

Impacts of (improving) employment guarantee schemes on the broader economy

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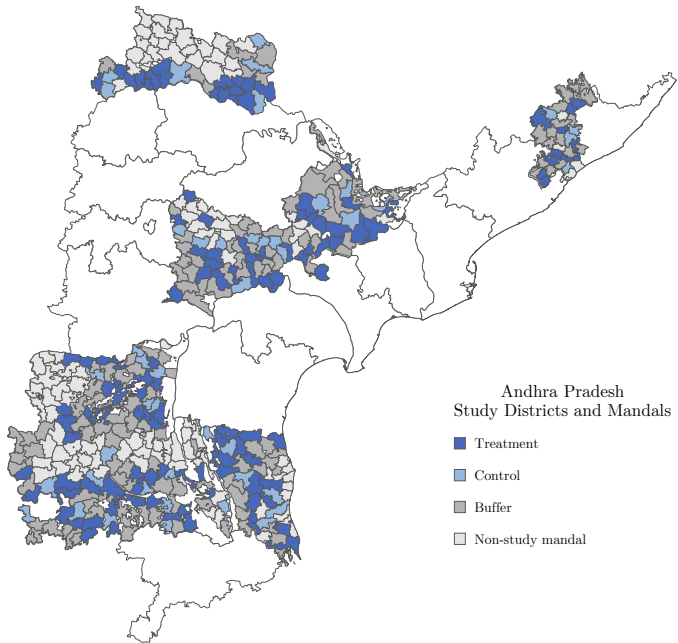
ILO Webinar

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- Public workfare programs are among the more common forms of anti-poverty programs in developing countries
 - Long history, from 18th century India to Depression-era US (WPA)
 - More recently - EGS in Maharashtra in 1980s, modern programs in India (Khera 2011), Africa (World Bank 2015), and elsewhere
 - India's NREGS is the world's largest, covering $\sim 11\%$ of the world's population
- Policy debate often revolves around their impacts on the broader economy: seen alternatively as a threat to *distort* or as a means to *discipline* the private sector
 - Productivity channel through the creation of public assets
 - Demand channel through shocks to local purchasing power
 - Labor market channel through competition for workers

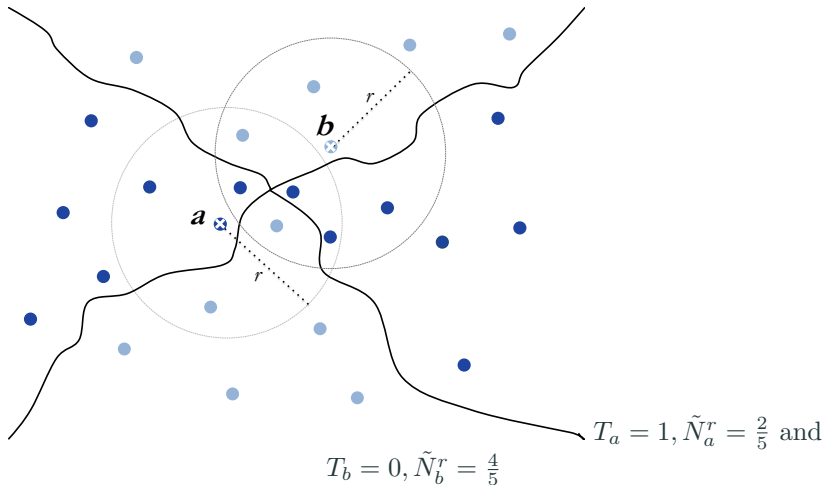
- Data: limited evidence to date on impacts on key outcomes such as income/poverty
- Identification: a few quasi-experimental strategies available, not generally allowing for effects that “spill over” across administrative boundaries
- Construct validity: weak and highly-varied implementation quality, especially in early years (Mehrotra 2008; Imbert-Papp 2011, Niehaus-Sukhtankar 2013), make it difficult to interpret varying estimated effects of “the program”



Impacts on NREGS implementation (MNS 2016)

1. Smartcards unambiguously improved program implementation
 - Smartcards itself was implemented for $\sim 50\%$ of payments by endline
 - The payment process improved: faster (29%), less time-consuming (20%), and more predictable (39%)
 - Leakage fell substantially: 13.9 percentage point reduction ($\sim 41\%$)
 - Perceived access to and actual participation in NREGS increased
 - User preferences were strongly in favor of Smartcards ($\sim 90\%$)
2. No change in total NREGS fund flow into treated mandals
3. We can interpret our results as impacts of significantly improving the *effective* presence of NREGS on the ground
 - Other channels likely to be second order
 - Pensions: much lower coverage (7% of rural pop. v.s. 50% for NREGS); intentionally targeted to those not able to work
 - General “financial inclusion”: bank accounts were not connected to core banking servers; only 0.3% of households reported positive balances

