work and in the vignettes just 48 percent of men report that the non-working woman’s spouse is the better husband.<sup>35</sup> Taken together, these observations

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<sup>33</sup>While accounts only women were more likely than men to state that “women can work”, they were substantially less likely to prefer a daughter-in-law who works, or a son-in-law who lets his wife work.

<sup>34</sup>When norms are perfectly perceived this is zero.

<sup>35</sup>An important caveat here is that we cannot measure the beliefs of community members outside our

suggest that direct deposit and linking reduced the extent of norm misperception among men, which would in turn enhance the welfare of the household.

Why might men update their perceived norms? First, a husband may directly learn that he had overestimated the social sanctions associated with a woman working when his wife starts to work. Second, seeing higher levels of FLFP in his community could help him indirectly learn that the social costs of work are lower than expected. Finally, men may learn about women’s changing attitudes ( $\alpha^F$ ) through other channels. Note that perceived norms liberalize among husbands of unconstrained women, whose labor supply was unaffected in the long run. This suggests that social learning may have contributed to the persistent shift in men’s perceived norms.

## 5.4 Impacts Using a Community-level Social Constraints Measure

Our main analysis uses a self-reported measure of social constraints—whether the woman had ever worked for MGNREGS at baseline. Table 1 shows that this measure correlates with caste-based measure of working in the Indian DHS survey, as well as men’s attitudes towards female work in our Control Group. One concern with this measure is that it varies at the individual, rather than the group level. However, as Figure 1 shows, there is substantial cross-GP variation in norms. As an additional check, we therefore examine whether our main results are robust to using GP-level FLFP as recorded in the 2011 Indian Census as a proxy of social constraints.

Appendix Table B9 reports demographic differences between women in GPs with above versus below-median FLFP.<sup>36</sup> More control group women in low-FLFP GPs are socially constrained, and low-FLFP GPs have lower average DHS work indices—both these patterns are consistent with the hypothesis that low-FLFP villages have stronger norms against female work. Surveyed women in low-FLFP villages also have more conservative norms. Men in low-FLFP villages, on the other hand, report more progressive actual norms than their peers in high-FLFP villages.

Figure 5 graphs treatment effects on the labor supply index, the empowerment index, the actual norms index (among women), and the perceived norms index (among men). We graph results separately for “constrained GPs” (those with below-median levels of FLFP according to the 2011 Census) and “unconstrained GPs” (above median FLFP). Appendix Tables B15 and B16 report results for the full set of outcomes. Overall, we find remarkably similar patterns using this alternative constraint measure: in constrained GPs we observe sizable and significant long-run treatment effects on labor supply and norms, while short-run

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sample, e.g. village elites whose households do not work for MGNREGS.

<sup>36</sup>Appendix Tables B13 and B14 show balance by this cut.

impacts on labor supply fade out in unconstrained GPs. While the two constraint measures are correlated (as expected), this result is not mechanical: only 49 percent of women in constrained GPs had never worked for MGNREGS at baseline, while 26 percent of women in unconstrained GPs had no experience with the program.

## 6 Discussion and Conclusion

Direct deposit facilities for women’s MGNREGS wage payments, coupled with basic bank account training, had substantial impacts on women’s work. Impacts for constrained women are persistent, while impacts for unconstrained women dissipate in the longer run. We find suggestive evidence that the dissipation of effects for the latter group is related to the Indian government’s independent efforts to scale up financial inclusion for women in the period between our short-run and long-run survey.

Further, long-run labor supply effects are concentrated in the private sector, which suggests that the intervention did not simply make work for MGNREGS more attractive. Rather, the results suggest that the intervention worked by increasing women’s outside options, thereby boosting women’s bargaining power and/or autonomy within the household. The intervention also had broader implications for women’s lives: first, it significantly empowered constrained women. Second, treated women state more progressive attitudes about women in the labor force, while their husbands report lower perceived social costs from having a wife who works.

While our findings are in line with the framework laid out in Section 3, we now briefly consider alternative explanations for our findings.

### 6.1 Alternative Explanations

To rationalize an increase in both MGNREGS and private-sector work, an alternative mechanism would need to impact the return to both forms of work. A natural possibility would be if women’s increased participation in MGNREGS changed private sector wages. However, we find no impact on wages, apart from a modest decline in non-farm casual wages for men in the long run (Appendix Table B17).

Another possibility is that direct deposit and training impacted labor supply by easing savings constraints, as in Callen et al. (forthcoming). However, accounts only women also received bank accounts, and our experiment did not generate immediate variation in access to financial instruments (Appendix Table C1, rows 1 and 4). The basic bank training and direct deposit treatments may have helped women learn about the benefits of bank accounts, which

could in turn stimulate a broader labor supply response. This hypothesis is not supported by the data, however: Appendix Figure B5, Panel A shows that the number of non-MGNREGS deposits in accounts only are very similar to those in direct deposit and training.

A final possibility is that women faced some fixed cost to working that was independent of social norms. In this case, if direct deposit and training improved the return to working for MGNREGS, it could induce women to pay the fixed cost and enter the labor market more broadly. One of the most common non-norms costs women might face when entering the labor market is finding child care. If this were the binding constraint, then we would expect women with young (especially pre-school age) children to be most impacted by our interventions. Appendix Figure B4 estimates effects by whether or not a household has a child under the age of 8. Treatment effects are apparent for both subgroups, which suggests that our results are not driven by women who face the largest child care burdens at home.

Another potential fixed cost relates to learning about work opportunities in the private sector. In the private sector, landlords or labor recruiters visit households and offer them short-term work opportunities. However, recruiters target both men and women, and since virtually all men work, it is unlikely that women’s MGNREGS participation increased access to recruiters. Given these results, and the fact that one-off fixed costs may be less relevant as MGNREGS and market work tend to take place in different seasons, we find no compelling evidence that non-norms fixed costs are driving our results.

## 6.2 Policy Implications

In recent decades, economic progress in India has translated into better-paying jobs and more attractive work opportunities, with wage growth in rural areas outstripping that in urban areas (Jacoby and Dasgupta, 2015). Yet this growth has failed to draw Indian women into the labor market. We argue that social norms around appropriate gender roles play an important role in keeping Indian women out of the labor force, but that these norms can be overcome by interventions that increase women’s bargaining/autonomy.

Specifically, we show that strengthening women’s control over MGNREGS wages through direct deposit and training increased women’s work both for the program and in the private sector labor market. These changes run counter to the prediction of a basic model of efficient household decision-making, where an increase in bargaining power (precipitated by greater female control over workfare wages) would reduce female labor supply. Importantly, a norms channel rationalizes both our main treatment effects and key heterogeneity–treatment effects are largest among the subset of socially constrained women—those who, based on a lack of MGNREGS work experience at baseline, are least attached to the labor market and have

husbands who are most opposed to female work.

In addition to shedding light on the determinants of female labor supply in contexts with restrictive gender norms, our results have multiple policy implications. First, gender targeting can impact women’s engagement with workfare programs and the labor market at large. This insight is especially important for programs like MGNREGS, which explicitly aim to include and empower women. Second, impacts can extend beyond economic fundamentals, reshaping the norms that govern female work. This creates scope for interventions like ours to create further welfare gains by altering the nature of preferences themselves. Third, our long-run results can help inform intervention scale-up discussions. Between the two waves of our follow up survey, the Indian government began scaling up MGNREGS direct deposit to female-owned accounts across our study area. Different from our intervention, this scale-up did not involve either targeted outreach to eligible women or any additional training. It appears that these program features were likely relevant for the most marginalized women, and an important reason for why we find persistent effects on constrained women’s labor supply in the long run.

Finally, our results contribute to a growing literature on the importance of gender norms in mediating women’s interactions with the labor market. Most existing work focuses on richer countries, where gender norms are more equitable but, similar to our setting, men are typically more conservative than women. Against this backdrop, we see our paper as making two important contributions. First, policy makers interested in changing norms do not always need to invest in costly norms-change campaigns; in some settings, targeting economic incentives is enough. Importantly, policies that target incentives are often easier to implement as norms are often difficult to measure and hard to move directly. Further, policies that cause women to increase engagement with actors external to the household are likely important for norm-updating in the community. This finding is similar to the role model effect associated with women village leaders in India (Beaman et al., 2009). Second, strengthening women’s economic agency can potentially unleash broader social change, especially as more conservative men update their beliefs about the social costs of adopting progressive behaviors.

Our paper also highlights some important open research questions relating to how norms are updated and perceived by community members. For example, while our results make it clear that norms shift with behavior, we cannot say whose behavior (or beliefs) are most influential for changing the beliefs of others. Bringing tools from the networks literature to bear on these questions is a promising avenue for future work.



## References

- Aker, J. C., R. Boumnijel, A. McClelland, and N. Tierney (2016). Payment Mechanisms and Antipoverty Programs: Evidence from a Mobile Money Cash Transfer Experiment in Niger. *Economic Development and Cultural Change* 65(1), 1–37.
- Akerlof, G. A. and R. E. Kranton (2000). Economics and Identity. *Quarterly Journal of Economics* 115(3), 715–753.
- Alesina, A., P. Giuliano, and N. Nunn (2013). On the Origins of Gender Roles: Women and the Plough. *Quarterly Journal of Economics* 128(2), 469–530.
- Almås, I., A. Armand, O. Attanasio, and P. Carneiro (2018). Measuring and Changing Control: Women’s Empowerment and Targeted Transfers. *The Economic Journal* 128(612), F609–F639.
- Angrist, J. (2002). How do Sex Ratios Affect Marriage and Labor Markets? Evidence from America’s Second Generation. *Quarterly Journal of Economics* 117(3), 997–1038.
- Atkin, D. (2009). Working for the Future: Female Factory Work and Child Health in Mexico. *Unpublished Manuscript, Yale University*.
- Attanasio, O. P. and V. Lechene (2014). Efficient Responses to Targeted Cash Transfers. *Journal of Political Economy* 122(1), pp. 178–222.
- Bachas, P., P. Gertler, S. Higgins, and E. Seira (2016). Banking on Trust: How Debit Cards Help the Poor to Save More.
- Bandiera, O., R. Burgess, N. Das, S. Gulesci, I. Rasul, and M. Sulaiman (2017). Labor Markets and Poverty in Village Economies. *Quarterly Journal of Economics* 132(2), 811–870.
- Banerjee, A., E. Duflo, N. Goldberg, D. Karlan, R. Osei, W. Parienté, J. Shapiro, B. Thuysbaert, and C. Udry (2015). A Multifaceted Program Causes Lasting Progress for the Very Poor: Evidence from Six Countries. *Science* 348(6236), 1260799.
- Banerjee, A., E. Duflo, C. Imbert, S. Mathew, and R. Pande (2016). E-governance, Accountability, and Leakage in Public Programs: Experimental Evidence from a Financial Management Reform in India.
- Beaman, L., R. Chattopadhyay, E. Duflo, R. Pande, and P. Topalova (2009). Powerful Women: Does Exposure Reduce Bias? *The Quarterly Journal of Economics* 124(4), 1497–1540.
- Bedoya, G., A. Coville, J. Haushofer, M. Isaqzadeh, and J. P. Shapiro (2019). No Household Left Behind: Afghanistan Targeting the Ultra Poor Impact Evaluation. Technical report, National Bureau of Economic Research.

- Belloni, A., V. Chernozhukov, and C. Hansen (2014, May). High-Dimensional Methods and Inference on Structural and Treatment Effects. *Journal of Economic Perspectives* 28(2), 29–50.
- Bernhardt, A., E. Field, R. Pande, N. Rigol, S. Schaner, and C. Troyer-Moore (2018). Male Social Status and Women’s Work. *AEA Papers and Proceedings* 108, 363–67.
- Bertrand, M., E. Kamenica, and J. Pan (2015). Gender Identity and Relative Income Within Households. *Quarterly Journal of Economics* 130(2), 571–614.
- Blundell, R., P.-A. Chiappori, and C. Meghir (2005). Collective Labor Supply with Children. *Journal of Political Economy* 113(6), pp. 1277–1306.
- Bobonis, G. J. (2009). Is the Allocation of Resources within the Household Efficient? New Evidence from a Randomized Experiment. *Journal of Political Economy* 117(3), 453–503.
- Bobonis, G. J. (2011). The Impact of Conditional Cash Transfers on Marriage and Divorce. *Economic Development and Cultural Change* 59(2), 281–312.
- Boudet, A. M. M., P. Petesch, and C. Turk (2012). On norms and agency: Conversations about gender equality with women and men in 20 countries. Technical report, The World Bank.
- Bursztyn, L., A. L. González, and D. Yanagizawa-Drott (2018). Misperceived Social Norms: Female Labor Force Participation in Saudi Arabia. NBER Working Paper No. 24736.
- Callen, M., S. De Mel, C. McIntosh, and C. Woodruff (forthcoming). What are the Headwaters of Formal Savings? Experimental Evidence from Sri Lanka. *The Review of Economic Studies*.
- Chatterji, S. (2016, December). Ramesh Writes to States for More Women in NREGA Scheme.
- Chiappori, P.-A. (1992). Collective Labor Supply and Welfare. *Journal of Political Economy* 100(3), pp. 437–467.
- Chiappori, P.-A., B. Fortin, and G. Lacroix (2002). Marriage Market, Divorce Legislation, and Household Labor Supply. *The Journal of Political Economy* 110(1), 37–72.
- Dhar, D., T. Jain, and S. Jayachandran (2018). Reshaping Adolescents’ Gender Attitudes: Evidence from a School-Based Experiment in India. Technical report, National Bureau of Economic Research.
- Dutta, P., R. Murgai, M. Ravallion, and D. P. Van de Walle (2012). Does India’s Employment Guarantee Scheme Guarantee Employment? *World Bank Policy Research Working Paper* (6003).
- Eswaran, M., B. Ramaswami, and W. Wadhwa (2013). Status, Caste, and the Time Allocation of Women in Rural India. *Economic Development and Cultural Change* 61(2), 311–333.

- Fernandez, R. (2013, February). Cultural Change as Learning: The Evolution of Female Labor Force Participation over a Century. *American Economic Review* 103(1), 472–500.
- Fernandez, R. and A. Fogli (2009). Culture: An Empirical Investigation of Beliefs, Work, and Fertility. *American Economic Journal: Macroeconomics* 1(1), 146–177.
- Fernandez, R., A. Fogli, and C. Olivetti (2004). Mothers and Sons: Preference Formation and Female Labor Force Dynamics. *The Quarterly Journal of Economics* 119(4), 1249–1299.
- Fletcher, E. K., R. Pande, and C. T. Moore (2017). Women and Work in India: Diagnostics and a Review of Potential Policies.
- Fogli, A. and L. Veldkamp (2011). Nature or Nurture? Learning and the Geography of Female Labor Force Participation. *Econometrica* 79(4), 1103–1138.
- Goldin, C. (2006, May). The Quiet Revolution That Transformed Women’s Employment, Education, and Family. *American Economic Review* 96(2), 1–21.
- Green, D. P., A. Wilke, and J. Cooper (2019). Countering Violence Against Women at Scale: A Mass Media Experiment in Rural Uganda.
- Hasan, A. (2010). Time Allocation in Rural Households: The Indirect Effects of Conditional Cash Transfer Programs. *World Bank Policy Research Working Paper* (5256).
- Heath, R. and A. M. Mobarak (2015). Manufacturing Growth and the Lives of Bangladeshi Women. *Journal of Development Economics* 115, 1–15.
- Heath, R. and X. Tan (2015). Intrahousehold Bargaining, Female Autonomy, and Labor Supply: Theory and Evidence from India.
- ILO (2015). Key Indicators of the Labour Market 2015 (KILM) Database. Online. LFEP Database, 7th edition (January 2016 of the 2015 revision).
- India Census (2011). Sex Ratio in India.
- Jacoby, H. G. and B. Dasgupta (2015). Changing Wage Structure in India in the Post-Reform Era: 1993-2011. Policy Research Working Paper 7426, World Bank Group.
- Jensen, R. (2012). Do Labor Market Opportunities Affect Young Women’s Work and Family Decisions? Experimental Evidence from India. *The Quarterly Journal of Economics* 127(2), 753–792.
- Kabeer, N. (1999). Resources, Agency, Achievements: Reflections on the Measurement of Women’s Empowerment. *Development and Change* 30(3), 435–464.
- Kling, J. R., J. B. Liebman, and L. F. Katz (2007). Experimental Analysis of Neighborhood Effects. *Econometrica* 75(1), pp. 83–119.
- Lundberg, S. and R. A. Pollak (1993). Separate Spheres Bargaining and the Marriage Market. *The Journal of Political Economy* 101(6), 988–1010.

- Muralidharan, K., P. Niehaus, and S. Sukhtankar (2016). Building State Capacity: Evidence from Biometric Smartcards in India. *American Economic Review* 106(10), 2895–2929.
- Niehaus, P. and S. Sukhtankar (2013, November). Corruption Dynamics: The Golden Goose Effect. *American Economic Journal: Economic Policy* 5(4), 230–69.
- Prentice, D. A. (2007). Norms, Prescriptive and Descriptive. *Encyclopedia of Social Psychology*, 630–631.
- Qian, N. (2008). Missing Women and the Price of Tea in China: The Effect of Sex-Specific Earnings on Sex Imbalance. *Quarterly Journal of Economics* 123(3), 1251–1285.
- Rangel, M. A. (2006). Alimony Rights and Intrahousehold Allocation of Resources: Evidence from Brazil. *Economic Journal* 116(513), 627 – 658.
- RBI (2016). Financial Literacy Centres (FLCs) - Revised Guidelines.
- RBI (2016). Handbook of Statistics on Indian Economy 2015-16. Technical report, Reserve Bank of India.
- Skoufias, E., M. Unar, and T. G. de Cossio (2013). The Poverty Impacts of Cash and In-Kind Transfers: Experimental Evidence from Rural Mexico. *Journal of Development Effectiveness* 5(4), 401–429.
- Srinivas, M. N. (1995). *Social Change in Modern India*. Orient Blackswan.
- Stevenson, B. (2008). Divorce Law and Women’s Labor Supply. *Journal of Empirical Legal Studies* 5(4), 853–873.
- Subbarao, K., C. Del Ninno, C. Andrews, and C. Rodríguez-Alas (2012). *Public Works as a Safety Net: Design, Evidence, and Implementation*. World Bank Publications.
- Tankard, M. E. and E. L. Paluck (2016). Norm Perception as a Vehicle for Social Change. *Social Issues and Policy Review* 10(1), 181–211.
- UNWOMEN (2012, December). Minister of Rural Development Jairam Ramesh commits to making MGNREGA more women-friendly. *UNWomen News*.