Modelling spatial exposure to treatment



This figure illustrates the construction of measures of spatial exposure to treatment for a given panchayat p (denoted by the black X symbol) and radius r in a treatment mandal (A) and a control mandal (B). Dark (light) blue dots represent treatment (control) panchayats; black lines represent mandal borders

► Relationship between key outcomes and spatial exposure variable

Cardinal effects on annualized household income

Income gains: Survey

	Total	NREGA	Wage labor	Self employment	Misc.
	(1)	(2)	(3)	(4)	(5)
Adjusted TE ($\beta_T + 0.36 * \beta_N$)	9579** (4539) {4548}	1295 (1061) {1154}	7607*** (2720) {2968}	-769 (3192) {3131}	2502 (2474) {2488}
Main effect (β_T)	9030** (3670) {3483}	1005* (584) {619}	6804*** (2130) {2228}	1123 (2681) {2602}	872 (2018) {1959}
Nbhd effect ($0.36 * \beta_N$)	550 (2654) {2081}	289 (804) {827}	803 (1099) {1133}	-1892 (1791) {1650}	1629 (1699) {1277}
Baseline	Yes	No	No	No	No
Control mean	69,122.1	4,743.4	24,120.2	26,563.1	13,695.4
Adjusted R^2	.039	.015	.053	.015	.013
Observations	4,823	4,856	4,857	4,857	4,857

► Distribution of earnings per day by source

► NREGS earnings per day

Wages and employment

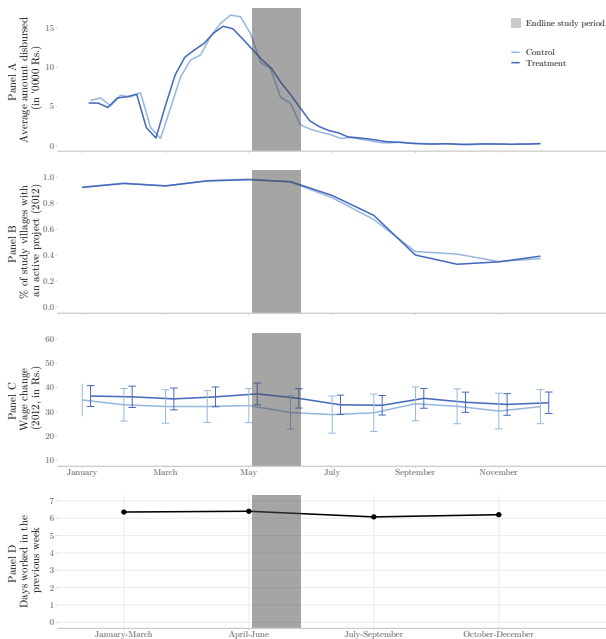
	Wage		Employment		
	(1)	(2)	(3)	(4)	(5)
	Reservation wage	Wage realization	Days self-employed or not working	Days worked in NREGS	Days worked in private sector
Adjusted TE ($\beta_T + 0.36 * \beta_N$)	6.9** (3.2) {3.5}	13*** (4.3) {4.6}	-2.4*** (.79) {.81}	1.3** (.55) {.56}	1.4* (.8) {.78}
Main effect (β_T)	5.8** (2.8) {2.9}	8.8** (3.6) {3.6}	-1.5** (.59) {.6}	.89* (.47) {.51}	.74 (.57) {.57}
Nbhd effect ($0.36 * \beta_N$)	1.1 (1.7) {1.7}	4.3* (2.4) {2.6}	-.95** (.42) {.41}	.39 (.27) {.24}	.71* (.4) {.38}
Control mean	97.2	127.9	17.3	4.5	7.9
Adjusted R^2	.054	.076	.073	.076	.020
Observations	12,677	7,016	13,951	14,009	14,278

▶ Time allocation

▶ Labor market models

▶ Additional labor market results

Seasonal variation



Income brackets and marginal effects: SECC

	Lowest bracket (< Rs. 5,000)	Middle bracket (Rs. 5,000 - 10,000)	Highest bracket (> Rs. 10,000)	Income bracket 3 levels
	(1)	(2)	(3)	(4)
Adjusted TE ($\beta_T + 0.36 * \beta_N$)	-.028* (.017) [.084]	.025* (.014) [.03]	.0034 (.0069) [.42]	-.026 (.017)
Main effect (β_T)	-.032** (.014) [.02]	.024** (.011) [0]	.0078 (.0055) [.29]	-.031** (.014)
Nbhd effect ($0.36 * \beta_N$)	.0038 (.0087) [.4]	.0019 (.0064) [0]	-.0051 (.0043) [.34]	.0053 (.009)
Control Mean	.8	.1	.0	.
Adjusted R^2	.016	.016	.030	.013
Observations	1.8 M	1.8 M	1.8 M	1.8 M

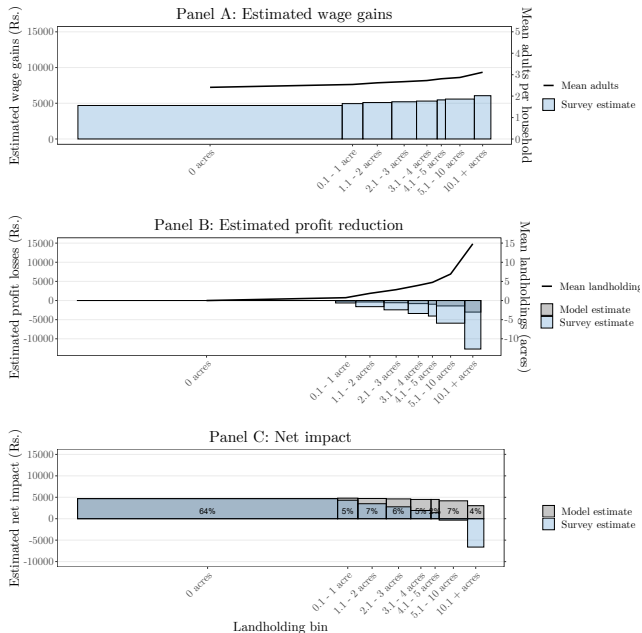
Effects on non-agricultural employment and enterprise

	All sectors	Livestock	Manufacturing and construction	Wholesale and retail	Other
	(1)	(2)	(3)	(4)	(5)
<i>Panel A: Number of employees</i>					
Adjusted TE ($\beta_T + 0.36 * \beta_N$)	3307** (1554) [.089]	294 (246) [.19]	909* (465) [.13]	836 (554) [.15]	1268** (616) [.12]
Main effect (β_T)	2251** (1101) [.1]	113 (212) [.33]	588* (313) [.14]	764* (398) [.1]	786* (435) [.17]
Nbhd effect ($0.36 * \beta_N$)	1056 (826) [.2]	182 (191) [.16]	320 (280) [.22]	71 (317) [.41]	483 (339) [.2]
Control mean	6796.7	1711.5	1439.9	1219.2	2426.1
Adjusted R^2	0.165	0.518	0.164	0.115	0.122
Observations	157	157	157	157	157
<i>Panel B: Number of enterprises</i>					
Adjusted TE ($\beta_T + 0.36 * \beta_N$)	1095* (575) [.085]	177 (134) [.18]	167 (176) [.28]	327 (227) [.13]	423** (214) [.093]
Main effect (β_T)	856** (427) [.078]	62 (126) [.32]	221 (141) [.14]	311* (165) [.074]	262 (163) [.14]
Nbhd effect ($0.36 * \beta_N$)	239 (311) [.27]	115 (108) [.14]	-54 (115) [.58]	16 (126) [.43]	162 (120) [.17]
Control mean	3816.5	1127.3	754.1	739.3	1195.7
Adjusted R^2	0.285	0.579	0.211	0.163	0.245
Observations	157	157	157	157	157

Effects on consumer goods prices

	Consumer goods			Prices and rates of return	
	(1) Index: uniform goods	(2) Index: all goods	(3) Individual goods	(4) Logged own-land profits	(5) Logged value per acre
Adjusted TE ($\beta_T + 0.36 * \beta_N$)	-0.055 (.13) {.13}	.0059 (.045) {.051}	-.0003 (.016) {.015}	-.19** (.08) {.076}	-.06 (.13) {.15}
Main effect (β_T)	-.0072 (.079) {.082}	.0072 (.029) {.032}	-.0071 (.011) {.011}	-.09 (.075) {.065}	-.061 (.11) {.11}
Nbhd effect ($0.36 * \beta_N$)	-.048 (.057) {.059}	-.0014 (.019) {.023}	.0068 (.0073) {.0075}	-.1** (.042) {.042}	.0018 (.053) {.059}
Item FE	No	No	Yes	No	No
Unit of observation	Village	Village	Item x Household	Household	Household
Control mean	11.1	10.7	-3.1	10.0	11.7
Adjusted R^2	.982	.998	.951	.261	.173
Observations	58	58	17,651	2,487	3,053