Table 1: Predictors of Being Constrained

	(1) Unconstrained Mean	(2) Constrained Mean	(3) Difference C-U	(4) N
<i>Panel A: Characteristics of Women</i>				
Age <sup>+</sup>	40.459	37.830	-2.629*** (0.641)	1699
Years Education <sup>+</sup>	0.471	1.113	0.643*** (0.153)	1646
Age Had First Child (Among Women With Kids at Baseline) <sup>+</sup>	19.031	19.254	0.223 (0.178)	1594
Has Individual Bank Account	0.585	0.500	-0.085*** (0.026)	1620
If Worked for Pay in Last Year	0.837	0.740	-0.097*** (0.020)	1620
Earnings Last Month	871.999	680.206	-191.793*** (63.220)	1596
Private Labor Index	0.070	-0.128	-0.197*** (0.049)	1620
MGNREGS Labor Index	-0.073	-0.148	-0.075* (0.038)	1620
Empowerment Index	0.071	-0.022	-0.093*** (0.027)	1610
Actual Norms Index	-0.074	-0.089	-0.016 (0.032)	1620
Perceived Norms Index: Acceptance Working Women	-0.026	-0.087	-0.062 (0.044)	1618
Perceived Norms Index: Acceptance Husbands	-0.039	-0.086	-0.047 (0.039)	1618
<i>Panel B: Characteristics of Husbands</i>				
Age <sup>+</sup>	44.962	42.813	-2.149*** (0.792)	1655
Years Education <sup>+</sup>	3.266	4.996	1.730*** (0.260)	1649
Has Individual Bank Account	0.837	0.820	-0.017 (0.021)	1490
If Worked for Pay in Last Year	0.990	0.994	0.004 (0.004)	1490
Earnings Last Month	1438.257	1508.418	70.160 (138.827)	1472
Private Labor Index	0.612	0.680	0.067** (0.031)	1490
MGNREGS Labor Index	0.177	0.054	-0.123* (0.063)	1490
Actual Norms Index	0.030	-0.000	-0.031 (0.032)	1490
Perceived Norms Index: Acceptance Working Women	-0.085	-0.209	-0.123*** (0.042)	1490
Perceived Norms Index: Acceptance Husbands	-0.283	-0.423	-0.141*** (0.046)	1490
<i>Panel C: Household Characteristics</i>				
Other Backwards Caste <sup>+</sup>	0.496	0.507	0.012 (0.053)	1575
Scheduled Caste/Scheduled Tribe <sup>+</sup>	0.458	0.403	-0.054 (0.054)	1575
Household Income Last Month (Male Report)	5345.488	4637.625	-707.863** (342.178)	1487
DHS Work Index (Residualized) <sup>†</sup>	0.026	-0.018	-0.044** (0.019)	1489
DHS Work Index (Unresidualized) <sup>†</sup>	0.045	-0.016	-0.061*** (0.022)	1489

Notes: Standard errors clustered at the GP level in parentheses. Sample limited to control group. The mean of the constrained indicator for this sample is 0.336. <sup>+</sup>Outcomes are from short run survey; otherwise, outcomes are from long run survey. Data from short run survey, such as age, are left as their original values. <sup>†</sup>Index constructed using the Indian Demographic and Health Survey V (2005-2006) and merged onto our sample at the subcaste level. The residualized index residualizes out female education, husband education, and the DHS wealth index within the DHS data. See Online Data Appendix for more details. Variables measured in INR topcoded at the 99th percentile. The exchange rate was approximately INR 64 per USD in 2015 and INR 65 per USD in 2017. The first two columns show the means among unconstrained and constrained women. The third column shows the regression coefficient on an indicator variable for being constrained. \* p ≤ 0.10, \*\* p ≤ 0.05, \*\*\* p ≤ 0.01.

Table 2: Impact of Treatments on Bank Account Use

	Account Use Index		Banking Autonomy Index	CSP Knowledge Index
	Short-Run (1)	Long-Run (2)	Long-Run (3)	Long-Run (4)
<i>Panel A: Full sample</i>				
$\theta$ : Direct Deposit and Training	0.131* (0.071)	0.130** (0.054)	0.190*** (0.073)	0.145 (0.105)
Accts Only Mean	-0.000	-0.000	-0.000	0.000
N	2504	2464	2464	2464
<i>Panel B: Constrained Women</i>				
$\theta$ : Direct Deposit and Training	0.207** (0.101)	0.265*** (0.083)	0.266*** (0.086)	0.307** (0.139)
Accts Only Mean	-0.060	-0.097	-0.109	-0.068
N	922	903	903	903
<i>Panel C: Unconstrained Women</i>				
$\theta$ : Direct Deposit and Training	0.102 (0.080)	0.047 (0.058)	0.092 (0.078)	0.041 (0.098)
Accts Only Mean	0.027	0.053	0.062	0.047
N	1519	1501	1501	1501
P-value: Panel B $\theta$ = Panel C $\theta$	0.307	0.017**	0.042**	0.026**

*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . The account use index includes: if the respondent visited the bank in the past 6 months, the respondent's individual account balance, and if the respondent owns an individual account. The banking autonomy index includes if the respondent visits the bank alone, if they visit the bank without the supervision of a male, if they feel comfortable conducting transactions at the CSP, if they feel comfortable visiting the CSP alone, and if they believe women can visit a CSP without male supervision. The CSP knowledge index includes: if the respondent has heard of a CSP before and the number of transactions ever conducted at a CSP. All monetary values are denominated in Indian Rupees and top-coded at the 99th percentile (by gender). The exchange rate was approximately INR 64 per USD in 2015 and INR 65 per USD in 2017. All index components are standardized with respect to the Accounts Only group; see Online Data Appendix for details on how these indices are constructed.

Table 3: Impact of Treatments on Women’s Labour Supply

	Aggregate Labor Supply Index		MGNREGS Labor Supply Sub-Index		Private Labor Supply Sub-Index	
	Short-Run (1)	Long-Run (2)	Short-Run (3)	Long-Run (4)	Short-Run (5)	Long-Run (6)
<i>Panel A: Full sample</i>						
$\theta$ : Direct Deposit and Training	0.165*** (0.042)	0.045 (0.048)	0.186*** (0.071)	0.021 (0.080)	0.166*** (0.050)	0.048 (0.062)
Accts Only Mean	0.000	-0.000	-0.000	0.000	0.000	-0.000
N	2504	2464	2504	2464	2504	2464
<i>Panel B: Constrained Women</i>						
$\theta$ : Direct Deposit and Training	0.213*** (0.051)	0.193*** (0.060)	0.263** (0.111)	0.069 (0.073)	0.226*** (0.059)	0.279*** (0.097)
Accts Only Mean	-0.122	-0.186	-0.049	-0.102	-0.163	-0.275
N	922	903	922	903	922	903
<i>Panel C: Unconstrained Women</i>						
$\theta$ : Direct Deposit and Training	0.150*** (0.052)	-0.036 (0.057)	0.168** (0.071)	-0.008 (0.102)	0.153** (0.071)	-0.094 (0.059)
Accts Only Mean	0.061	0.108	0.033	0.067	0.080	0.156
N	1519	1501	1519	1501	1519	1501
P-value: Panel B $\theta$ = Panel C $\theta$	0.276	0.001***	0.343	0.398	0.352	0.000***

*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . The labor supply index is an average of the MGNREGS, private, and general labor sub-indices. All sub-index components are standardized with respect to the Accounts Only group. The MGNREGS labor supply index includes if the respondent worked in the past month and if the respondent worked in the past year (self-reports). It also includes variables from the administrative MIS data: if the respondent worked for MGNREGS in the past month, if worked for MGNREGS in past year, MGNREGS wages in past month, and MGNREGS wages in past year. The private labor supply index includes: if the respondent’s primary occupation was a worker in the past year, if the respondent worked for pay in the past year, and total earnings from private work in the past year. The general labor supply index includes variables that could reflect either public or private work: if respondent worked for pay in the past month, total earnings in the past month, and total months worked in the past year. See Online Data Appendix for further details on variable construction. All monetary values are denominated in Indian Rupees and top-coded at the 99th percentile (by gender). The public/private labor supply index is included in the aggregate labor supply index but not included in this table.

Table 4: Impact of Treatments on Empowerment

	Aggregate Empowerment Index		Purchase Index		Mobility in Past Year		Self-Reported Decision Making	
	Short-Run (1)	Long-Run (2)	Short-Run (3)	Long-Run (4)	Short-Run (5)	Long-Run (6)	Short-Run (7)	Long-Run (8)
<i>Panel A: Full sample</i>								
$\theta$ : Direct Deposit and Training	0.041 (0.032)	0.032 (0.034)	0.096* (0.053)	0.039 (0.063)	0.037 (0.036)	0.053 (0.035)	-0.021 (0.053)	0.019 (0.045)
Accts Only Mean	0.000	0.002	0.000	0.000	-0.000	0.000	0.000	-0.000
N	2504	2453	2504	2453	2504	2464	2504	2464
<i>Panel B: Constrained Women</i>								
$\theta$ : Direct Deposit and Training	0.100*** (0.037)	0.144*** (0.049)	0.239*** (0.067)	0.238*** (0.080)	0.023 (0.052)	0.115** (0.056)	0.041 (0.064)	0.062 (0.078)
Accts Only Mean	-0.028	-0.111	-0.089	-0.218	0.054	-0.042	-0.050	-0.084
N	922	897	922	897	922	903	922	903
<i>Panel C: Unconstrained Women</i>								
$\theta$ : Direct Deposit and Training	0.026 (0.041)	-0.022 (0.036)	0.042 (0.065)	-0.059 (0.069)	0.060 (0.044)	-0.001 (0.040)	-0.030 (0.071)	-0.005 (0.056)
Accts Only Mean	0.010	0.055	0.037	0.102	-0.031	0.027	0.025	0.035
N	1519	1496	1519	1496	1519	1501	1519	1501
P-value: Panel B $\theta$ = Panel C $\theta$	0.145	0.002***	0.029**	0.002***	0.538	0.061*	0.430	0.487

*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . The aggregate empowerment index is the average of the purchase, mobility in past year, and self-reported decision making sub-indices (columns 3-8). All sub-index components are standardized with respect to the Accounts Basic group. The purchase index includes indicators for if the respondent ever makes purchases for certain activities and if the respondent sometimes or always uses own funds for certain activities. Activities include spending on daily food, spending on clothing for yourself, children's health, spending on home improvement, spending on festivals, and food and drink outside the home. The mobility index includes indicators for if the respondent visited the market in the panchayat, market in the district headquarters, natal home, anganwadi, and primary health center in the past year and in the past 30 days. The self-reported decision making index includes indicators for if the respondent helps decide or decides how to spend their her earnings and whether or not to take employment. See Online Data Appendix for further details on variable construction.



Table 5: Impact of Treatments on Actual Norms

	Female Reports				Male Reports			
	Actual Norms Index (1)	Personal Preferences (2)	Acceptance: Working Women (3)	Acceptance: Husbands (4)	Actual Norms Index (5)	Personal Preferences (6)	Acceptance: Working Women (7)	Acceptance: Husbands (8)
<i>Panel A: Full sample</i>								
$\theta$ : Direct Deposit and Training	0.110*** (0.040)	0.098** (0.044)	0.091 (0.061)	0.087 (0.060)	-0.011 (0.043)	-0.059 (0.070)	0.015 (0.051)	-0.024 (0.057)
Accts Only Mean	-0.000	0.000	0.000	-0.000	0.077	0.180	0.001	0.049
N	2464	2464	2464	2464	2293	2293	2293	2293
<i>Panel B: Constrained Women</i>								
$\theta$ : Direct Deposit and Training	0.215*** (0.051)	0.160** (0.069)	0.243*** (0.073)	0.210*** (0.077)	-0.036 (0.082)	0.012 (0.109)	-0.020 (0.083)	-0.099 (0.103)
Accts Only Mean	-0.095	-0.068	-0.099	-0.117	0.066	0.091	0.045	0.062
N	903	903	903	903	837	837	837	837
<i>Panel C: Unconstrained Women</i>								
$\theta$ : Direct Deposit and Training	0.050 (0.054)	0.059 (0.059)	0.007 (0.079)	0.019 (0.073)	-0.001 (0.043)	-0.083 (0.079)	0.040 (0.063)	-0.007 (0.057)
Accts Only Mean	0.048	0.043	0.048	0.054	0.080	0.218	-0.024	0.046
N	1501	1501	1501	1501	1403	1403	1403	1403
P-value: Panel B $\theta$ = Panel C $\theta$	0.024**	0.269	0.017**	0.040**	0.688	0.427	0.564	0.409

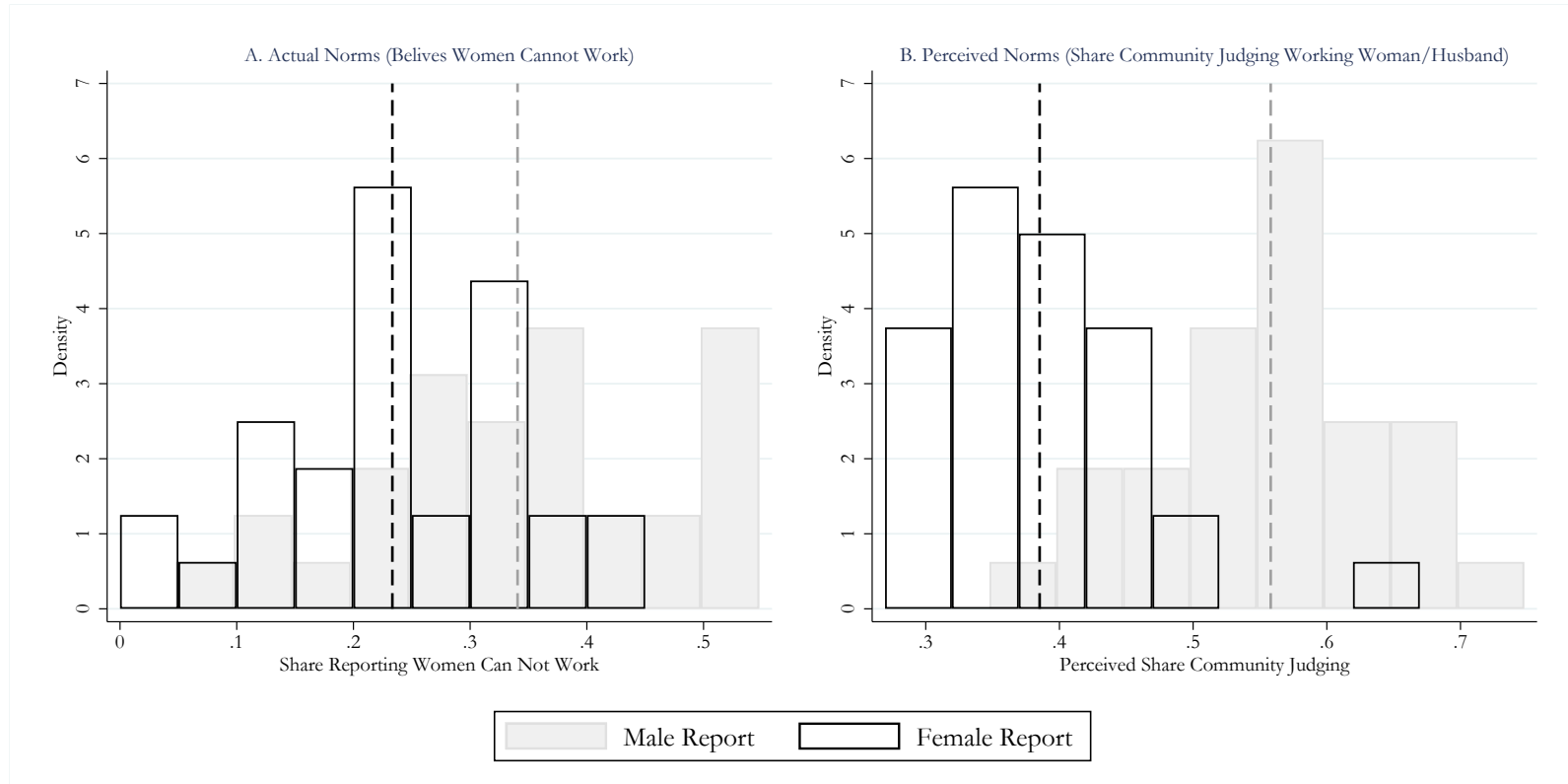
*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . These questions were only asked in the long run survey. The actual norms index is the average of the personal preference, acceptance of working women, and acceptance of husbands sub-indices (columns 2-4). All sub-index components are standardized with respect to the Accounts Only group. The personal preferences index includes if the respondent believes that women can work, if prefers to have a daughter-in-law who wants to work for pay, and if prefers to have a son-in-law who allows daughter to work for pay. The acceptance indices are derived from a series of vignette questions featuring a housewife and working woman. The acceptance of working women sub-index includes if the respondent believes the working woman is the better wife, if believes the working woman is the better mother, and if believes the working woman is the better caretaker. The acceptance of husbands index includes if the respondent believes the working woman's husband is a better provider and if believes the working woman's husband is a better husband. See Online Data Appendix for further details on variable construction.