Estimated wage and profit effects by landholding

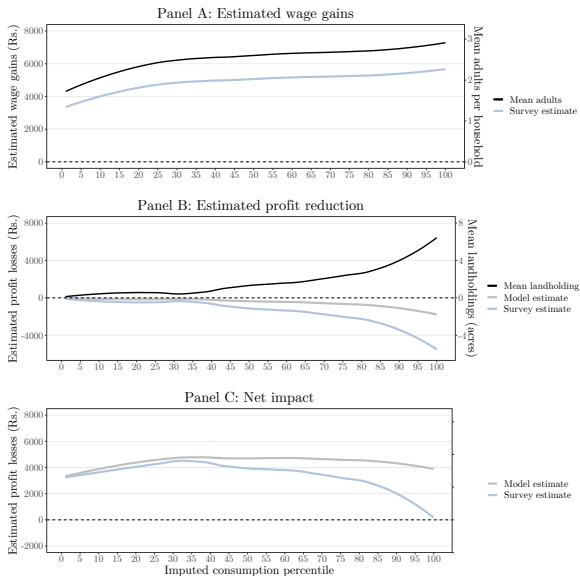


1. How did the initial “impulse” of an improved NREGS cause both wages *and* employment to increase in tandem?
 - Estimate that effects via capital formation account for at most $\sim 2.4\%$ of total
 - Negligible impact on measures of human capital (nutrition, skilled labor)
 - *Reduction* in returns to land-ownership hard to reconcile with any productivity-based story
 - Evidence of employer market power: wage gains are concentrated in areas with more concentrated landholdings. Estimate that workers receive at least 75% of their marginal product
2. In what ways did these increases then affect other parts of the economy?
 - Impacts on intermediated financial savings were negligible \rightarrow income gains were largely spent locally

1. Results raise our posterior beliefs that EGS could be a cost-effective anti-poverty strategy relative to direct transfers
 - Typical a priori concern is that wage increases without corresponding productivity gains will reduce private employment and thus attenuate impacts on poverty
 - Our findings reverse these priors, underscoring (i) importance of employer market power and (ii) role of demand multipliers (as also in Egger et al, 2021)
2. Highlight political economy issues in the design of implementation of anti-poverty programs
 - Employers (especially landlords) benefit from low and volatile wages (Jayachandran, 2006)
 - Landowner opposition to NREGS is well-documented (Khera, 2011; Anderson et al, 2015)
3. Illustrate how the costs of corruption and weak implementation may exceed the direct costs of diverted public resources

Appendix

Wage and profit estimates across imputed consumption percentiles

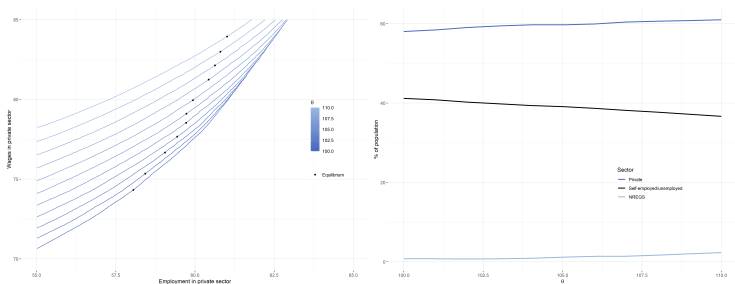


Earnings from wage labor per working-age adult

	Wage per worker	Balance
	(1)	(2)
Adjusted TE ($\beta_T + 0.36 * \beta_N$)	1946*** (729) {797}	.23 (.21) {.22}
Main effect (β_T)	1630*** (585) {612}	.13 (.16) {.17}
Nbhd effect ($0.36 * \beta_N$)	317 (307) {312}	.098 (.1) {.099}
Control mean	7,525.0	4.1
Adjusted R^2	.053	.023
Observations	4,732	4,892