Table 6: Impact of Treatments on Perceived Norms

	Female Reports			Male Reports		
	Perceived Norms Index (1)	Perceived Norms: Acceptance Working Women (2)	Perceived Norms: Acceptance Husbands (3)	Perceived Norms Index (4)	Perceived Norms: Acceptance Working Women (5)	Perceived Norms: Acceptance Husbands (6)
<i>Panel A: Full sample</i>						
$\theta$ : Direct Deposit and Training	0.062 (0.039)	0.079** (0.040)	0.050 (0.046)	0.087** (0.044)	0.062 (0.053)	0.113** (0.052)
Accts Only Mean	-0.000	-0.000	0.000	-0.236	-0.138	-0.334
N	2464	2464	2464	2292	2292	2292
<i>Panel B: Constrained Women</i>						
$\theta$ : Direct Deposit and Training	0.116* (0.069)	0.096 (0.071)	0.152* (0.080)	0.102 (0.078)	0.030 (0.095)	0.174** (0.084)
Accts Only Mean	-0.079	-0.064	-0.094	-0.310	-0.188	-0.432
N	903	903	903	836	836	836
<i>Panel C: Unconstrained Women</i>						
$\theta$ : Direct Deposit and Training	0.007 (0.043)	0.052 (0.048)	-0.037 (0.051)	0.115** (0.046)	0.090 (0.063)	0.121** (0.052)
Accts Only Mean	0.047	0.041	0.053	-0.200	-0.117	-0.284
N	1501	1501	1501	1403	1403	1403
P-value: Panel B $\theta$ = Panel C $\theta$	0.168	0.606	0.041**	0.882	0.597	0.520

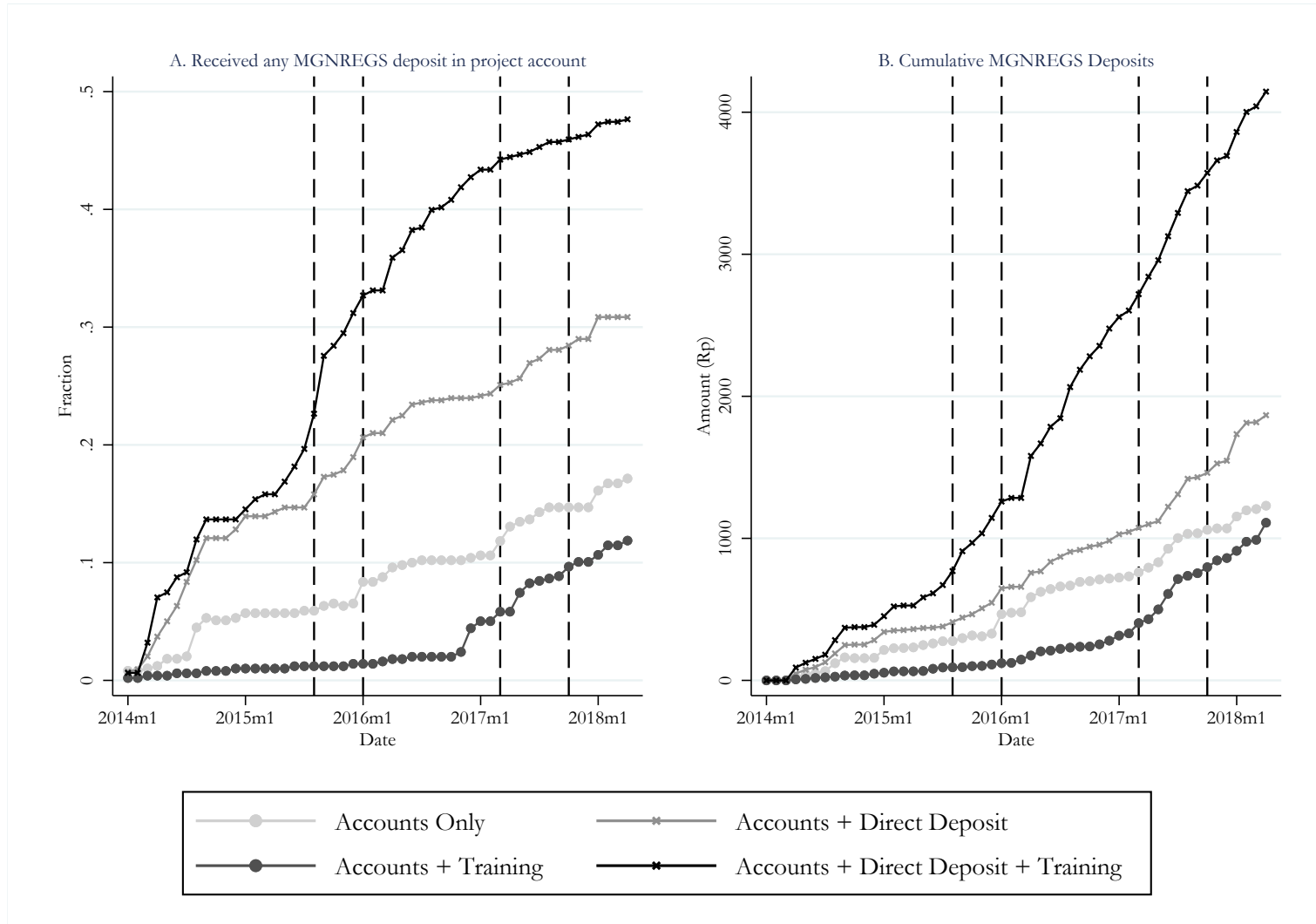
*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . These questions were only asked in the long run survey. The perceived norms index is the average of the perceived acceptance of working women and the perceived acceptance of working women's husbands sub-indices. The perceived acceptance of working women sub-index includes the respondent's perception of the fraction of community members who will not think poorly of working women and if the respondent perceives that the working woman (from the vignettes) is viewed with more respect. The perceived acceptance of husbands sub-index includes the respondent's perception of the fraction of the community who will not think a working woman's husband is a bad provider and if the respondent perceives that the working woman's husband is viewed with more respect. See Online Data Appendix for further details on variable construction.

Figure 1: Distribution of Village-Level Attitudes and Perceived Social Sanctions towards Female Work



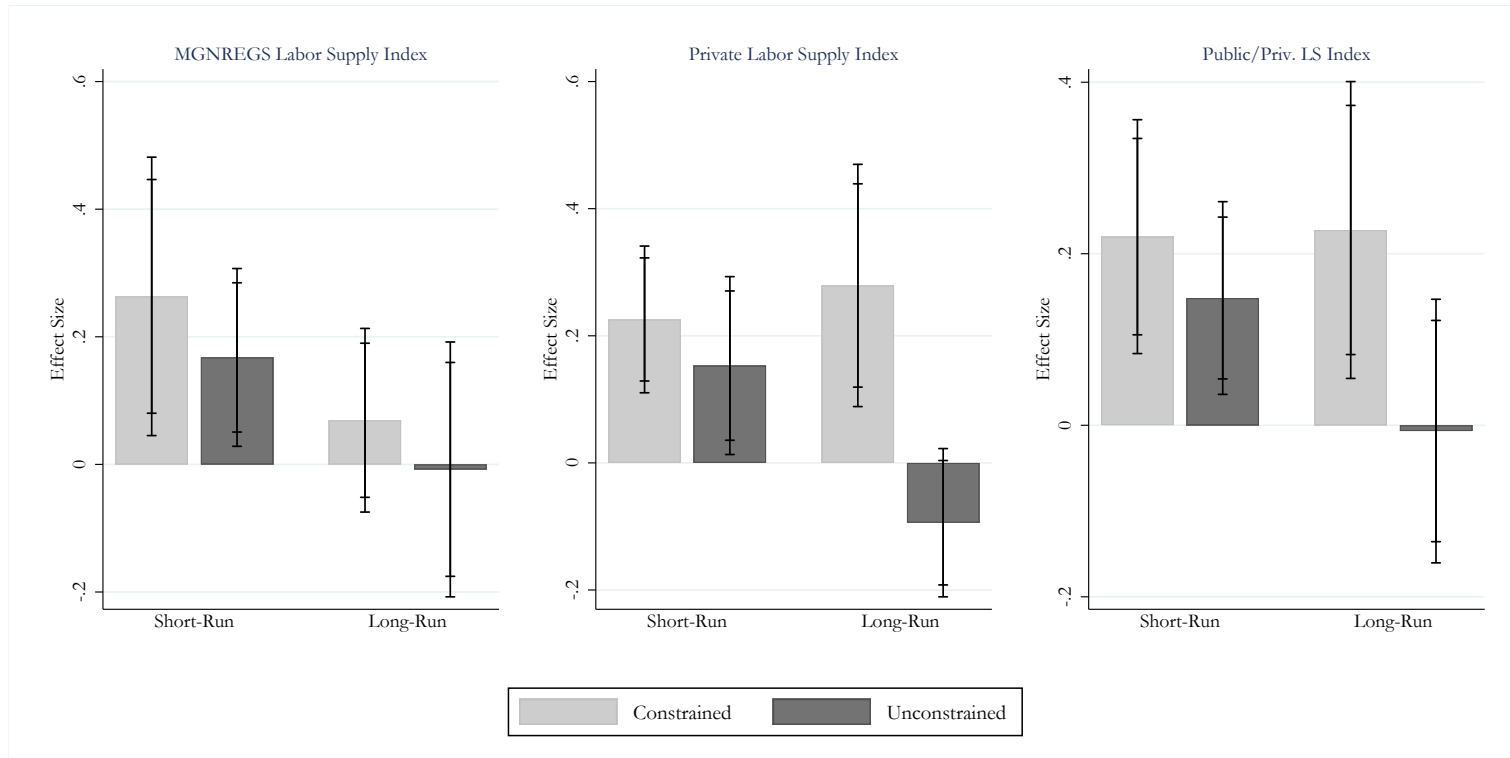
*Notes:* Both panels limit the sample to 32 Control group GPs that have 20 or more non-missing observations for both male and female reports. Panel A plots the GP-level distribution of the share of respondents who agree with the statement “women can not go out and work” over “women can go out for work”. Panel B plots the average female report of the share of households who would speak badly about a woman if she were to go out and work (female report) and the share of households who would think a man is a bad provider if his wife were to go out and work. The dashed lines report the GP-level average of each variable of interest.

Figure 2: Administrative Data - NREGA deposits in Project Accounts Over Time



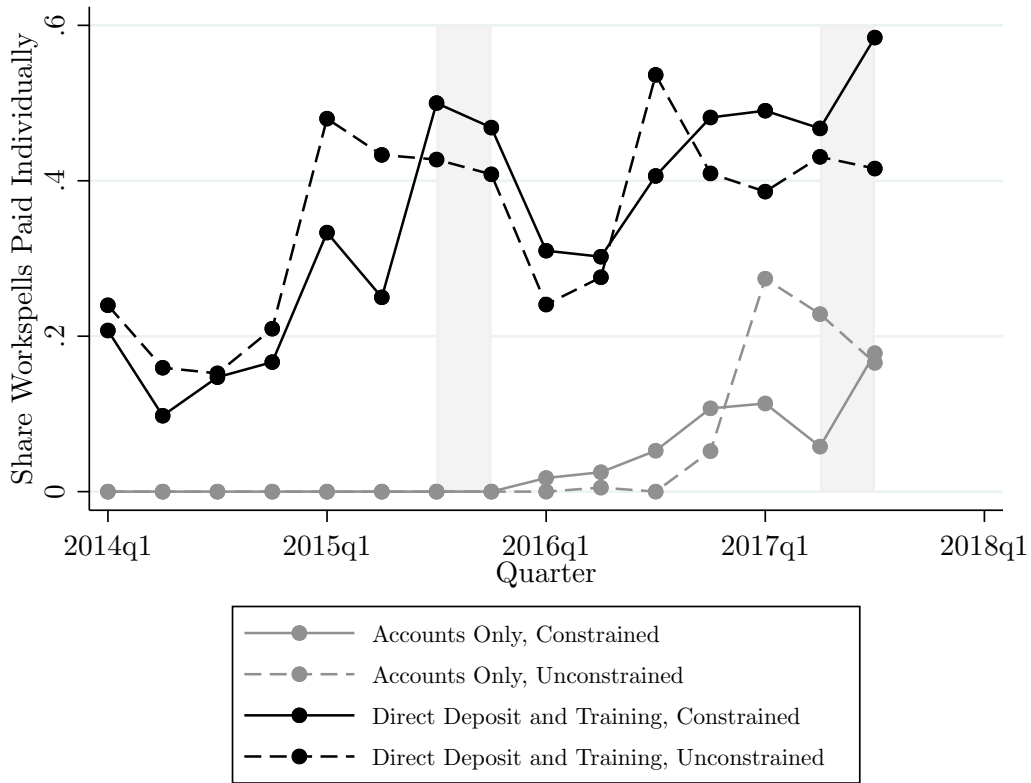
Notes: Administrative bank account data. All non-account openers are coded as having zero values for all measures. All outcomes are top-coded at the 99th percentile by month and gender. Dashed lines demarcate the beginning and end of the short-run and long-run surveys. The exchange rate was approximately INR 64 per USD in 2015 and INR 65 per USD in 2017.

Figure 3: Treatment Effects on Labor Supply Sub-Indices



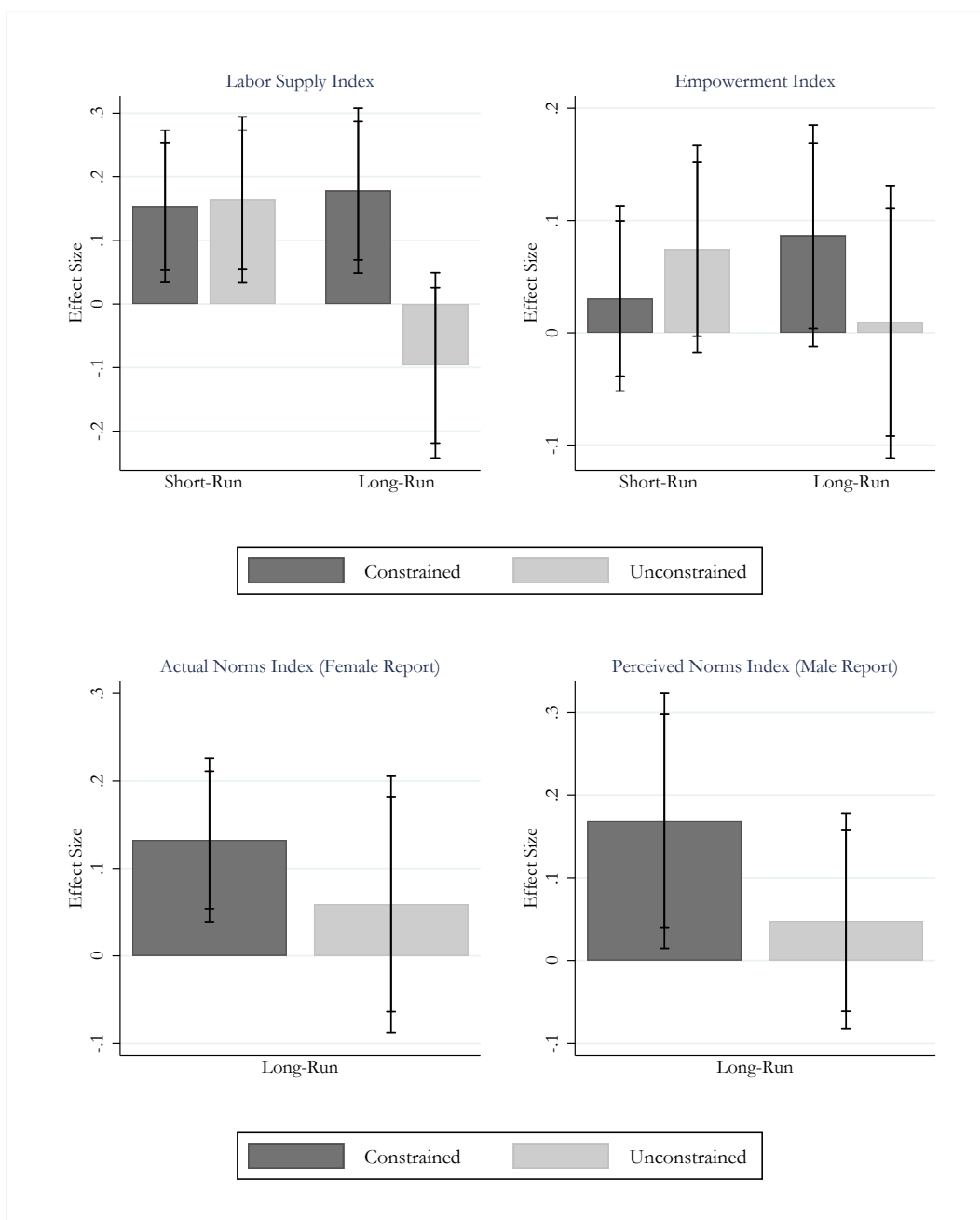
*Notes:* Bars display effect of Accounts + Direct Deposit + Training. Whiskers show 90 and 95 percent confidence intervals, based on robust standard errors clustered at the GP level. See Online Data Appendix for details on index components.

Figure 4: Share of MGNREGS Wages Paid Individually Over Time



*Notes:* This graphs the share of MGNREGS payments made to sampled women in individual accounts according to MGNREGS MIS data. A small number of payments cannot be classified as individual or joint; these are dropped from all estimates. Shaded bars indicate follow-up survey periods.

Figure 5: Treatment Effects by Above/Below Median GP-Level FLFP



*Notes:* In this figure, an individual is considered "constrained" if they reside in a GP with a female labor force participation rate below the median rate (among the sample GPs) according to the 2011 Indian Census. See Tables B15 and B16 for the full set of regressions. Whiskers give 90 and 95 percent confidence intervals on point estimates. Robust standard errors are clustered at the GP level. All regressions include controls for strata, district, and additional controls selected via double lasso.

## A Theoretical Appendix

In this section we show how a collective model of household bargaining with fixed norms costs can be represented by the reduced form presented in the main paper.

We assume a household consists of two members ( $i \in \{M, F\}$ ). Individual utility functions, norms costs, wages, and hours constraints are the same as those described in the main text. Further, each household receives non-labor income  $y$ . Finally, we assume that the wife's Pareto weight is given by  $\mu$ . This weight may be a function of wages, non-labor income, and "distribution factors" ( $z$ ), which affect the bargaining weight  $\mu$ , but do not otherwise enter the household utility maximization problem (Blundell et al., 2005).

The household's allocation problem is given by:

$$\begin{aligned}
 \max_{h_s^i, c^i} \quad & \mu(z) [u^F(1 - h_N^F - h_P^F, c^F) - \gamma^F 1(h_P^F + h_N^F > 0)] + \\
 & (1 - \mu(z)) [u^M(1 - h_N^M - h_P^M, c^M) - \gamma^M 1(h_P^M + h_N^M > 0)] \quad \text{subject to} \\
 & c^M + c^F \leq \sum_{i=M,F} \sum_{s=N,P} w_s^i h_s^i + y \\
 & h_s^i \geq 0 \\
 & h_N^i \leq \bar{N}_s^i
 \end{aligned} \tag{3}$$

Where  $1(\cdot)$  is the indicator function.

Now, assume no social constraints to female work:  $\gamma^F = \gamma^M = 0$ . In this case, the household problem can be represented in two stages. In the first stage, the household implements a sharing rule in which the wife receives a share of non-labor income given by  $\Phi^F(w_P^F, w_N^F, w_P^M, w_N^M, y, z)$ , while the husband receives share  $\Phi^M = y - \Phi^F$ .<sup>37</sup> In the second stage, each spouse maximizes his or her own individual utility subject to the budget constraint  $c^i \leq w_N^i h_N^i + w_P^i h_P^i + \Phi^i$  and the hours constraints. Proposition 1 in Chiappori (1992) provides a formal proof of the equivalence between these two problems – the key here is that preferences over consumption and leisure are separable, in that each spouse only cares about his/her own consumption and leisure. The first order conditions give the familiar result that if an individual works in sector  $j$  (and in the case of MGNREGS the hours constraint is not binding), his or her marginal rate of substitution between consumption and leisure is equal to the wage:  $u_c^i/u_l^i = w_j^i$ .

If  $\gamma^F > 0$  but  $\gamma^M = 0$ , the two-stage setup still delivers the same solution as program 3. However, in some cases a woman may be socially constrained, in that she does not work even though  $u_c^i/u_l^i < w_j^i$ .

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<sup>37</sup>An individual's income share can be negative or positive – the purpose of  $\Phi^i$  is to fix which point on the Pareto frontier the household ends up choosing.



Things look different when  $\gamma^M > 0$ , since women's preferences over consumption and leisure are no longer separable from men's. However, we can rewrite program 3 to satisfy separability. Specifically, let the wife's modified utility be:  $u^F(l^F, c^F) - \gamma^F - \frac{1-\mu}{\mu}\gamma^M$ . The husband's modified utility is  $u^M(l^M, c^M)$ . The bargaining power weighted objective function matches that of program 3, but the utility functions are separable.

This in turn implies that in the two stage problem, we can think of the wife behaving as if she maximizes  $u^F(l^F, c^F) - \gamma^F - \frac{1-\mu}{\mu}\gamma^M$ : she internalizes the norms costs borne to her husband, with more weight placed on this cost the lower her relative bargaining power. Further, this modified two-stage formulation corresponds to the reduced-form problem laid out in the main text.