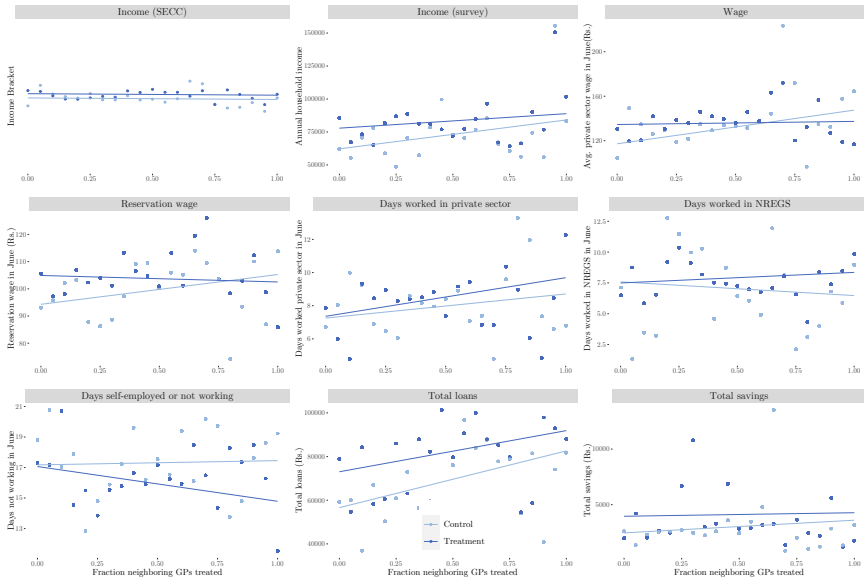
The unit of analysis is a household. In Column 1, working-age adults are those aged between 18 and 65. We divide the household-level wage labor income (both physical labor income and income from NREGS) by the number of working-age adults per household. Column 2 presents a balance test of the mean number of working-age adults per household across treatment and control groups. [▶ Back](#)

Labor market equilibria under imperfect competition

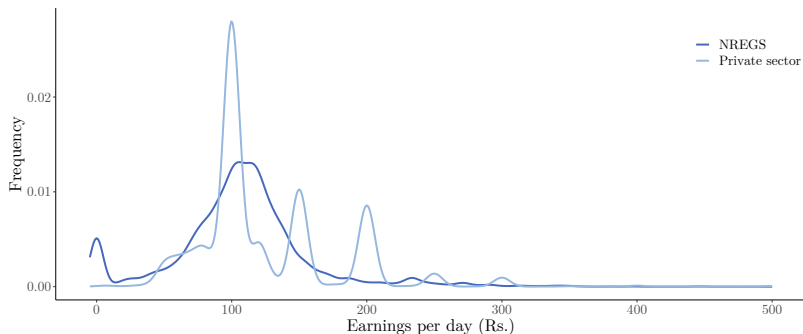


This figure presents a simulation to show how it is possible for both wages and employment to increase in response to an improvement in the quality of NREGS jobs (and the value of NREGS as an outside option). Figure (a) illustrates labor supply curves and equilibrium employment / wage pairs (L, w) under the assumption of monopsony wage-setting. Figure (b) shows the proportion of the population employed in the two sectors at equilibrium under monopsony wage setting for different values of θ . In this simulation, the reservation wage for 160,000 workers for NREGS work is uniformly distributed between 50 and 150 and for the private sector work is equal to $\exp(\text{Reservation wage}_{\text{NREGS}} + 20)/30 +$ a random Uniform $[-20, 20]$ noise. The firm's production function is $2500\sqrt{L}$. [▶ Back](#)

Relationship between key outcomes and spatial exposure



Distribution of earnings per day by source



This figure plots the distribution of earnings per day for individuals who report positive days worked in June 2012 either on NREGS or in the private sector. NREGS earnings per day are calculated as the amount earned divided by days worked in June; private sector earnings per day are simply the daily wage the worker reported earning. [▶ Back](#)

Additional labor market results

	Wage realization (in Rs.)	Self-employment (days)	Not working (days)
	(1)	(2)	(3)
Adjusted TE	10**	-.54	-1.9***
$(\beta_T + 0.36 * \beta_N)$	(5)	(.74)	(.66)
	{5.2}	{.77}	{.71}
Main effect	7.9*	-.58	-.87
(β_T)	(4.1)	(.58)	(.54)
	{4.1}	{.61}	{.57}
Nbhd effect	2.5	.041	-.99***
$(0.36 * \beta_N)$	(3)	(.35)	(.35)
	{3.1}	{.33}	{.33}
Weighted by days worked	Yes	No	No
Control mean	128	5.8	12
Adjusted R^2	.058	.023	.085
Observations	6969	13715	13926

The unit of analysis is an adult. In Column 1, we weight results by days worked.

▶ Back

Time allocation by gender and primary occupation

		Self-employment	NREGS	Private sector	Not working	n
Men	Workers	7.0	4.9	10.1	8.0	6536
	Students	3.3	0.6	1.4	21.8	3078
	Housework	0.0	1.9	0.1	25.7	23
	Retired	8.0	0.2	0.1	25.3	865
Women	Workers	4.8	6.3	8.2	10.8	6294
	Students	1.1	0.2	0.7	25.5	2427
	Housework	2.1	0.7	0.6	26.4	685
	Retired	0.4	0.0	0.6	28.8	964

The unit of analysis is an adult. This table shows a cross-table of survey respondents' reported number of days spent on primary activities by gender and primary occupation. [▶ Back](#)

Non-response and response composition rates by treatment status

	Treatment	Control	Difference	<i>p</i> -value	<i>N</i>
	(1)	(2)	(3)	(4)	(5)
Wage realization (Rs.)	.013	.011	.0018	.59	7370
Reservation wage (Rs.)	.4	.39	.0073	.64	21437
Days worked private sector	.33	.3	.031	.037	21437
Days self-employed or not working	.34	.33	.019	.13	21437
Days worked on NREGS	.15	.13	.027	.02	21437
Days worked private sector > 0	.52	.49	.028	.2	14514
Wage realization \geq reservation wage	.98	.99	-.0029	.57	7287

Columns 1-2 report the proportion of missing answers to the respective question in treatment and control. Column 3 reports the regression-adjusted treatment difference between treatment and control from a linear regression. Column 4 reports the *p*-value of a test that the parameter estimated in Column 3 is zero. Column 5 reports the number of individuals from whom answers were sought. Outcomes in each row are described in Table 2.

Responses were sought from less than the full sample in the following cases: for “Wage realization (Rs.)” we asked the set of individuals who reported a strictly positive number of days worked for someone else; for “Wage realization \geq Reservation wage” is the set of individuals that had non-missing values for both average daily wages and reservation wage. [▶ Back](#)

Attrition from and entry into sample frames by treatment status

	Treatment	Control	Regression- adjusted difference	<i>p</i> -value
	(1)	(2)	(3)	(4)
Attriters from Baseline	.014	.026	-.013	0.19
Entrants in Endline	.064	.063	.0013	0.82
Net % change in jobcards	.05	.036	.0083	0.45
Net % change in jobcards (sampled GPs)	.044	.031	.015	0.31

These tables compare the entire NREGS sample frame—i.e., all jobcard holders—across treatment (column 1) and control (column 2) mandals. Column 3 reports the difference in treatment and control means, while column 4 reports the *p*-value on the treatment indicator.

Row 1 presents the proportion of NREGS jobcards and SSP beneficiaries that dropped out of the sample frame between baseline and endline. Row 2 presents the proportion that entered the sample frame between baseline and endline. Row 3 presents the net percent change in jobcards among all GPs within study mandals. Row 4 presents the same but only among GPs sampled for our household survey. [▶ Back](#)

Comparing characteristics of surveyed households at baseline and endline

	# household members	% non-working age	% children	% female members	% Hindu	% Muslim	% Christian	% SC	% ST	% household head is widow	% members can read	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11) (12)	
Treatment	-1.1 (.1)	-.0063 (.017)	-.0011 (.0087)	-.0012 (.016)	-.0053 (.012)	.0078 (.008)	-.0056 (.01)	-.014 (.024)	.0087 (.025)	.012 (.02)	-.0025 (.013)	-.0003 (.0037)
EL survey	-3.8 (.09)	.1 (.04)	.28 (.019)	1.6 (.046)	.017 (.0095)	-.0073 (.0059)	-.0089 (.0086)	-.0035 (.019)	.018 (.012)	-.032 (.021)	-.17 (.013)	-.002 (.0042)
EL survey X treatment	.11 (.1)	.068 (.049)	.043 (.026)	-.00071 (.055)	-.0062 (.013)	.0027 (.0081)	.007 (.011)	.0043 (.022)	-.013 (.013)	-.017 (.025)	-.0054 (.016)	-.0031 (.0048)
BL Control Mean	4.8	.35	.098	.51	.9	.039	.052	.26	.12	.15	.61	.014
Adjusted R^2	.63	.27	.079	.49	.059	.015	.049	.031	.12	.0038	.1	.00031
Observations	9555	9555	9555	9555	9555	9555	9555	9332	9332	8104	9512	9555

The unit of analysis is an adult. The dependent variables are: the number household members, the percentage of members younger than 18 or older than 65, the percentage of members younger than 7, the percentage of households of the respective religion or of the respective category (columns 5 to 9), the percentage of households whose head is a widow and finally the percentage of household members who can read. “EL survey” is a binary variable indicating an observation from the endline survey. “EL survey X treatment” is an interaction effect of being surveyed at endline and being in treatment. “BL control mean” is the mean of the outcome within the control group at

baseline. [▶ Back](#)