## B Appendix Tables and Figures

Table B1: Balance on Attrition

	(1)	(2)	(3)	(4)	(5)	(6)
	Accounts Only Mean	Accounts + Direct Deposit	Accounts + Training	Accounts + Direct Deposit + Training	P-Value: Joint Test	N
<i>Panel A: Full Sample</i>						
Woman Interviewed at Midline	0.931	0.002	0.003	0.018	0.469	2666
Husband Interviewed at Midline	0.869	0.022	0.011	0.030	0.507	2666
Woman Interviewed at Endline	0.911	0.014	0.007	0.023	0.579	2666
Husband Interviewed at Endline	0.844	0.033	0.002	0.019	0.514	2666
<i>Panel B: Constrained Women</i>						
Woman Interviewed at Midline	0.916	0.016	-0.011	0.021	0.511	993
Husband Interviewed at Midline	0.877	0.026	-0.032	0.012	0.248	993
Woman Interviewed at Endline	0.877	0.057*	0.003	0.025	0.132	993
Husband Interviewed at Endline	0.824	0.052	-0.026	-0.024	0.058*	993
<i>Panel C: Unconstrained Women</i>						
Woman Interviewed at Midline	0.940	-0.012	0.009	0.014	0.488	1608
Husband Interviewed at Midline	0.869	0.015	0.023	0.034	0.538	1608
Woman Interviewed at Endline	0.930	-0.014	0.010	0.021	0.390	1608
Husband Interviewed at Endline	0.862	0.012	-0.001	0.033	0.642	1608

Notes: Each row is a separate regression. All regressions include district and strata fixed effects. The first column gives the mean among the Accounts Only group, columns 2-4 give regression coefficients. Robust standard errors clustered at the GP level are omitted from the table for legibility. Column 5 gives the p-value from a test that all treatment coefficients are jointly equal to zero. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . Sample is the union of individuals in midline and endline. Husbands were only interviewed at midline if their wives were interviewed.

Table B2: Balance on Predetermined Demographic Characteristics

	(1)	(2)	(3)	(4)	(5)	(6)
	Accounts Only Mean	Accounts + Direct Deposit	Accounts + Training	Accounts + Direct Deposit + Training	P-Value: Joint Test	N
<i>Panel A: Individual Characteristics of Eligible Women</i>						
Age	40.067	-0.517	0.099	-0.926	0.540	2407
Years Education	0.808	-0.042	-0.186	0.086	0.221	2332
Can Read or Write	0.106	0.003	-0.018	0.009	0.418	2391
Had No Children At Time of Baseline	0.021	-0.003	-0.004	-0.006	0.875	2388
Age Had First Child (Among Women With Kids at Baseline)	19.074	0.048	0.183	-0.258	0.187	2339
Ever Worked for MGNREGS Before Baseline (Unconstrained) <sup>†</sup>	0.641	-0.015	0.005	0.009	0.923	2407
Worked for MGNREGS in Past Year at Baseline <sup>†</sup>	0.161	0.020	0.022	0.046	0.598	2138
In MGNREGS MIS in Past Year <sup>+</sup>	0.518	-0.079	0.049	0.022	0.251	2308
<i>Panel B: Individual Characteristics of Husbands</i>						
Age	44.597	0.130	-0.046	-1.106	0.462	2359
Years Education	4.272	-0.306	-0.411	0.107	0.333	2338
Can Read or Write	0.564	-0.062	-0.055	-0.033	0.400	2289
Ever Worked for MGNREGS Before Baseline <sup>†</sup>	0.930	-0.018	-0.004	0.026**	0.006***	2407
Worked for MGNREGS in Past Year at Baseline <sup>†</sup>	0.317	0.020	-0.026	0.015	0.795	2070
In MGNREGS MIS in Past Year <sup>+</sup>	0.652	-0.100*	-0.029	-0.079	0.247	2149
<i>Panel C: Household/Couple Characteristics</i>						
Male-Female Age Gap	4.707	0.498	-0.151	-0.306	0.055*	2359
Male-Female Education Gap	3.508	-0.338	-0.200	-0.024	0.593	2269
Hindu	0.959	0.013	-0.013	0.023	0.130	2391
Scheduled Caste or Tribe	0.360	0.009	0.087	0.032	0.687	2276
Other Backward Caste	0.556	-0.015	-0.057	-0.020	0.893	2276
Number Household Members on Job Card <sup>†</sup>	3.947	-0.185	0.144	-0.022	0.651	2407
<i>Panel D: GP Characteristics</i>						
Number Eligible Women in GP	25.324	7.047	4.917	2.338	0.441	133
Total GP Population	2837.059	1228.640*	866.262*	255.411	0.169	133
Fraction GP Population Female	0.461	0.002	-0.000	0.005	0.492	133
Fraction GP Population SC/ST	0.274	-0.010	0.027	0.064	0.242	133
Fraction Female GP Population Literate	0.411	-0.006	-0.006	-0.008	0.974	133
Fraction Male GP Population Literate	0.651	-0.017	-0.005	-0.014	0.742	133
Female Workers / Female GP Population	0.277	0.004	0.019	0.040	0.571	133
Male Workers / Male GP Population	0.511	0.004	0.013	0.007	0.474	133

Notes: Each row is a separate regression. All regressions include district and strata fixed effects. Regressions in Panel D are at the GP level with robust standard errors; otherwise, regressions are at the individual level with standard errors clustered at the GP level. Standard errors are omitted from the table for legibility. The first column gives the mean among the Accounts Only group, columns 2-4 give regression coefficients. Column 5 gives the p-value from a test that all treatment coefficients are jointly equal to zero. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . Variables marked by <sup>†</sup> are from the baseline census, and variables marked by <sup>+</sup> are from the MIS data. All data in Panel D are from the Indian Census. Otherwise, data are from the short run survey. Data from the short run survey, such as age, are left as their original values.

Table B3: Impact of Treatments on Main Outcomes: Full Specification (Part 1)

	Short Run					Long Run				
	$\gamma_1$	$\gamma_2$	$\gamma_3$	$\theta$	N	$\gamma_1$	$\gamma_2$	$\gamma_3$	$\theta$	N
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Table 2: Women's Bank Use</i>										
Account Use Index	0.127**	-0.029	0.034	0.131*	2504	0.045	0.012	0.073	0.130**	2464
	(0.064)	(0.074)	(0.098)			(0.048)	(0.054)	(0.078)		
Constrained	0.214*	-0.017	0.011	0.207**	922	0.098	0.067	0.100	0.265***	903
	(0.110)	(0.119)	(0.152)			(0.086)	(0.086)	(0.123)		
Unconstrained	0.094	-0.022	0.030	0.102	1519	0.032	-0.012	0.027	0.047	1501
	(0.062)	(0.059)	(0.097)			(0.049)	(0.057)	(0.079)		
Banking Autonomy Index						0.134	0.012	0.044	0.190***	2464
						(0.085)	(0.071)	(0.115)		
Constrained						0.124	-0.029	0.170	0.266***	903
						(0.091)	(0.084)	(0.128)		
Unconstrained						0.099	-0.025	0.017	0.092	1501
						(0.099)	(0.081)	(0.129)		
CSP Knowledge Index						-0.046	-0.057	0.249*	0.145	2464
						(0.083)	(0.094)	(0.135)		
Constrained						0.103	-0.075	0.280	0.307**	903
						(0.116)	(0.122)	(0.176)		
Unconstrained						-0.119	-0.039	0.199	0.041	1501
						(0.080)	(0.095)	(0.135)		
<i>Table 3: Women's Labor Supply</i>										
Aggregate Labor Supply Index	0.043	0.033	0.089	0.165***	2504	0.039	-0.036	0.041	0.045	2464
	(0.044)	(0.040)	(0.059)			(0.056)	(0.049)	(0.074)		
Constrained	0.046	0.087*	0.080	0.213***	922	0.166**	0.033	-0.006	0.193***	903
	(0.052)	(0.047)	(0.072)			(0.072)	(0.065)	(0.094)		
Unconstrained	0.068	-0.001	0.084	0.150***	1519	-0.024	-0.084	0.071	-0.036	1501
	(0.056)	(0.056)	(0.075)			(0.068)	(0.056)	(0.086)		
MGNREGS Labor Supply Sub-Index	0.027	-0.072	0.231**	0.186***	2504	-0.013	-0.077	0.111	0.021	2464
	(0.068)	(0.059)	(0.094)			(0.125)	(0.078)	(0.134)		
Constrained	0.061	-0.032	0.234*	0.263**	922	0.017	-0.033	0.085	0.069	903
	(0.106)	(0.095)	(0.139)			(0.093)	(0.070)	(0.113)		
Unconstrained	0.037	-0.103*	0.233**	0.168**	1519	-0.038	-0.108	0.138	-0.008	1501
	(0.073)	(0.061)	(0.098)			(0.157)	(0.098)	(0.162)		
Private Labor Supply Sub-Index	0.048	0.101**	0.016	0.166***	2504	0.090	-0.012	-0.030	0.048	2464
	(0.049)	(0.048)	(0.070)			(0.057)	(0.065)	(0.089)		
Constrained	0.042	0.120*	0.063	0.226***	922	0.322***	0.103	-0.146	0.279***	903
	(0.062)	(0.064)	(0.092)			(0.097)	(0.101)	(0.136)		
Unconstrained	0.081	0.106	-0.034	0.153**	1519	-0.011	-0.089	0.006	-0.094	1501
	(0.066)	(0.071)	(0.093)			(0.060)	(0.063)	(0.092)		

This table reports the main regression results. Each row lists results both in the short run (columns 1-5, when applicable) and long run (columns 6-10) for each main outcome variable in the full sample. Sub-rows represent results for the same outcome variable for the constrained and unconstrained sub-samples.  $\gamma_1$  represents the effect of training (columns 1 and 6),  $\gamma_2$  the effect of direct deposit (columns 2 and 7), and  $\gamma_3$  the effect of both training and direct deposit (columns 3 and 8).  $\theta$  is the total treatment effect of direct deposit and training (columns 4 and 9). Columns 5 and 10 report the sample size. All regressions cluster robust standard errors at the GP level and include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.010$ .

Table B4: Impact of Treatments on Main Outcomes: Full Specification (Part 2)

	Short Run					Long Run				
	$\gamma_1$	$\gamma_2$	$\gamma_3$	$\theta$	N	$\gamma_1$	$\gamma_2$	$\gamma_3$	$\theta$	N
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Table 4: Empowerment</i>										
Aggregate Empowerment Index	0.003 (0.036)	0.011 (0.040)	0.027 (0.051)	0.041	2504	0.081* (0.042)	0.011 (0.030)	-0.060 (0.052)	0.032	2453
Constrained	0.069* (0.042)	0.033 (0.040)	-0.003 (0.057)	0.100***	922	0.162*** (0.052)	0.042 (0.041)	-0.060 (0.067)	0.144***	897
Unconstrained	-0.013 (0.047)	0.011 (0.050)	0.029 (0.069)	0.026	1519	0.056 (0.049)	0.004 (0.035)	-0.082 (0.060)	-0.022	1496
Purchase Index	-0.027 (0.049)	0.027 (0.062)	0.095 (0.075)	0.096*	2504	0.134 (0.084)	-0.028 (0.059)	-0.068 (0.101)	0.039	2453
Constrained	0.013 (0.060)	0.096 (0.072)	0.129 (0.089)	0.239***	922	0.220** (0.086)	0.071 (0.072)	-0.053 (0.110)	0.238***	897
Unconstrained	-0.064 (0.057)	-0.037 (0.069)	0.143 (0.091)	0.042	1519	0.108 (0.097)	-0.075 (0.067)	-0.092 (0.117)	-0.059	1496
Mobility in Past Year	0.046 (0.034)	0.014 (0.037)	-0.023 (0.047)	0.037	2504	0.047 (0.043)	-0.018 (0.043)	0.023 (0.054)	0.053	2464
Constrained	0.061 (0.047)	-0.001 (0.047)	-0.038 (0.070)	0.023	922	0.051 (0.055)	-0.021 (0.056)	0.086 (0.075)	0.115**	903
Unconstrained	0.046 (0.041)	0.024 (0.041)	-0.011 (0.055)	0.060	1519	0.041 (0.049)	-0.015 (0.049)	-0.027 (0.064)	-0.001	1501
Self-Reported Decision Making	-0.012 (0.061)	-0.005 (0.057)	-0.004 (0.081)	-0.021	2504	0.086* (0.048)	0.087* (0.044)	-0.153** (0.069)	0.019	2464
Constrained	0.107 (0.075)	0.010 (0.056)	-0.076 (0.093)	0.041	922	0.187** (0.079)	0.076 (0.073)	-0.200* (0.105)	0.062	903
Unconstrained	-0.050 (0.082)	-0.003 (0.077)	0.023 (0.111)	-0.030	1519	0.049 (0.060)	0.110** (0.055)	-0.165** (0.083)	-0.005	1501

This table reports the main regression results. Each row lists results both in the short run (columns 1-5, when applicable) and long run (columns 6-10) for each main outcome variable in the full sample. Sub-rows represent results for the same outcome variable for the constrained and unconstrained sub-samples.  $\gamma_1$  represents the effect of training (columns 1 and 6),  $\gamma_2$  the effect of direct deposit (columns 2 and 7), and  $\gamma_3$  the effect of both training and direct deposit (columns 3 and 8).  $\theta$  is the total treatment effect of direct deposit and training (columns 4 and 9). Columns 5 and 10 report the sample size. All regressions cluster robust standard errors at the GP level and include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.10$ .

Table B5: Impact of Treatments on Main Outcomes: Full Specification (Part 3)

	Long Run				N (5)
	$\gamma_1$ (1)	$\gamma_2$ (2)	$\gamma_3$ (3)	$\theta$ (4)	
<i>Table 5: Actual Norms, Female Report</i>					
Actual Norms Index	0.028 (0.042)	-0.010 (0.037)	0.093* (0.056)	0.110***	2464
Constrained	0.064 (0.058)	0.030 (0.057)	0.121 (0.087)	0.215***	903
Unconstrained	0.013 (0.050)	-0.035 (0.041)	0.072 (0.063)	0.050	1501
Personal Preferences	-0.014 (0.041)	-0.008 (0.044)	0.119* (0.066)	0.098**	2464
Constrained	0.057 (0.069)	-0.031 (0.071)	0.135 (0.108)	0.160**	903
Unconstrained	-0.063 (0.045)	-0.008 (0.045)	0.130* (0.072)	0.059	1501
Acceptance: Working Women	0.028 (0.054)	-0.030 (0.055)	0.092 (0.077)	0.091	2464
Constrained	0.051 (0.069)	-0.004 (0.078)	0.196* (0.109)	0.243***	903
Unconstrained	0.015 (0.073)	-0.048 (0.064)	0.040 (0.095)	0.007	1501
Acceptance: Husbands	0.002 (0.083)	-0.069 (0.059)	0.154 (0.103)	0.087	2464
Constrained	0.071 (0.092)	0.075 (0.081)	0.064 (0.121)	0.210***	903
Unconstrained	-0.023 (0.102)	-0.150** (0.068)	0.192 (0.122)	0.019	1501
<i>Table 5: Actual Norms, Male Report</i>					
Actual Norms Index	-0.037 (0.043)	-0.030 (0.038)	0.056 (0.057)	-0.011	2293
Constrained	-0.102 (0.079)	-0.027 (0.083)	0.092 (0.104)	-0.036	837
Unconstrained	0.031 (0.047)	-0.035 (0.042)	0.003 (0.062)	-0.001	1403
Personal Preferences	-0.022 (0.076)	-0.068 (0.070)	0.032 (0.103)	-0.059	2293
Constrained	-0.034 (0.111)	0.082 (0.111)	-0.036 (0.137)	0.012	837
Unconstrained	0.008 (0.054)	-0.152** (0.052)	0.061 (0.074)	-0.083	1403
Acceptance: Working Women	-0.037 (0.048)	-0.013 (0.047)	0.065 (0.068)	0.015	2293
Constrained	-0.103 (0.088)	-0.059 (0.087)	0.143 (0.120)	-0.020	837
Unconstrained	-0.004 (0.062)	0.020 (0.060)	0.024 (0.086)	0.040	1403
Acceptance: Husbands	-0.070 (0.052)	-0.070 (0.045)	0.116* (0.068)	-0.024	2293
Constrained	-0.167* (0.098)	-0.103 (0.101)	0.171 (0.128)	-0.099	837
Unconstrained	0.002 (0.054)	-0.043 (0.052)	0.034 (0.074)	-0.007	1403

This table reports the main regression results. Each row lists results both in the long run for each main outcome variable in the full sample. Sub-rows represent results for the same outcome variable for the constrained and unconstrained sub-samples.  $\gamma_1$  represents the effect of training (column 1),  $\gamma_2$  the effect of direct deposit (column 2), and  $\gamma_3$  the effect of both training and direct deposit (column 3).  $\theta$  is the total treatment effect of direct deposit and training (column 4). Column 5 report the sample size. All regressions cluster robust standard errors at the GP level and include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ .

Table B6: Impact of Treatments on Main Outcomes: Full Specification (Part 4)

	Long Run				
	$\gamma_1$	$\gamma_2$	$\gamma_3$	$\theta$	N
	(1)	(2)	(3)	(4)	(5)
<i>Table 6: Perceived Norms, Female Report</i>					
Perceived Norms Index	0.028 (0.049)	-0.032 (0.038)	0.066 (0.064)	0.062	2464
Constrained	0.083 (0.068)	-0.010 (0.073)	0.042 (0.097)	0.116*	903
Unconstrained	-0.009 (0.061)	-0.053 (0.040)	0.070 (0.073)	0.007	1501
Perceived Norms: Acceptance Working Women	0.068 (0.047)	-0.034 (0.043)	0.045 (0.063)	0.079**	2464
Constrained	0.118 (0.078)	-0.014 (0.079)	-0.008 (0.105)	0.096	903
Unconstrained	0.039 (0.057)	-0.052 (0.050)	0.065 (0.073)	0.052	1501
Perceived Norms: Acceptance Husbands	-0.002 (0.057)	-0.015 (0.040)	0.068 (0.073)	0.050	2464
Constrained	0.075 (0.071)	0.039 (0.073)	0.037 (0.100)	0.152*	903
Unconstrained	-0.058 (0.075)	-0.054 (0.046)	0.074 (0.090)	-0.037	1501
<i>Table 6: Perceived Norms, Male Report</i>					
Perceived Norms Index	0.052 (0.040)	0.019 (0.044)	0.017 (0.062)	0.087**	2292
Constrained	0.011 (0.076)	0.036 (0.070)	0.055 (0.099)	0.102	836
Unconstrained	0.132*** (0.044)	0.049 (0.047)	-0.066 (0.064)	0.115**	1403
Perceived Norms: Acceptance Working Women	0.039 (0.049)	0.005 (0.057)	0.018 (0.078)	0.062	2292
Constrained	-0.032 (0.092)	0.006 (0.084)	0.057 (0.121)	0.030	836
Unconstrained	0.083 (0.061)	0.004 (0.066)	0.003 (0.092)	0.090	1403
Perceived Norms: Acceptance Husbands	0.065 (0.049)	0.033 (0.048)	0.015 (0.065)	0.113**	2292
Constrained	0.054 (0.085)	0.066 (0.075)	0.053 (0.106)	0.174**	836
Unconstrained	0.147*** (0.052)	0.066 (0.052)	-0.092 (0.070)	0.121**	1403

This table reports the main regression results. Each row lists results both in the long run for each main outcome variable in the full sample. Sub-rows represent results for the same outcome variable for the constrained and unconstrained sub-samples.  $\gamma_1$  represents the effect of training (column 1),  $\gamma_2$  the effect of direct deposit (column 2), and  $\gamma_3$  the effect of both training and direct deposit (column 3).  $\theta$  is the total treatment effect of direct deposit and training (column 4). Column 5 report the sample size. All regressions cluster robust standard errors at the GP level and include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ .

Table B7: Balance on Predetermined Demographic Characteristics - Unconstrained Sample

	(1)	(2)	(3)	(4)	(5)	(6)
	Accounts Only Mean	Accounts + Direct Deposit	Accounts + Training	Accounts + Direct Deposit + Training	P-Value: Joint Test	N
<i>Panel A: Individual Characteristics of Eligible Women</i>						
Age	41.255	-0.494	-0.413	-1.126	0.746	1472
Years Education	0.649	-0.091	-0.097	0.093	0.484	1424
Can Read or Write	0.080	0.001	0.003	0.000	0.998	1462
Had No Children At Time of Baseline	0.017	-0.007	-0.005	-0.006	0.649	1462
Age Had First Child (Among Women With Kids at Baseline)	19.126	-0.036	0.021	-0.484**	0.085*	1442
In MGNREGS MIS in Past Year <sup>+</sup>	0.558	-0.101	0.029	-0.050	0.403	1417
Worked for MGNREGS in Past Year at Baseline <sup>†</sup>	0.250	0.044	0.041	0.076	0.561	1305
<i>Panel B: Individual Characteristics of Husbands</i>						
Age	45.866	0.114	-0.974	-1.255	0.358	1441
Years Education	3.951	-0.564	-0.699*	-0.242	0.258	1429
Can Read or Write	0.554	-0.097**	-0.105**	-0.086*	0.049**	1394
In MGNREGS MIS in Past Year <sup>+</sup>	0.664	-0.102*	-0.023	-0.102*	0.209	1325
Ever Worked for MGNREGS Before Baseline <sup>†</sup>	0.926	-0.027	0.003	0.027*	0.049**	1472
Worked for MGNREGS in Past Year at Baseline <sup>†</sup>	0.295	0.027	0.004	0.042	0.838	1314
<i>Panel C: Household/Couple Characteristics</i>						
Male-Female Age Gap	4.886	0.342	-0.568	-0.349	0.147	1441
Male-Female Education Gap	3.311	-0.542	-0.526	-0.357	0.422	1384
Hindu	0.972	0.011	-0.026	0.007	0.403	1464
Scheduled Caste or Tribe	0.370	0.046	0.102	0.025	0.674	1371
Other Backward Caste	0.569	-0.040	-0.103	-0.025	0.575	1371
Number Household Members on Job Card <sup>†</sup>	4.074	-0.358	0.082	-0.113	0.425	1472
<i>Panel D: GP Characteristics</i>						
Number Eligible Women in GP	26.000	7.110	4.637	2.947	0.474	129
Total GP Population	2883.394	1196.056*	811.583	254.732	0.218	129
Fraction GP Population Female	0.463	0.000	-0.001	0.005	0.542	129
Fraction GP Population SC/ST	0.282	-0.012	0.020	0.062	0.302	129
Fraction Female GP Population Literate	0.409	-0.006	-0.006	-0.002	0.986	129
Fraction Male GP Population Literate	0.648	-0.016	-0.005	-0.010	0.804	129
Female Workers / Female GP Population	0.283	-0.004	0.014	0.046	0.387	129
Male Workers / Male GP Population	0.511	0.005	0.013	0.006	0.540	129

Notes: Each row is a separate regression. All regressions include district and strata fixed effects. Regressions in Panel D are at the GP level with robust standard errors; otherwise, regressions are at the individual level with standard errors clustered at the GP level. Standard errors are omitted from the table for legibility. The first column gives the mean among the Accounts Only group, columns 2-4 give regression coefficients. Column 5 gives the p-value from a test that all treatment coefficients are jointly equal to zero. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . Variables marked by <sup>†</sup> are from the baseline census, and variables marked by <sup>+</sup> are from the MIS data. All data in Panel D are from the Indian Census. Otherwise, data are from the short run survey. Data from the short run survey, such as age, are left as their original values. Sample restricted to women who reported having done NREGA work at baseline.



Table B8: Balance on Predetermined Demographic Characteristics - Constrained Sample

	(1)	(2)	(3)	(4)	(5)	(6)
	Accounts Only Mean	Accounts + Direct Deposit	Accounts + Training	Accounts + Direct Deposit + Training	P-Value: Joint Test	N
<i>Panel A: Individual Characteristics of Eligible Women</i>						
Age	37.806	-0.072	1.926	-0.161	0.265	877
Years Education	1.070	0.138	-0.301	0.152	0.321	853
Can Read or Write	0.147	0.024	-0.045	0.041	0.122	871
Had No Children At Time of Baseline	0.026	0.006	0.002	-0.004	0.903	870
Age Had First Child (Among Women With Kids at Baseline)	18.978	0.227	0.546*	0.166	0.284	845
In MGNREGS MIS in Past Year <sup>+</sup>	0.478	-0.028	0.117	0.130*	0.095*	833
<i>Panel B: Individual Characteristics of Husbands</i>						
Age	42.144	0.621	2.192*	-0.438	0.224	865
Years Education	4.947	0.028	0.046	0.696	0.274	856
Can Read or Write	0.587	-0.008	0.036	0.065	0.365	845
In MGNREGS MIS in Past Year <sup>+</sup>	0.667	-0.087	-0.006	-0.040	0.612	772
Ever Worked for MGNREGS Before Baseline <sup>†</sup>	1.000	0.000	0.000	0.000	.	877
Worked for MGNREGS in Past Year at Baseline <sup>†</sup>	0.359	0.008	-0.069	-0.034	0.691	756
<i>Panel C: Household/Couple Characteristics</i>						
Male-Female Age Gap	4.479	0.639	0.164	-0.294	0.203	865
Male-Female Education Gap	3.907	-0.140	0.356	0.480	0.313	835
Hindu	0.942	0.007	0.003	0.039	0.170	870
Scheduled Caste or Tribe	0.332	-0.051	0.059	0.036	0.462	852
Other Backward Caste	0.543	0.037	0.020	0.009	0.974	852
Number Household Members on Job Card <sup>†</sup>	3.691	0.098	0.277	0.120	0.889	877
<i>Panel D: GP Characteristics</i>						
Number Eligible Women in GP	26.438	7.706	6.445	3.087	0.374	124
Total GP Population	2875.813	1242.852*	931.687*	259.117	0.195	124
Fraction GP Population Female	0.462	0.001	0.001	0.005	0.688	124
Fraction GP Population SC/ST	0.278	-0.028	0.027	0.058	0.143	124
Fraction Female GP Population Literate	0.413	-0.009	-0.008	-0.009	0.962	124
Fraction Male GP Population Literate	0.654	-0.026	-0.004	-0.018	0.440	124
Female Workers / Female GP Population	0.272	0.011	0.037	0.041	0.553	124
Male Workers / Male GP Population	0.510	0.007	0.016*	0.008	0.365	124

Notes: Each row is a separate regression. All regressions include district and strata fixed effects. Regressions in Panel D are at the GP level with robust standard errors; otherwise, regressions are at the individual level with standard errors clustered at the GP level. Standard errors are omitted from the table for legibility. The first column gives the mean among the Accounts Only group, columns 2-4 give regression coefficients. Column 5 gives the p-value from a test that all treatment coefficients are jointly equal to zero. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . Variables marked by <sup>†</sup> are from the baseline census, and variables marked by <sup>+</sup> are from the MIS data. All data in Panel D are from the Indian Census. Otherwise, data are from the short run survey. Data from the short run survey, such as age, are left as their original values. Sample restricted to women who reported not having done NREGA work at baseline.

Table B9: Predictors of Living in a Low FLFP Village

	(1) High FLFP Mean	(2) Low FLFP Mean	(3) Difference Low-High	(4) N
<i>Panel A: Characteristics of Women</i>				
Age <sup>†</sup>	39.432	39.951	0.519 (0.705)	1738
Years Education <sup>+</sup>	0.683	0.692	0.009 (0.130)	1683
Age Had First Child (Among Women With Kids at Baseline) <sup>+</sup>	19.004	19.333	0.328 (0.201)	1631
Has Individual Bank Account	0.565	0.532	-0.032 (0.043)	1654
Ever Worked for MGNREGS Before Baseline <sup>‡</sup>	0.274	0.468	0.194*** (0.057)	1699
If Worked for Pay in Last Year	0.812	0.786	-0.026 (0.031)	1654
Earnings Last Month	866.922	679.264	-187.658 (124.650)	1630
Private Labor Index	0.013	-0.018	-0.031 (0.072)	1654
MGNREGS Labor Index	-0.131	-0.046	0.085 (0.085)	1654
Empowerment Index	0.038	0.042	0.004 (0.033)	1644
Actual Norms Index	-0.051	-0.124	-0.073** (0.031)	1654
Perceived Norms Index: Acceptance Working Women	-0.013	-0.113	-0.100* (0.050)	1652
Perceived Norms Index: Acceptance Husbands	-0.039	-0.083	-0.044 (0.051)	1652
<i>Panel B: Characteristics of Husbands</i>				
Age <sup>†</sup>	43.841	45.089	1.248 (0.988)	1694
Years Education <sup>+</sup>	3.771	4.110	0.339 (0.443)	1688
Has Individual Bank Account	0.829	0.837	0.008 (0.030)	1521
If Worked for Pay in Last Year	0.990	0.994	0.003 (0.005)	1521
Earnings Last Month	1325.313	1790.540	465.227*** (165.303)	1503
Private Labor Index	0.565	0.794	0.229*** (0.049)	1521
MGNREGS Labor Index	0.141	0.097	-0.044 (0.127)	1521
Actual Norms Index	-0.008	0.083	0.091** (0.036)	1521
Perceived Norms Index: Acceptance Working Women	-0.106	-0.154	-0.048 (0.054)	1521
Perceived Norms Index: Acceptance Husbands	-0.322	-0.352	-0.030 (0.052)	1521
<i>Panel C: Household Characteristics</i>				
Other Backwards Caste <sup>+</sup>	0.525	0.446	-0.079 (0.080)	1614
Scheduled Caste/Scheduled Tribe <sup>+</sup>	0.418	0.488	0.070 (0.085)	1614
Household Income Last Month (Male Report)	4960.051	5369.025	408.974 (465.945)	1518
DHS Work Index (Residualized) <sup>‡</sup>	0.040	-0.049	-0.089*** (0.032)	1522
DHS Work Index (Unresidualized) <sup>‡</sup>	0.060	-0.046	-0.105*** (0.039)	1522

Notes: Standard errors clustered at the GP level in parentheses. Sample limited to control group. The mean of the constrained indicator for this sample is 0.320. <sup>+</sup>Outcomes are from short run survey; otherwise, outcomes are from long run survey. Data from short run survey, such as age, are left as their original values. <sup>†</sup>Index constructed using the Indian Demographic and Health Survey V (2005-2006) and merged onto our sample at the subcaste level. The residualized index residualizes out female education, husband education, and the DHS wealth index within the DHS data. See Online Data Appendix for more details. Variables measured in INR topcoded at the 99th percentile. The exchange rate was approximately INR 64 per USD in 2015 and INR 65 per USD in 2017. The first two columns show the means among unconstrained and constrained women. The third column shows the regression coefficient on an indicator variable for being constrained. \* p ≤ 0.10, \*\* p ≤ 0.05, \*\*\* p ≤ 0.01.

Table B10: Impact of Treatments on Receipt of MGNREGS Payments in Individual Accounts

	May 1, 2015 - April 30, 2018		May 1, 2015 - Nov. 30, 2017			
	Bank Admin Data <sup>+</sup>		Bank Admin Data <sup>+</sup>		MGNREGS Admin Data	
	Any Payment: Project Account	Value Payments: Project Account	Any Payment: Project Account	Value Payments: Project Account	Any Payment: Individual Account	Value Payments: Individual Account
	(1)	(2)	(3)	(4)	(5)	(6)
$\theta$ : Direct Deposit and Training	0.261*** (0.046)	2175.894*** (483.149)	0.277*** (0.042)	2004.488*** (443.212)	0.230*** (0.032)	1181.774*** (235.112)
$\gamma_1$ : Training	-0.027 (0.045)	-140.666 (463.677)	-0.021 (0.041)	-256.439 (389.977)	-0.006 (0.022)	5.249 (166.450)
$\gamma_2$ : Direct Deposit	0.099** (0.047)	724.119* (418.066)	0.107*** (0.039)	472.592 (347.701)	0.126*** (0.034)	596.901*** (226.535)
$\gamma_3$ : Direct Deposit $\times$ Training	0.189** (0.074)	1592.441** (686.840)	0.191*** (0.064)	1788.334*** (564.893)	0.109** (0.047)	579.624* (339.762)
Accts Only Mean	0.135	968.955	0.106	807.369	0.053	282.351
N	1993	1993	1993	1993	2440	2440

<sup>+</sup>Sample limited to GPs served by banking partner providing administrative data.  
The exchange rate was approximately INR 64 per USD in 2015 and INR 65 per USD in 2017.

Table B11: Impact of Treatments on Gender-Based Violence and Mental Health

	Freedom from Gender-based Violence Index		Mental Health Index	
	Short-Run (1)	Long-Run (2)	Short-Run (3)	Long-Run (4)
<i>Panel A: Full sample</i>				
$\theta$ : Direct Deposit and Training	-0.007 (0.039)	0.050 (0.033)	-0.005 (0.042)	-0.081* (0.048)
Accts Only Mean	0.000	-0.000	0.000	0.000
N	2504	2463	2501	2460
<i>Panel B: Constrained Women</i>				
$\theta$ : Direct Deposit and Training	0.067 (0.058)	-0.004 (0.058)	0.055 (0.059)	-0.115 (0.072)
Accts Only Mean	-0.046	-0.000	-0.005	-0.012
N	922	903	922	902
<i>Panel C: Unconstrained Women</i>				
$\theta$ : Direct Deposit and Training	-0.038 (0.050)	0.077* (0.040)	-0.050 (0.054)	-0.053 (0.060)
Accts Only Mean	0.024	0.002	0.011	0.008
N	1519	1500	1516	1498
P-value: Panel B $\theta$ = Panel C $\theta$	0.162	0.232	0.164	0.490

*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . The aggregate freedom from gender-based violence index is an average of the freedom from physical violence, autonomy, and freedom from emotional abuse sub-indices. All sub-index components are standardized with respect to the Accounts Basic group. The freedom from physical violence index includes indicators for if the respondent has not experienced each of the following in the past year: pull hair/punch/kick you, push/slap you, and physically force you to have sexual intercourse when you do not want to. The autonomy index includes if the respondent reports her husband is never jealous or angry if she talks to other men, never prevents her from meeting her female friends, never tries to limit contact with family members, and never insists on knowing where wife is at all times. The freedom from emotional abuse index includes indicators for if the respondent has not experienced each of the following in the past year: humiliated in front of others, received threats/harm to self or others respondent cares about, and been insulted. The aggregate mental health index is an average of the freedom from depression and anxiety sub-indices. The freedom from depression index includes indicators for if the respondent experienced the following (sometimes, a little, or not at all) in the past 30 days: feeling hopeless, worthless, depressed, and that everything was an effort. The freedom from anxiety index includes indicators for if the respondent experienced the following (sometimes, a little, or not at all) in the past 30 days: feeling nervous and restless/fidgety. See Online Data Appendix for further details on variable construction.

Table B12: Robustness of Mental Health in the Long-Run Survey: Setting a Higher Bar for Mental Health

	Original Index	Less Than Some Depression/ Anxiety	No Depression/ Anxiety
	(1)	(2)	(3)
<i>Panel A: Full sample</i>			
$\theta$ : Direct Deposit and Training	-0.081* (0.048)	-0.055 (0.045)	0.025 (0.049)
Accts Only Mean	0.000	0.000	-0.000
N	2460	2460	2460
<i>Panel B: Constrained Women</i>			
$\theta$ : Direct Deposit and Training	-0.115 (0.072)	-0.061 (0.080)	-0.017 (0.083)
Accts Only Mean	-0.012	-0.032	-0.010
N	902	902	902
<i>Panel C: Unconstrained Women</i>			
$\theta$ : Direct Deposit and Training	-0.053 (0.060)	-0.043 (0.057)	0.051 (0.054)
Accts Only Mean	0.008	0.018	0.006
N	1498	1498	1498
P-value: Panel B $\theta$ = Panel C $\theta$	0.490	0.844	0.455

*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.10$ .

Table B13: Balance on Predetermined Demographic Characteristics: High FLFP (Unconstrained) GP's

	(1)	(2)	(3)	(4)	(5)	(6)
	Accounts Only Mean	Accounts + Direct Deposit	Accounts + Training	Accounts + Direct Deposit + Training	P-Value: Joint Test	N
<i>Panel A: Individual Characteristics of Eligible Women</i>						
Age	39.151	-0.016	0.149	0.684	0.936	1176
Years Education	0.819	0.236	-0.030	0.192	0.275	1134
Can Read or Write	0.095	0.039	0.011	0.015	0.433	1168
Had No Children At Time of Baseline	0.022	-0.007	-0.006	-0.018*	0.388	1166
Age Had First Child (Among Women With Kids at Baseline)	18.776	0.191	0.421*	-0.096	0.146	1142
Ever Worked for MGNREGS Before Baseline (Unconstrained) <sup>†</sup>	0.722	-0.008	0.088*	0.038	0.196	1176
Worked for MGNREGS in Past Year at Baseline <sup>†</sup>	0.178	0.075	0.110*	0.098*	0.244	1057
In MGNREGS MIS in Past Year <sup>+</sup>	0.513	-0.031	0.144*	-0.050	0.112	1130
<i>Panel B: Individual Characteristics of Husbands</i>						
Age	43.308	0.647	0.428	0.303	0.926	1159
Years Education	3.974	0.255	-0.363	0.462	0.319	1151
Can Read or Write	0.532	-0.025	-0.058	-0.035	0.715	1124
Ever Worked for MGNREGS Before Baseline <sup>†</sup>	0.940	-0.015	-0.025	0.004	0.163	1176
Worked for MGNREGS in Past Year at Baseline <sup>†</sup>	0.315	0.050	0.013	0.050	0.804	1037
In MGNREGS MIS in Past Year <sup>+</sup>	0.637	-0.061	0.034	-0.102	0.324	1065
<i>Panel C: Household/Couple Characteristics</i>						
Male-Female Age Gap	4.412	0.332	0.060	-0.521	0.167	1159
Male-Female Education Gap	3.255	-0.180	-0.350	0.121	0.791	1112
Hindu	0.968	0.010	0.023	0.019	0.513	1168
Scheduled Caste or Tribe	0.387	-0.039	0.199*	-0.025	0.087*	1108
Other Backward Caste	0.551	0.064	-0.202**	-0.016	0.018**	1108
Number Household Members on Job Card <sup>†</sup>	3.953	-0.219	0.298	-0.152	0.720	1176
<i>Panel D: GP Characteristics</i>						
Number Eligible Women in GP	31.933	4.341	3.925	1.665	0.970	52
Total GP Population	2618.067	131.637	145.451	-470.748	0.582	52
Fraction GP Population Female	0.468	-0.007	0.001	0.000	0.505	52
Fraction GP Population SC/ST	0.340	0.010	0.070	0.070	0.646	52
Fraction Female GP Population Literate	0.377	0.006	-0.024	-0.000	0.633	52
Fraction Male GP Population Literate	0.619	0.014	-0.027	0.006	0.793	52
Female Workers / Female GP Population	0.428	0.011	0.028	0.038	0.522	52
Male Workers / Male GP Population	0.535	-0.009	-0.002	0.008	0.670	52

Notes: Each row is a separate regression. All regressions include district and strata fixed effects. Regressions in Panel D are at the GP level with robust standard errors; otherwise, regressions are at the individual level with standard errors clustered at the GP level. Standard errors are omitted from the table for legibility. The first column gives the mean among the Accounts Only group, columns 2-4 give regression coefficients. Column 5 gives the p-value from a test that all treatment coefficients are jointly equal to zero. \* p $\leq$  0.10, \*\* p $\leq$  0.05, \*\*\* p $\leq$  0.01. Variables marked by <sup>†</sup> are from the baseline census, and variables marked by <sup>+</sup> are from the MIS data. All data in Panel D are from the Indian Census. Otherwise, data are from the short run survey. Data from the short run survey, such as age, are left as their original values. GP-level female labor force participation (FLFP) comes from the 2011 Indian Census. GP's are considered constrained if the female labor force participation rate is below the median (among the sample GPs) according to the 2011 Indian Census.

Table B14: Balance on Predetermined Demographic Characteristics: Low FLFP (Constrained) GP's

	(1)	(2)	(3)	(4)	(5)	(6)
	Accounts Only Mean	Accounts + Direct Deposit	Accounts + Training	Accounts + Direct Deposit + Training	P-Value: Joint Test	N
<i>Panel A: Individual Characteristics of Eligible Women</i>						
Age	41.223	-1.159	-0.374	-2.039*	0.284	1231
Years Education	0.795	-0.126	-0.292	-0.054	0.417	1198
Can Read or Write	0.121	-0.003	-0.028	0.000	0.530	1223
Had No Children At Time of Baseline	0.020	-0.004	-0.005	-0.006	0.955	1222
Age Had First Child (Among Women With Kids at Baseline)	19.449	0.144	0.077	-0.231	0.570	1197
Ever Worked for MGNREGS Before Baseline (Unconstrained) <sup>†</sup>	0.538	0.025	-0.028	-0.024	0.738	1231
Worked for MGNREGS in Past Year at Baseline <sup>†</sup>	0.138	-0.012	-0.044	-0.003	0.699	1081
In MGNREGS MIS in Past Year <sup>+</sup>	0.525	-0.049	-0.022	0.189*	0.077*	1178
<i>Panel B: Individual Characteristics of Husbands</i>						
Age	46.245	-0.592	-0.701	-1.854*	0.362	1200
Years Education	4.655	-0.819	-0.546	-0.409	0.443	1187
Can Read or Write	0.607	-0.102*	-0.071	-0.060	0.416	1165
Ever Worked for MGNREGS Before Baseline <sup>†</sup>	0.916	-0.014	0.014	0.045***	0.005***	1231
Worked for MGNREGS in Past Year at Baseline <sup>†</sup>	0.319	0.023	-0.079	-0.020	0.513	1033
In MGNREGS MIS in Past Year <sup>+</sup>	0.671	-0.060	-0.038	0.048	0.559	1084
<i>Panel C: Household/Couple Characteristics</i>						
Male-Female Age Gap	5.083	0.605	-0.041	0.244	0.377	1200
Male-Female Education Gap	3.828	-0.642	-0.144	-0.290	0.504	1157
Hindu	0.948	-0.003	-0.043	0.004	0.592	1223
Scheduled Caste or Tribe	0.326	0.095	0.081	0.075	0.738	1168
Other Backward Caste	0.564	-0.112	-0.015	-0.019	0.544	1168
Number Household Members on Job Card <sup>†</sup>	3.940	-0.163	0.098	0.034	0.854	1231
<i>Panel D: GP Characteristics</i>						
Number Eligible Women in GP	20.105	10.761**	6.622	0.541	0.108	81
Total GP Population	3009.947	1593.017	1374.232*	786.774	0.273	81
Fraction GP Population Female	0.456	0.008	0.003	0.010**	0.227	81
Fraction GP Population SC/ST	0.222	0.001	0.053	0.060	0.267	81
Fraction Female GP Population Literate	0.438	-0.007	-0.002	-0.001	0.993	81
Fraction Male GP Population Literate	0.675	-0.030	-0.003	-0.021	0.333	81
Female Workers / Female GP Population	0.157	0.016	0.017	0.033	0.801	81
Male Workers / Male GP Population	0.491	0.014*	0.022**	0.011	0.107	81

Notes: Each row is a separate regression. All regressions include district and strata fixed effects. Regressions in Panel D are at the GP level with robust standard errors; otherwise, regressions are at the individual level with standard errors clustered at the GP level. Standard errors are omitted from the table for legibility. The first column gives the mean among the Accounts Only group, columns 2-4 give regression coefficients. Column 5 gives the p-value from a test that all treatment coefficients are jointly equal to zero. \* p $\leq$  0.10, \*\* p $\leq$  0.05, \*\*\* p $\leq$  0.01. Variables marked by <sup>†</sup> are from the baseline census, and variables marked by <sup>+</sup> are from the MIS data. All data in Panel D are from the Indian Census. Otherwise, data are from the short run survey. Data from the short run survey, such as age, are left as their original values. GP-level female labor force participation (FLFP) comes from the 2011 Indian Census. GP's are considered constrained if the female labor force participation rate is below the median (among the sample GPs) according to the 2011 Indian Census.

Table B15: Impact of Treatments on Main Outcomes: High/Low Village-level FLFP from 2011 Census (Part 1)

	Short Run			Long Run		
	Constrained (1)	Unconstrained (2)	P-value (3)	Constrained (4)	Unconstrained (5)	P-value (6)
<i>Table 2: Women's Bank Use</i>						
Account Use Index	0.291*** (0.110)	0.109 (0.067)	0.158	0.300*** (0.081)	0.060 (0.067)	0.023**
Banking Autonomy Index				0.465*** (0.081)	0.006 (0.072)	0.000***
CSP Knowledge Index				0.486*** (0.167)	-0.016 (0.097)	0.010***
<i>Table 3: Women's Labor Supply</i>						
Aggregate Labor Supply Index	0.151** (0.062)	0.164** (0.067)	0.890	0.178*** (0.066)	-0.090 (0.080)	0.010***
MGNREGS Labor Supply Sub-Index	0.129 (0.135)	0.182** (0.077)	0.733	0.047 (0.092)	-0.119 (0.151)	0.347
Private Labor Supply Sub-Index	0.192** (0.080)	0.147 (0.090)	0.711	0.240** (0.097)	-0.126 (0.082)	0.004***
<i>Table 4: Empowerment</i>						
Aggregate Empowerment Index	0.031 (0.042)	0.074 (0.047)	0.488	0.083 (0.053)	0.009 (0.062)	0.366
Purchase Index	0.086 (0.073)	0.075 (0.055)	0.908	0.158* (0.094)	0.013 (0.095)	0.280
Mobility in Past Year	0.024 (0.046)	0.047 (0.062)	0.767	0.008 (0.044)	0.012 (0.065)	0.964
Self-Reported Decision Making	-0.017 (0.061)	0.091 (0.099)	0.354	0.075 (0.071)	-0.025 (0.071)	0.320

In this table, an individual is considered constrained if they reside in a village with a female labor force participation rate below the median rate (among the sample villages) according to the 2011 Indian Census. Each cell in columns 1-2 and 4-5 represent the total treatment effect of direct deposit and training ( $\theta$ ) from a different regression. All regressions cluster robust standard errors at the GP level and include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . The outcome variables, listed in the left margin, are the same outcomes variables used in the main table as indicated.



Table B16: Impact of Treatments on Main Outcomes: High/Low Village-level FLFP from 2011 Census (Part 2)

	Long Run		
	Constrained (1)	Unconstrained (2)	P-value (3)
<i>Table 5: Actual Norms</i>			
Actual Norms Index (Female Report)	0.133*** (0.048)	0.059 (0.075)	0.408
Personal Preferences (Female Report)	0.088* (0.050)	0.048 (0.074)	0.652
Acceptance: Working Women (Female Report)	0.164** (0.067)	0.018 (0.120)	0.294
Acceptance: Husbands (Female Report)	0.146* (0.075)	0.113 (0.085)	0.774
Actual Norms Index (Male Report)	0.020 (0.084)	-0.004 (0.037)	0.795
Personal Preferences (Male Report)	-0.047 (0.122)	-0.033 (0.095)	0.925
Acceptance: Working Women (Male Report)	0.033 (0.080)	0.062 (0.060)	0.771
Acceptance: Husbands (Male Report)	0.073 (0.102)	-0.073 (0.052)	0.203
<i>Table 6: Perceived Norms</i>			
Perceived Norms Index (Female Report)	0.071 (0.057)	0.043 (0.048)	0.704
Perceived Acceptance: Working Women (Female Report)	0.112* (0.064)	0.037 (0.053)	0.364
Perceived Acceptance: Husbands (Female Report)	0.049 (0.063)	0.040 (0.063)	0.924
Perceived Norms Index (Male Report)	0.169** (0.079)	0.048 (0.066)	0.242
Perceived Acceptance: Working Women (Male Report)	0.116 (0.088)	0.061 (0.081)	0.643
Perceived Acceptance: Husbands (Male Report)	0.224** (0.087)	0.035 (0.081)	0.116

In this table, an individual is considered constrained if they reside in a village with a female labor force participation rate below the median rate (among the sample villages) according to the 2011 Indian Census. Each cell in columns 1-2 represent the total treatment effect of direct deposit and training ( $\theta$ ) from a different regression. All regressions cluster robust standard errors at the GP level and include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.10$ . The outcome variables, listed in the left margin, are the same outcomes variables used in the main table as indicated.

Table B17: Impact of Treatments on Daily Wages

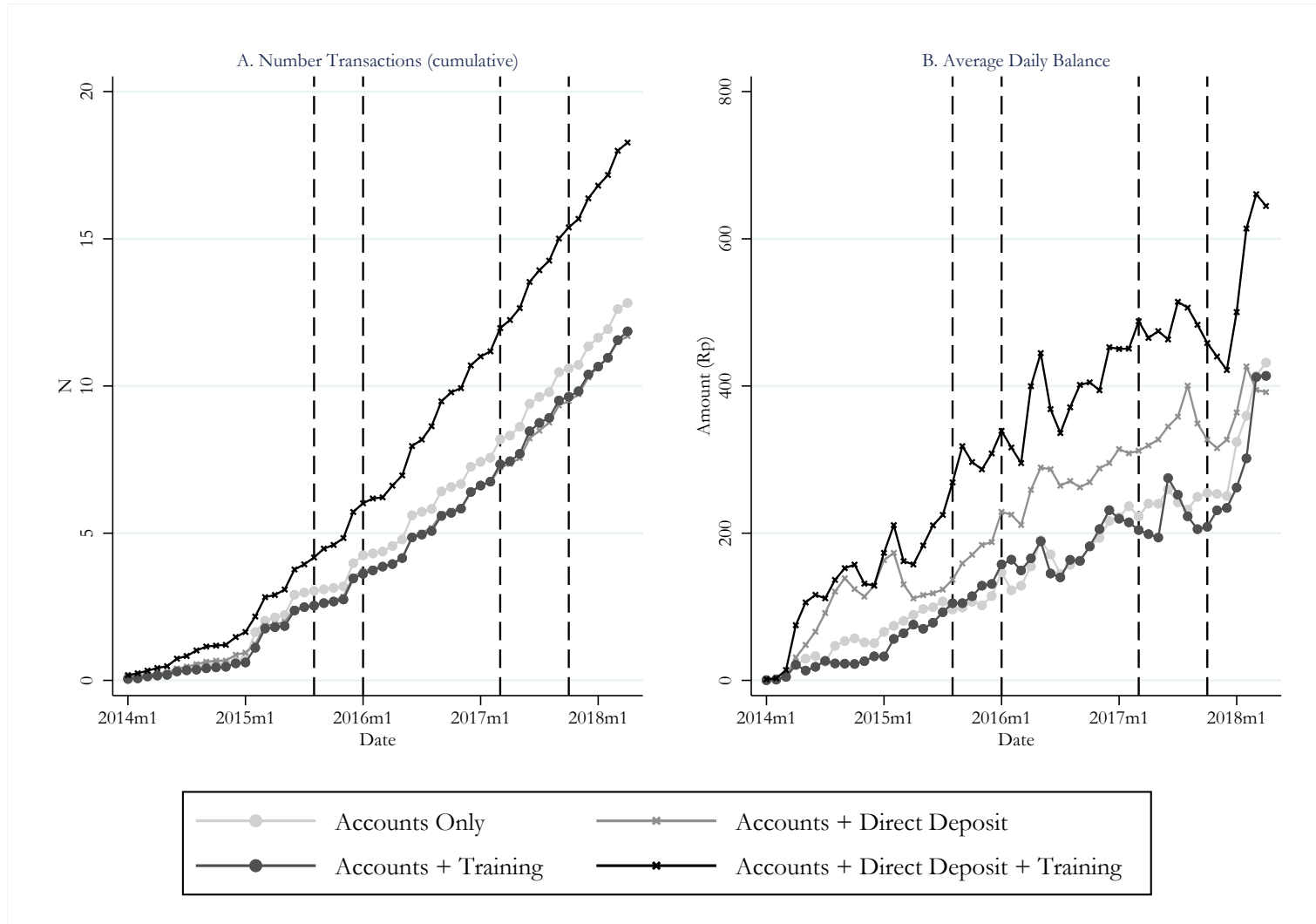
	Farm Labor		Non-Farm Labor		MGNREGS	
	(1) Short-Run	(2) Long-Run	(3) Short-Run	(4) Long-Run	(5) Short-Run	(6) Long-Run
<i>Panel A: Women</i>						
$\theta$ : Direct Deposit and Training	2.563 (9.376)	-6.059 (6.776)	-4.498 (12.955)	-0.290 (9.983)	-4.513 (11.960)	9.098 (12.036)
Accts Only Mean	177.982	206.740	191.400	222.143	157.867	198.350
N	1321	1731	275	280	234	226
<i>Panel B: Men</i>						
$\theta$ : Direct Deposit and Training	-2.756 (8.661)	-9.419 (6.966)	-14.291 (9.931)	-15.943** (7.075)	-7.053 (6.598)	-7.995 (7.901)
Accts Only Mean	186.449	219.845	227.064	250.124	183.545	222.156
N	1124	1588	988	1265	727	554
P-value: Panel B $\theta$ = Panel C $\theta$	0.539	0.646	0.513	0.209	0.851	0.229

*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . Sample limited to individuals who report working for specified activity and earning a non-zero wage. At midline we ask for daily and weekly wages (which we convert to daily by assuming 6 working days per week). At endline we ask for daily wages in the high and low seasons separately, so we take the average in order to stay consistent with midline. Wages are top-coded at the 99th percentile within gender. The exchange rate was approximately INR 64 per USD in 2015 and INR 65 per USD in 2017.

Figure B1: Timeline of Experimental Activities

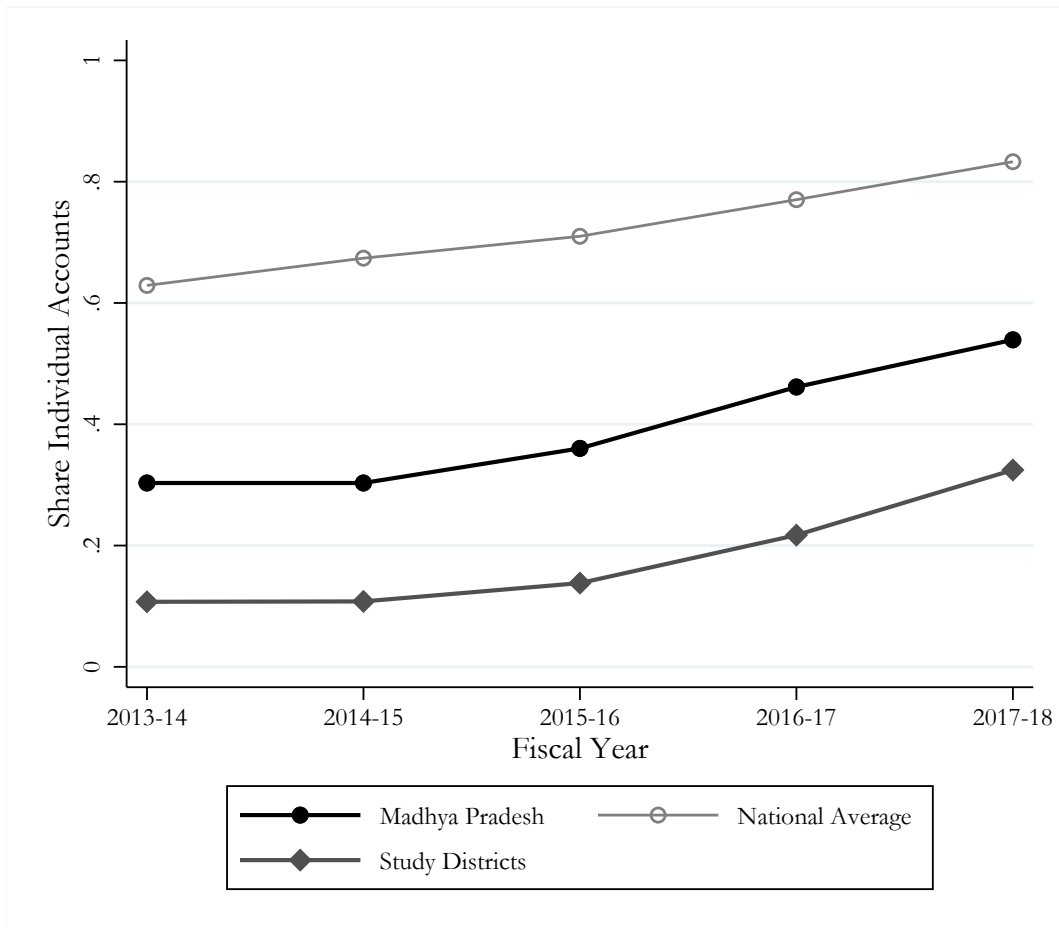
Activity	2013		2014												2015												...	2017										
	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12		1	2	3	4	5	6	7	8	9		
Baseline Census	█																																					
Account Opening at the CSP	█		█																																			
Wave 1 Direct Deposit Signup	█		█																																			
Training Sessions																																						
Wave 2 Direct Deposit Signup																																						
Bank Card Disbursement at the CSP																																						
Short-Run Survey																																						
Long-Run Survey																																						