Compositional changes in sample at endline

	# household members	% non-working age	% children	% female members	% Hindu	% Muslim	% Christian	% SC	% ST	% household head is widow	% members can read	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treatment	.042 (.11)	.018 (.014)	.017* (.0072)	.012 (.011)	-.024 (.018)	-.017 (.015)	.0088 (.009)	.022 (.022)	-.013 (.033)	.0024 (.02)	-.023 (.018)	-.00052 (.00051)
EL entrant	-.16 (.25)	-.044 (.036)	.017 (.034)	-.0078 (.029)	.0094 (.047)	-.013 (.040)	-.018 (.01)	.03 (.077)	-.11** (.034)	-.085* (.034)	-.031 (.034)	-.00047 (.0005)
EL entrant X treatment	.12 (.34)	.013 (.043)	.00034 (.030)	-.0052 (.036)	-.024 (.058)	-.011 (.05)	.012 (.026)	-.008 (.088)	.008 (.055)	-.082 (.042)	.015 (.068)	.00053 (.00057)
Control Mean	4.25	.30	.07	.50	.94	.04	.02	.19	.15	.13	.44	.00
Adjusted R^2	.017	.017	.0062	.0032	.068	.018	.067	.026	.11	.0038	.01	-.001
Observations	4909	4909	4909	4909	4909	4909	4909	4909	4909	4847	4866	4909

The unit of analysis is a household. “entrant” is an indicator for a household that entered the sample for the endline survey but was not in the baseline sample frame. “EL entrant X treatment” is the interaction between the treatment indicator and the endline entrant indicator, and the coefficient of interest in these regressions. The dependent variables are: the number household members, the percentage of members younger than 18 or older than 65, the percentage of members younger than 7, the percentage of households of the respective religion or of the respective category (columns 5 to 9), the percentage of households whose head is a widow and finally the percentage of household members who can read. [▶ Back](#)

NREGS earnings per day

	(1)	(2)
Adjusted TE ($\beta_T + 0.36 * \beta_N$)	-0.78 (5.1) {5.4}	-1.1 (5.1) {5}
Main effect (β_T)	-2.8 (5.1) {5.5}	-3 (5) {5.1}
Nbhd effect ($0.36 * \beta_N$)	2 (3.5) {3.6}	1.9 (3.5) {3.6}
Baseline lag	Yes	No
Control mean	116	116
Adjusted R^2	.03	.03
Observations	6392	6426

The unit of analysis is an adult. The outcome variable is NREGS earnings per day of work. This was calculated by dividing reported NREGS earnings in June 2012 by reported days spent working in NREGS in the same period. Column 1 includes a baseline lag, Column 2 does not. [▶ Back](#)

Baseline balance in administrative data

	Treatment	Control	Difference	<i>p</i> -value
	(1)	(2)	(3)	(4)
<i>Panel A: Official records from GoAP in 2010</i>				
% population working	.53	.52	.0062	.47
% male	.51	.51	.00023	.82
% literate	.45	.45	.0043	.65
% SC	.19	.19	.0025	.81
% ST	.1	.12	-.016	.42
Jobcards per capita	.54	.55	-.0098	.63
Pensions per capita	.12	.12	.0015	.69
% old age pensions	.48	.49	-.012	.11
% weaver pensions	.0088	.011	-.0018	.63
% disabled pensions	.1	.1	.0012	.72
% widow pensions	.21	.2	.013	.039
<i>Panel B: 2011 census rural totals</i>				
Population	45580	45758	-221	.91
% population under age 6	.11	.11	-.00075	.65
% agricultural laborers	.23	.23	-.0049	.59
% female agricultural laborers	.12	.12	-.0032	.52
% marginal agricultural laborers	.071	.063	.0081	.14
<i>Panel C: 2011 census village directory</i>				
# primary schools per village	3.2	3.6	-.4	.23
% village with medical facility	.52	.49	.028	.53
% villages with tap water	.87	.84	.033	.25
% villages with banking facility	.12	.15	-.036	.025
% villages with paved road access	.95	.94	.0086	.49
Avg. village size in acres	1374	1505	-131	.36

Baseline balance in survey data

	Treatment	Control	Difference	<i>p</i> -value
	(1)	(2)	(3)	(4)
Household members	4.8	4.8	.022	.89
BPL	.98	.98	.0042	.73
Scheduled caste	.22	.25	-.027	.35
Scheduled tribe	.12	.11	.0071	.81
Literacy	.42	.42	.0015	.93
Annual income	41,482	42,791	-1,290	.52
Total annual expenditure	687,128	657,228	26,116	.37
Short-term Expenditure	52,946	51,086	1,574	.45
Longer-term Expenditure	51,947	44,390	7,162	.45
Pay to work/enroll	.011	.0095	.00099	.82
Pay to collect	.058	.036	.023	.13
Ghost household	.012	.0096	.0019	.75
Time to collect	156	169	-7.5	.62
Owns land	.65	.6	.058	.06
Total savings	5,863	5,620	3.7	1.00
Accessible (in 48h) savings	800	898	-105	.68
Total loans	62,065	57,878	5,176	.32
Owns business	.21	.16	.048	.02
Number of vehicles	.11	.12	-.014	.49
Average payment delay	.28	.23	.036	.99
Payment delay deviation	.11	8.8	-.52	.72
Official amount	172	162	15	.45
Survey amount	177	189	-10	.65
Leakage	-5.1	-27	25	.15
NREGS availability	.47	.56	-.1	.02
Household doing NREGS work	.43	.42	.0067	.85
NREGS days worked, June	8.3	8	.33	.65
Private sector days worked, June	4.8	5.3	-.49	.15
Days unpaid/idle, June	22	22	.29	.47
Average daily wage private sector, June	96	98	-3.7	.34
Daily reservation wage, June	70	76	-6.8	.03
NREGS hourly wage, June	13	14	-1.3	.13
NREGS overreporting	.15	.17	-.015	.55
Additional days household wanted NREGS work	15	16	-.8	.67