Figure B2: Administrative Data - Use of Project Accounts Over Time



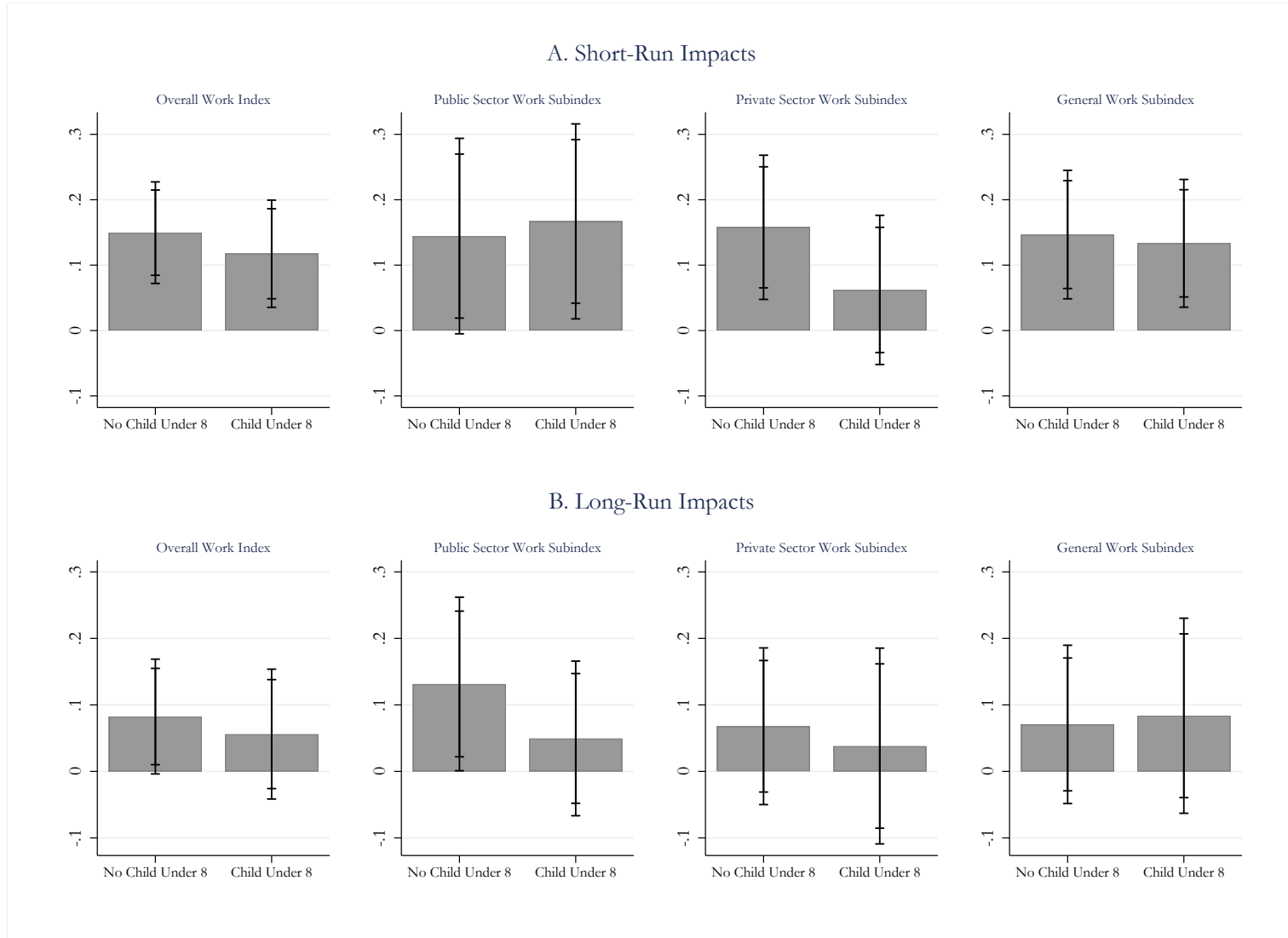
Notes: Administrative bank account data. All non-account openers are coded as having zero values for all measures. All outcomes are top-coded at the 99th percentile by month. Dashed lines demarcate the beginning and end of the short-run and long-run surveys. The exchange rate was approximately INR 64 per USD in 2015 and INR 65 per USD in 2017.

Figure B3: Share of Women Receiving MGNREGS Payments in Individual Accounts Over Time



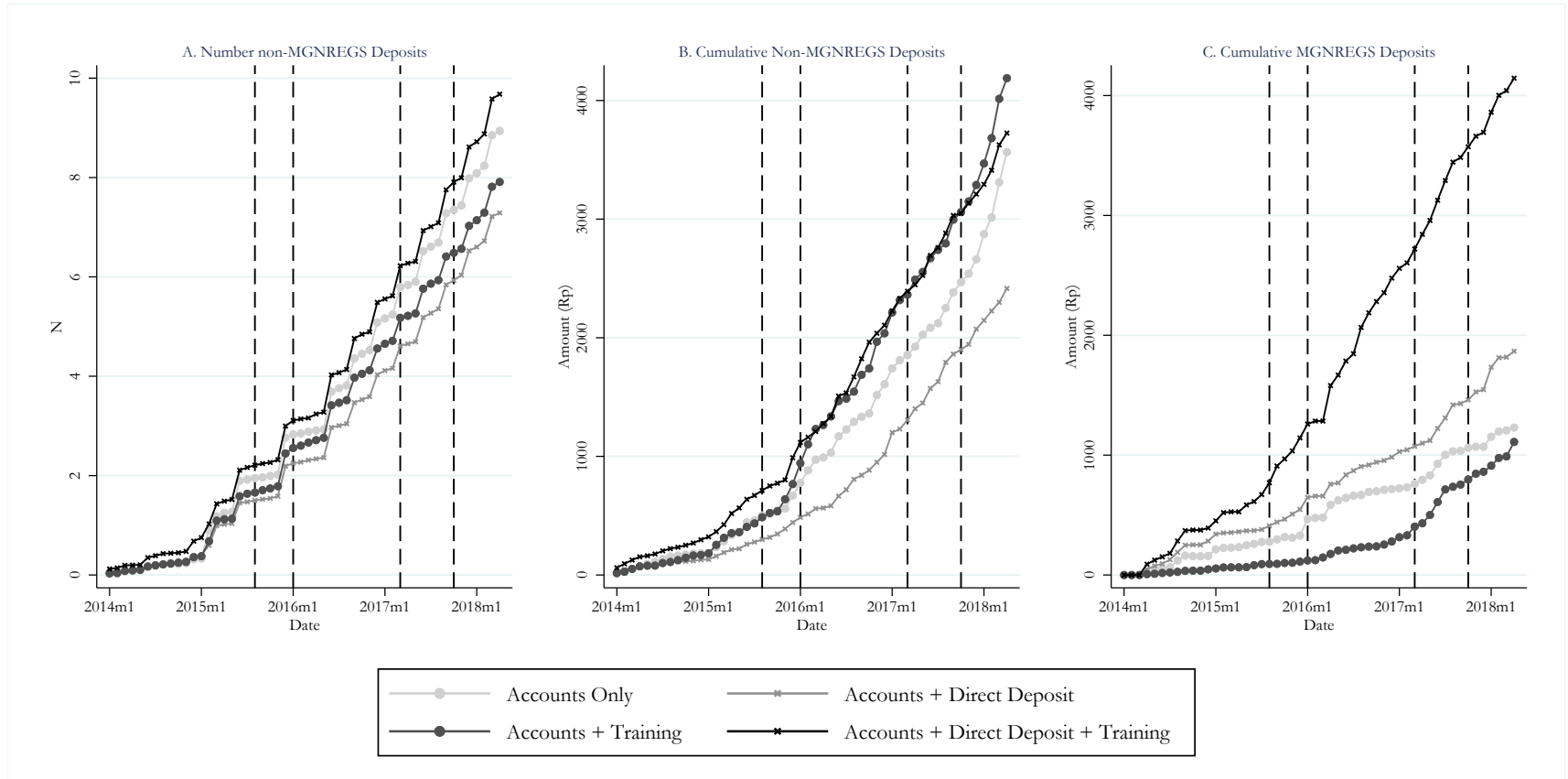
Notes: Data from MGNREGS MIS Table R1.2.6: Women Joint Account Detail, accessed at <http://mnregaweb4.nic.in/netnrega/MISreport4.aspx>. Figures for FY 2013-14 omit Andhra Pradesh, Manipur, and Dadra and Nagar Haveli due to missing data.

Figure B4: Effects of Accounts Plus Linking by Age of Youngest Child in the Household



*Notes:* This figure graphs treatment effects of Accounts + Direct Deposit + Training relative to Accounts Only by whether or not the household has a children under the age of eight. Whiskers give 90 and 95 percent confidence intervals on point estimates. Robust standard errors are clustered at the gram panchayat level. All regressions include controls for strata, district, and additional controls selected via double lasso.

Figure B5: Non-MGNREGS Activity in Project Bank Accounts



*Notes:* Administrative bank account data. All non-account openers are coded as having zero values for all measures. All outcomes are top-coded at the 99th percentile by month and gender. Dashed lines demarcate the beginning and end of the short-run and long-run surveys. The exchange rate was approximately INR 64 per USD in 2015 and INR 65 per USD in 2017.

Table C1: Impact of Treatments on Banking Sub-Index Components

		Full Sample			Constrained			Unconstrained			P-value
		$\theta$	Mean	N	$\theta$	Mean	N	$\theta$	Mean	N	Const=Unconst
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Panel A: Account Use Index</i>											
Short Run											
	If Own Individual Acct	0.019 (0.026)	0.886	2504	0.042 (0.045)	0.841	922	0.007 (0.025)	0.912	1519	0.383
	If Visited - 6 months	0.060 (0.037)	0.161	2500	0.093* (0.050)	0.149	920	0.044 (0.042)	0.163	1517	0.359
	Individual Acct Balance	63.969** (27.988)	84.592	2474	75.333* (40.361)	82.716	911	64.583* (35.247)	82.612	1500	0.822
Long Run											
	If Own Individual Acct	0.063** (0.031)	0.827	2464	0.103** (0.045)	0.759	903	0.041 (0.034)	0.865	1501	0.204
	If Visited - 6 months	0.078*** (0.028)	0.181	2454	0.174*** (0.043)	0.127	897	0.015 (0.032)	0.209	1497	0.002***
	Individual Acct Balance	30.948 (48.131)	228.131	2377	48.752 (86.028)	248.627	880	-8.081 (51.371)	217.986	1440	0.547
<i>Panel B: Womens Banking Autonomy Index</i>											
Visits Bank											
	Alone	0.043* (0.025)	0.107	2455	0.077** (0.030)	0.070	902	0.017 (0.032)	0.128	1493	0.083*
	Without Male Supervision	0.079** (0.035)	0.188	2455	0.127*** (0.046)	0.141	902	0.040 (0.041)	0.209	1493	0.066*
CSP											
	Comfortable Conducting Transactions	0.097** (0.047)	0.605	2402	0.063 (0.071)	0.594	865	0.106** (0.047)	0.612	1478	0.537
	Comfortable Visiting Alone	0.093** (0.047)	0.534	2415	0.138*** (0.053)	0.461	879	0.059 (0.053)	0.580	1477	0.170
	Believes Can Visit Without Male	0.072 (0.049)	0.426	2425	0.192*** (0.061)	0.354	893	-0.010 (0.052)	0.466	1474	0.002***
<i>Panel C: Women's CSP Knowledge Index</i>											
	Heard of CSP Before	0.029 (0.039)	0.828	2464	0.067 (0.049)	0.799	903	0.009 (0.041)	0.849	1501	0.208
	Num. Transactions Ever Conducted At CSP	0.207* (0.121)	1.701	2322	0.441*** (0.170)	1.637	839	0.048 (0.103)	1.744	1428	0.008***

*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . All monetary values are denominated in Indian Rupees and top-coded at the 99th percentile (by gender). The exchange rate was approximately INR 64 per USD in 2015 and INR 65 per USD in 2017. The outcome variables in this table feed into the account use, banking autonomy, and CSP knowledge indices. See Online Data Appendix for further details on variable construction.



Table C2: Impact of Treatments on MGNREGS Labor Supply Sub-Index Components

	Full Sample			Constrained			Unconstrained			P-value
	$\theta$ (1)	Mean (2)	N (3)	$\theta$ (4)	Mean (5)	N (6)	$\theta$ (7)	Mean (8)	N (9)	Const=Unconst (10)
<i>Panel A: Self Reports</i>										
Short Run										
Worked for MGNREGS Past Month	0.015 (0.010)	0.017	2504	0.031** (0.015)	0.005	922	0.009 (0.012)	0.021	1519	0.227
Worked for MGNREGS Past Year	0.006 (0.022)	0.104	2504	0.012 (0.023)	0.072	922	-0.006 (0.028)	0.120	1519	0.555
Long Run										
Worked for MGNREGS Past Month	-0.007 (0.016)	0.025	2164	0.010 (0.026)	0.027	847	-0.017 (0.016)	0.026	1262	0.267
Worked for MGNREGS Past Year	0.023 (0.030)	0.129	2196	0.053 (0.041)	0.090	857	-0.003 (0.038)	0.150	1283	0.248
<i>Panel B: MIS Reports</i>										
Short Run										
Worked for MGNREGS Past Month	0.055*** (0.020)	0.029	2504	0.072** (0.029)	0.019	922	0.050** (0.023)	0.035	1519	0.443
Worked for MGNREGS Past Year	0.090* (0.048)	0.277	2504	0.109 (0.075)	0.264	922	0.073 (0.052)	0.294	1519	0.615
MGNREGS Wages Past Month	64.443** (26.590)	34.681	2504	86.703** (37.451)	22.933	922	60.282** (29.576)	42.513	1519	0.457
MGNREGS Wages Past Year	153.739 (162.520)	641.045	2504	141.271 (284.224)	698.173	922	130.260 (144.236)	633.270	1519	0.965
Long Run										
Worked for MGNREGS Past Month	-0.031 (0.040)	0.123	2464	-0.011 (0.030)	0.090	903	-0.047 (0.053)	0.146	1501	0.444
Worked for MGNREGS Past Year	0.071 (0.052)	0.288	2464	0.050 (0.052)	0.221	903	0.085 (0.063)	0.335	1501	0.570
MGNREGS Wages Past Month	-38.126 (77.410)	205.928	2464	0.016 (49.847)	138.291	903	-67.113 (100.004)	250.097	1501	0.355
MGNREGS Wages Past Year	290.768 (319.064)	1318.816	2464	334.683 (283.881)	933.608	903	295.952 (409.326)	1575.897	1501	0.916

*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . The exchange rate was approximately INR 64 per USD in 2015 and INR 65 per USD in 2017. All outcome variables in this table feed into the MGNREGS labor supply index. All monetary values are denominated in Indian Rupees and top-coded at the 99th percentile (by gender). See Online Data Appendix for further details on variable construction.

Table C3: Impact of Treatments on Labor Supply Sub-Index Components

	Full Sample			Constrained			Unconstrained			P-value
	$\theta$	Mean	N	$\theta$	Mean	N	$\theta$	Mean	N	Const=Unconst
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Panel A: Private Labor Supply</i>										
Short Run										
Primary Occupation Past Year was Worker	0.056** (0.024)	0.116	2498	0.062** (0.027)	0.063	919	0.055 (0.034)	0.142	1517	0.872
If Worked for Pay Last Year	0.086*** (0.028)	0.700	2504	0.153*** (0.044)	0.615	922	0.053* (0.031)	0.746	1519	0.025**
Private Work Earnings Past Year	1094.189 (686.120)	3742.679	2303	1252.180* (737.623)	2597.358	852	1205.542 (967.725)	4230.647	1393	0.966
Long Run										
Primary Occupation Past Year was Worker	0.001 (0.039)	0.631	2464	0.154** (0.063)	0.462	903	-0.089** (0.035)	0.727	1501	0.000***
If Worked for Pay Last Year	0.009 (0.029)	0.835	2464	0.103** (0.045)	0.724	903	-0.048 (0.029)	0.903	1501	0.001***
Private Work Earnings Past Year	601.386 (422.743)	4020.259	2361	1605.697** (689.693)	2906.048	871	126.741 (522.976)	4574.462	1432	0.091*
<i>Panel B: Public/Private Labor Supply</i>										
Short Run										
If Worked for Pay Past Month	0.077*** (0.029)	0.203	2469	0.113*** (0.034)	0.112	913	0.075* (0.039)	0.248	1493	0.414
Earnings Past Month	68.682 (48.739)	278.362	2459	72.516 (55.574)	196.488	912	98.447 (64.458)	304.903	1485	0.742
Months Worked Past Year	0.748** (0.343)	4.224	2481	1.227** (0.495)	3.638	918	0.460 (0.378)	4.507	1500	0.134
Long Run										
If Worked for Pay Past Month	0.020 (0.040)	0.579	2463	0.108** (0.045)	0.465	902	-0.035 (0.048)	0.646	1501	0.008***
Earnings Past Month	129.720 (118.763)	636.506	2403	360.485** (142.962)	488.474	880	-27.900 (120.662)	703.151	1464	0.009***
Months Worked Past Year	0.228 (0.266)	3.132	2416	0.453 (0.375)	2.546	890	0.158 (0.308)	3.463	1467	0.476

*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . The exchange rate was approximately INR 64 per USD in 2015 and INR 65 per USD in 2017. All outcome variables in this table feed into the private labor or general labor supply indices. All monetary values are denominated in Indian Rupees and top-coded at the 99th percentile (by gender). See Online Data Appendix for further details on variable construction.

Table C4: Impact of Treatments on Norms Sub-Index Components: Female Report

	Full Sample			Constrained			Unconstrained			P-value
	$\theta$	Mean	N	$\theta$	Mean	N	$\theta$	Mean	N	Const=Unconst
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Panel A: Personal Preferences</i>										
Believes Women Can Work	0.034 (0.028)	0.784	2461	0.073 (0.046)	0.759	903	0.020 (0.036)	0.797	1498	0.356
Prefers Daughter-in-Law Who Works	0.062* (0.033)	0.350	2464	0.056 (0.051)	0.322	903	0.059 (0.042)	0.370	1501	0.959
Prefers Son-in-Law Who Allows Wife to Work	0.035 (0.026)	0.247	2464	0.080** (0.040)	0.211	903	0.003 (0.033)	0.270	1501	0.100
<i>Panel B: Acceptance of Working Women</i>										
Believes Working Woman is:										
Better Wife	0.075** (0.035)	0.542	2463	0.167*** (0.051)	0.487	902	0.007 (0.039)	0.576	1501	0.006***
Better Mother	0.025 (0.038)	0.511	2463	0.104** (0.047)	0.457	902	-0.022 (0.049)	0.535	1501	0.048**
Better Caretaker	0.035 (0.031)	0.503	2464	0.071* (0.043)	0.462	903	0.025 (0.044)	0.516	1501	0.459
<i>Panel C: Acceptance of Working Women's Husbands</i>										
Believes Working Woman's Husband is:										
Better Provider	0.056* (0.030)	0.490	2463	0.107** (0.044)	0.449	902	0.004 (0.038)	0.508	1501	0.063*
Better Husband	0.043 (0.035)	0.499	2464	0.109*** (0.040)	0.422	903	0.016 (0.043)	0.535	1501	0.065*
<i>Panel D: Perceived Norms</i>										
Frac. Community Who Will Not Think Poorly of Working Woman	0.019 (0.018)	0.619	2457	0.010 (0.029)	0.595	901	0.021 (0.019)	0.636	1496	0.722
Working Woman is Viewed With More Respect	0.046 (0.029)	0.519	2462	0.079** (0.040)	0.497	902	0.016 (0.039)	0.528	1500	0.262
Frac. Community Who Will Not Think Poorly of Husband	-0.003 (0.014)	0.593	2459	0.025 (0.029)	0.558	901	-0.028* (0.016)	0.613	1498	0.119
Working Woman's Husband is Viewed With More Respect	0.053* (0.031)	0.525	2461	0.087* (0.048)	0.500	901	0.017 (0.036)	0.539	1500	0.202

*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . These questions were only asked in the long run survey. The outcome variables in this table feed into the actual norms and perceived norms sub-indices, which then feed into the aggregate norms index. See Online Data Appendix for further details on variable construction.

Table C5: Impact of Treatments on Norms Sub-Index Components: Male Report

	Full Sample			Constrained			Unconstrained			P-value
	$\theta$	Mean	N	$\theta$	Mean	N	$\theta$	Mean	N	Const=Unconst
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Panel A: Personal Preferences</i>										
Believes Women Can Work	0.006 (0.034)	0.674	2293	0.051 (0.061)	0.631	837	-0.017 (0.036)	0.688	1403	0.298
Prefers Daughter-in-Law Who Works	-0.022 (0.039)	0.500	2293	-0.029 (0.056)	0.481	837	-0.012 (0.042)	0.510	1403	0.772
Prefers Son-in-Law Who Allows Wife to Work	-0.062 (0.040)	0.459	2293	-0.012 (0.055)	0.406	837	-0.079 (0.051)	0.484	1403	0.317
<i>Panel B: Acceptance of Working Women</i>										
Believes Working Woman is:										
Better Wife	-0.011 (0.034)	0.585	2280	0.043 (0.055)	0.565	829	-0.038 (0.041)	0.598	1398	0.202
Better Mother	0.006 (0.034)	0.461	2285	-0.016 (0.053)	0.495	832	0.023 (0.038)	0.444	1400	0.523
Better Caretaker	0.029 (0.028)	0.511	2282	-0.054 (0.043)	0.565	830	0.076* (0.039)	0.477	1399	0.037**
<i>Panel C: Acceptance of Working Women's Husbands</i>										
Believes Working Woman's Husband is:										
Better Provider	0.004 (0.030)	0.516	2281	-0.036 (0.059)	0.513	833	0.016 (0.033)	0.515	1396	0.455
Better Husband	-0.041 (0.034)	0.522	2283	-0.062 (0.057)	0.538	831	-0.033 (0.037)	0.520	1399	0.621
<i>Panel D: Perceived Norms</i>										
Frac. Community Who Will Not Think Poorly of Working Woman	0.001 (0.020)	0.561	2288	0.019 (0.037)	0.527	835	0.005 (0.022)	0.578	1400	0.734
Working Woman is Viewed With More Respect	0.045 (0.032)	0.486	2288	-0.003 (0.050)	0.497	833	0.080* (0.043)	0.477	1402	0.212
Frac. Community Who Will Not Think Poorly of Husband	0.034** (0.017)	0.430	2283	0.075*** (0.028)	0.379	832	0.021 (0.020)	0.457	1398	0.086*
Working Woman's Husband is Viewed With More Respect	0.047 (0.034)	0.512	2286	0.031 (0.059)	0.513	834	0.054 (0.040)	0.509	1399	0.741

*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . These questions were only asked in the long run survey. The outcome variables in this table feed into the actual norms and perceived norms sub-indices, which then feed into the aggregate norms index. See Data Appendix for further details on variable construction.

Table C6: Impact of Treatments on Purchase Sub-Index Components

		Full Sample			Constrained			Unconstrained			P-value
		$\theta$	Mean	N	$\theta$	Mean	N	$\theta$	Mean	N	Const=Unconst
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Panel A: Purchase Index - Woman has made purchases for [activity]</i>											
Short Run											
	Food	0.076*** (0.028)	0.482	2504	0.138*** (0.045)	0.428	922	0.029 (0.045)	0.503	1519	0.129
	Clothing	0.022 (0.030)	0.384	2504	0.068 (0.052)	0.370	922	-0.004 (0.035)	0.393	1519	0.237
	Child Health	0.039 (0.030)	0.441	2504	0.075 (0.051)	0.394	922	0.034 (0.040)	0.463	1519	0.542
	Home Improvement	-0.009 (0.027)	0.243	2504	0.033 (0.039)	0.192	922	-0.021 (0.028)	0.265	1519	0.176
	Festivals	0.053 (0.037)	0.374	2504	0.101** (0.047)	0.332	922	0.045 (0.047)	0.388	1519	0.287
	Food Outside Home	0.053 (0.033)	0.344	2504	0.158*** (0.052)	0.288	922	-0.001 (0.040)	0.372	1519	0.010**
Long Run											
	Food	0.030 (0.029)	0.730	2462	0.138*** (0.045)	0.596	902	-0.034 (0.036)	0.803	1500	0.002***
	Clothing	-0.032 (0.032)	0.608	2462	0.070 (0.053)	0.510	902	-0.088** (0.041)	0.654	1500	0.029**
	Child Health	0.008 (0.028)	0.659	2456	0.103*** (0.038)	0.548	898	-0.040 (0.035)	0.710	1498	0.004***
	Home Improvement	0.005 (0.043)	0.478	2461	0.038 (0.056)	0.414	901	-0.005 (0.052)	0.497	1500	0.539
	Festivals	0.023 (0.032)	0.641	2463	0.126** (0.052)	0.535	902	-0.029 (0.035)	0.692	1501	0.007***
	Food Outside Home	0.053 (0.032)	0.634	2463	0.123*** (0.047)	0.535	902	0.025 (0.037)	0.678	1501	0.064*
<i>Panel B: Purchase Index - Woman sometimes/always uses own funds for [activity]</i>											
Short Run											
	Food	0.062** (0.031)	0.424	2504	0.136*** (0.046)	0.375	922	0.019 (0.039)	0.444	1519	0.047**
	Clothing	0.043 (0.030)	0.317	2504	0.083* (0.050)	0.298	922	0.029 (0.040)	0.329	1519	0.334
	Child Health	0.059* (0.031)	0.376	2504	0.100** (0.049)	0.327	922	0.056 (0.040)	0.396	1519	0.465
	Home Improvement	0.002 (0.029)	0.210	2504	0.040 (0.040)	0.163	922	-0.020 (0.030)	0.227	1519	0.108
	Festivals	0.067* (0.038)	0.327	2504	0.107** (0.049)	0.303	922	0.062 (0.047)	0.332	1519	0.399
	Food Outside Home	0.044 (0.036)	0.302	2504	0.132*** (0.050)	0.255	922	0.003 (0.044)	0.324	1519	0.036**
Long Run											
	Food	0.047 (0.040)	0.600	2462	0.166*** (0.054)	0.475	902	-0.028 (0.045)	0.665	1500	0.002***
	Clothing	0.003 (0.041)	0.509	2462	0.118** (0.057)	0.384	902	-0.053 (0.046)	0.565	1500	0.012**
	Child Health	0.028 (0.038)	0.547	2456	0.131*** (0.047)	0.426	898	-0.025 (0.046)	0.604	1498	0.009***
	Home Improvement	-0.010 (0.046)	0.419	2461	0.056 (0.058)	0.333	901	-0.036 (0.055)	0.454	1500	0.209
	Festivals	0.044 (0.039)	0.540	2463	0.181*** (0.055)	0.429	902	-0.027 (0.040)	0.589	1501	0.000***
	Food Outside Home	0.048 (0.041)	0.540	2463	0.169*** (0.052)	0.419	902	-0.009 (0.043)	0.595	1501	0.001***

*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . The outcome variables in this table feed into purchase sub-indices which then feed into the aggregate empowerment index. See Online Data Appendix for further details on variable construction.

Table C7: Impact of Treatments on Empowerment Sub-Index Components

		Full Sample			Constrained			Unconstrained			P-value
		$\theta$	Mean	N	$\theta$	Mean	N	$\theta$	Mean	N	Const=Unconst
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Panel A: Decision Making Index - Makes decisions about [activity]</i>											
Short Run											
	Spending Earnings	0.025 (0.031)	0.483	2456	0.049 (0.045)	0.498	906	0.026 (0.039)	0.470	1489	0.685
	Taking Employment	-0.037 (0.028)	0.264	2441	-0.001 (0.038)	0.205	893	-0.050 (0.039)	0.297	1487	0.340
Long Run											
	Spending Earnings	0.015 (0.024)	0.397	2460	0.061 (0.049)	0.379	901	0.003 (0.030)	0.397	1499	0.332
	Taking Employment	-0.000 (0.029)	0.281	2455	0.004 (0.043)	0.222	900	-0.006 (0.033)	0.313	1495	0.829
<i>Panel C: Mobility Index - If Visited [location] in Past Month</i>											
Short Run											
	Market	0.004 (0.038)	0.519	2481	0.042 (0.047)	0.527	911	-0.026 (0.047)	0.522	1507	0.260
	District Market	0.005 (0.029)	0.178	2494	0.029 (0.050)	0.203	915	-0.000 (0.031)	0.161	1516	0.604
	Natal Home	-0.036 (0.030)	0.301	2487	-0.037 (0.053)	0.329	913	-0.038 (0.028)	0.287	1511	0.979
	Anganwadi	0.070** (0.029)	0.182	2489	0.100*** (0.039)	0.144	914	0.059* (0.034)	0.201	1512	0.367
	PHC	-0.021 (0.029)	0.265	2492	-0.053 (0.043)	0.327	914	0.013 (0.033)	0.228	1515	0.142
Long Run											
	Market	-0.003 (0.034)	0.511	2356	0.040 (0.048)	0.460	869	-0.027 (0.044)	0.541	1428	0.270
	District Market	0.025 (0.026)	0.100	2373	0.054 (0.036)	0.104	865	0.018 (0.029)	0.096	1450	0.373
	Natal Home	0.057 (0.039)	0.239	2346	0.037 (0.051)	0.258	866	0.073 (0.046)	0.230	1421	0.545
	Anganwadi	0.035 (0.030)	0.185	2248	0.062 (0.041)	0.147	829	0.005 (0.039)	0.211	1360	0.249
	PHC	0.029 (0.034)	0.239	2264	0.022 (0.050)	0.222	837	0.033 (0.040)	0.249	1368	0.850
<i>Panel B: Mobility Index - If Visited [location] in Past Year</i>											
Short Run											
	Market	0.016 (0.032)	0.809	2481	0.046 (0.045)	0.797	911	-0.001 (0.038)	0.814	1507	0.367
	District Market	-0.046 (0.043)	0.446	2494	-0.044 (0.050)	0.546	915	-0.051 (0.052)	0.394	1516	0.892
	Natal Home	0.054** (0.022)	0.837	2487	0.022 (0.026)	0.865	913	0.079*** (0.030)	0.818	1511	0.164
	Anganwadi	0.089** (0.039)	0.314	2489	0.091* (0.048)	0.284	914	0.098** (0.048)	0.330	1512	0.919
	PHC	0.009 (0.038)	0.645	2492	-0.080** (0.038)	0.732	914	0.055 (0.047)	0.603	1515	0.011**
Long Run											
	Market	-0.010 (0.031)	0.745	2356	0.067 (0.042)	0.658	869	-0.066* (0.038)	0.792	1428	0.012**
	District Market	-0.037 (0.040)	0.394	2373	-0.028 (0.055)	0.479	865	-0.035 (0.046)	0.346	1450	0.899
	Natal Home	-0.012 (0.020)	0.886	2346	0.029 (0.029)	0.876	866	-0.043 (0.029)	0.895	1421	0.109
	Anganwadi	0.072 (0.048)	0.408	2248	0.140** (0.058)	0.342	829	0.021 (0.059)	0.446	1360	0.073*
	PHC	0.024 (0.038)	0.733	2264	0.081 (0.052)	0.703	837	-0.028 (0.044)	0.754	1368	0.087*

Notes: Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . The outcome variables in this table feed into decision and mobility sub-indices which then feed into the aggregate empowerment index. See Online Data Appendix for further details on variable construction.

Table C8: Impact of Treatments on Gender Based Violence Sub-Index Components

		Full Sample			Constrained			Unconstrained			P-value
		$\theta$	Mean	N	$\theta$	Mean	N	$\theta$	Mean	N	Const=Unconst
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Panel A: Freedom from Physical Violence - If Woman has Not Experienced / physical violence type/ in Past Year</i>											
Short Run											
	No Punching, Pulling Hair, or Kicking	-0.026 (0.024)	0.836	2504	0.019 (0.035)	0.827	922	-0.046 (0.031)	0.840	1519	0.148
	No Pushing or Slapping	0.016 (0.019)	0.884	2504	0.040 (0.025)	0.875	922	0.002 (0.025)	0.890	1519	0.263
	No Forcing Sexual Intercourse	-0.038 (0.032)	0.779	2504	0.009 (0.056)	0.755	922	-0.061* (0.033)	0.791	1519	0.233
Long Run											
	No Punching, Pulling Hair, or Kicking	0.010 (0.019)	0.853	2444	-0.029 (0.036)	0.873	895	0.014 (0.023)	0.847	1490	0.310
	No Pushing or Slapping	0.014 (0.016)	0.911	2454	0.010 (0.026)	0.910	901	0.027 (0.021)	0.908	1493	0.592
	No Forcing Sexual Intercourse	0.001 (0.025)	0.863	2455	-0.019 (0.044)	0.844	901	0.007 (0.027)	0.870	1495	0.577
<i>Panel B: Autonomy - Husband Does Not Limit His Wife's Autonomy</i>											
Short Run											
	Never Jealous if Talks to Other Men	0.022 (0.033)	0.539	2499	0.038 (0.045)	0.553	921	0.021 (0.044)	0.532	1515	0.796
	Never Prevents Meeting Female Friends	0.036 (0.029)	0.815	2501	0.070 (0.046)	0.774	922	0.024 (0.035)	0.837	1516	0.390
	Never Limits Contact With Family	0.021 (0.019)	0.913	2501	0.013 (0.030)	0.909	922	0.025 (0.022)	0.917	1516	0.725
	Does Not Insist on Knowing Location At All Times	-0.014 (0.037)	0.581	2500	0.023 (0.053)	0.538	922	-0.032 (0.045)	0.604	1515	0.365
Long Run											
	Never Jealous if Talks to Other Men	-0.009 (0.026)	0.632	2422	-0.016 (0.044)	0.638	888	0.006 (0.037)	0.632	1476	0.721
	Never Prevents Meeting Female Friends	0.058** (0.027)	0.784	2313	0.040 (0.046)	0.775	828	0.065* (0.037)	0.788	1430	0.693
	Never Limits Contact With Family	0.022 (0.019)	0.911	2443	0.037 (0.038)	0.908	895	0.017 (0.018)	0.915	1490	0.607
	Does Not Insist on Knowing Location At All Times	-0.012 (0.031)	0.606	2448	-0.038 (0.050)	0.611	898	-0.001 (0.041)	0.605	1491	0.576
<i>Panel C: Emotional Abuse - If Woman Has Not Experienced / emotional abuse type/ in Past Year</i>											
Short Run											
	Not Humiliated In Front of Others	-0.010 (0.022)	0.876	2504	-0.008 (0.041)	0.875	922	-0.006 (0.026)	0.874	1519	0.978
	Not Threatened	0.010 (0.020)	0.884	2504	0.054 (0.034)	0.861	922	-0.007 (0.023)	0.896	1519	0.125
	Not Insulted	-0.039 (0.031)	0.732	2504	0.000 (0.042)	0.688	922	-0.058 (0.041)	0.751	1519	0.296
Long Run											
	Not Humiliated In Front of Others	0.002 (0.018)	0.903	2450	-0.032 (0.031)	0.904	898	0.023 (0.022)	0.902	1492	0.166
	Not Threatened	0.029* (0.017)	0.911	2455	0.006 (0.028)	0.924	900	0.039** (0.019)	0.905	1495	0.295
	Not Insulted	0.036* (0.020)	0.793	2449	0.030 (0.038)	0.774	895	0.039* (0.024)	0.803	1494	0.847

*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \* p $\leq$  0.10, \*\* p $\leq$  0.05, \*\*\* p $\leq$  0.01. The outcome variables in this table feed into the freedom from physical violence, autonomy, and emotional abuse sub-indices, which then feed into the aggregate freedom from gender-based violence index. See Online Data Appendix for further details on variable construction.

Table C9: Impact of Treatments on Mental Health Sub-Index Components

		Full Sample			Constrained			Unconstrained			P-value
		$\theta$	Mean	N	$\theta$	Mean	N	$\theta$	Mean	N	Const=Unconst
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Panel A: Freedom From Depression - Has Not Experienced [depression symptom] All or Most of the Time in the Past 30 Days</i>											
Short Run											
	Not Hopeless	-0.012 (0.027)	0.770	2491	-0.001 (0.041)	0.773	918	-0.009 (0.032)	0.767	1511	0.872
	Not Worthless	0.039 (0.028)	0.747	2493	0.088** (0.040)	0.728	918	0.005 (0.036)	0.759	1512	0.087*
	Not Depressed	-0.016 (0.024)	0.739	2492	0.004 (0.042)	0.734	918	-0.035 (0.031)	0.746	1511	0.467
	Not Feeling Like Everything Requires Effort	0.013 (0.031)	0.729	2489	0.043 (0.039)	0.725	917	-0.011 (0.036)	0.732	1509	0.263
Long Run											
	Not Hopeless	-0.048** (0.021)	0.919	2453	-0.048* (0.028)	0.913	899	-0.048* (0.029)	0.924	1494	0.997
	Not Worthless	-0.033** (0.016)	0.910	2455	-0.035 (0.027)	0.919	901	-0.035* (0.020)	0.910	1494	1.000
	Not Depressed	-0.014 (0.022)	0.889	2456	0.018 (0.034)	0.843	901	-0.036 (0.025)	0.915	1495	0.204
	Not Feeling Like Everything Requires Effort	-0.027 (0.017)	0.922	2451	-0.026 (0.027)	0.904	899	-0.025 (0.019)	0.932	1492	0.968
<i>Panel B: Freedom From Anxiety - Has Not Experienced [anxiety symptom] All or Most of the Time in the Past 30 Days</i>											
Short Run											
	Not Nervous	0.013 (0.026)	0.741	2494	0.037 (0.039)	0.760	920	-0.010 (0.032)	0.737	1512	0.316
	Not Restless	-0.029 (0.022)	0.765	2494	-0.001 (0.033)	0.750	918	-0.044 (0.030)	0.778	1513	0.362
Long Run											
	Not Nervous	-0.019 (0.018)	0.903	2457	-0.036 (0.029)	0.909	902	-0.005 (0.021)	0.899	1495	0.365
	Not Restless	-0.007 (0.018)	0.903	2452	-0.053* (0.030)	0.914	900	0.017 (0.024)	0.896	1492	0.067*

*Notes:* Robust standard errors clustered at the GP level in parentheses. All regressions include strata and district fixed effects. Additional covariates are selected using double post lasso. The set of potential controls includes individual and GP-level characteristics and their square. See Online Data Appendix for the complete list of potential controls. \*  $p \leq 0.10$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ . The outcome variables in this table feed into the freedom from anxiety and depression sub-indices, which then feed into the aggregate mental health index. See Online Data Appendix for further details on variable construction.



## Online Data Appendix

The Online Data Appendix, which contains additional detail on variable construction and a list of lasso controls, is available here:

[https://drive.google.com/open?id=1R2tduu08ZoJrdTJl0HXePjRwY\\_ix7kdG](https://drive.google.com/open?id=1R2tduu08ZoJrdTJl0HXePjRwY_ix7kdG).