Wages, if treatment only changed composition

	Age	Female	Non-general Class	Non-Hindu	Agricultural labor	Salaried	Self-employed	Household is BPL	Household is widow-led	Household has a literate member	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
TE on composition	-.29 (.66)	-.0049 (.015)	-.0013 (.022)	.019 (.02)	-.036 (.026)	-.0015 (.0094)	-.015 (.019)	.0088 (.023)	-.013 (.019)	-.017 (.024)	
Control correlation with wage	.087 (.13)	-.55*** (4.2)	9 (9.1)	4.8 (12)	-15* (7.9)	20** (9.2)	-9.7 (8.4)	-14 (11)	-13** (5.2)	-1.7 (5)	
Compositional effect on wage	-.025 (.069)	.27 (.82)	-.012 (.2)	.093 (.25)	.54 (.49)	-.029 (.18)	-.14 (.22)	-.13 (.34)	.17 (.26)	.029 (.095)	1.1 (1.1)
Control correlation with res wage	-.019 (.067)	-.35*** (3)	3.2 (5.6)	.57 (13)	-.98 (3)	22*** (7.2)	5.1 (3.2)	-5.6 (4.5)	-.87 (2.3)	1.2 (2.6)	
Compositional effect on res wage	.0054 (.023)	.17 (.51)	-.0042 (.07)	.011 (.25)	.035 (.11)	-.033 (.21)	-.074 (.11)	-.049 (.13)	.011 (.035)	-.02 (.052)	.052 (.65)
Unit of analysis	Adult	Adult	Adult	Adult	Adult	Adult	Adult	Household	Household	Household	

This table examines to what extent the treatment effects on wages and reservation wages that we estimate in Table 2 could be attributable to changes in composition as a result of treatment.

Total days reported

	(1)	(2)
Adjusted TE ($\beta_T + 0.36 * \beta_N$)	-.32* (.19) {.22}	-.34* (.19) {.22}
Main effect (β_T)	-.29 (.18) {.2}	-.3 (.18) {.2}
Nbhd effect ($0.36 * \beta_N$)	-.033 (.079) {.08}	-.035 (.082) {.084}
Baseline lag	Yes	No
Control mean	30.1	30.1
Adjusted R^2	.017	.015
Observations	13,713	13,798

The unit of analysis is an adult. The outcome variable is the total days reported doing various activities. This was not required to add up to 30 days. Column 1 includes a baseline lag, Column 2 does not.

Differential effects by recall length

	Employment			Wages
	(1) Days self-employed or not working	(2) Days worked in NREGS	(3) Days worked in private sector	(4) NREGS earnings in June
Treatment	-1.1 (1.4)	.47 (.7)	-.11 (1.2)	134 (121)
Survey Week	.061 (.24)	-.16 (.11)	-.012 (.21)	11 (20)
Treatment × Survey Week	-.041 (.28)	.025 (.13)	.14 (.25)	-5.4 (23)
Control mean	17	3.5	7.9	704
Adjusted R^2	.067	.04	.018	.1
Observations	13713	13713	13713	13713

The unit of analysis is an adult. The outcomes are wage and employment outcomes. Survey week is coded as 0 for the first week and + 1 for each week after that, i.e 1 for the second, 3 for the fourth etc.

Days of NREGS work provided

	(1)	(2)
Adjusted TE ($\beta_T + 0.36 * \beta_N$)	913 (772) {788}	1071 (873) {935}
Main effect (β_T)	637 (641) {606}	546 (753) {732}
Nbhd effect ($0.36 * \beta_N$)	276 (356) {365}	525 (361) {389}
Baseline lag	Yes	No
Control mean	6,605.2	6,605.2
Adjusted R^2	.324	.113
Observations	856	861

The unit of analysis is a village. Data comes from official NREGS administrative records on the number of days of NREGS work provided for each NREGS project.