Online Appendix for "Social Welfare Portability and Migration: Evidence from the Indian Public Distribution System"

Contents

A   Treatment Effect Decompositions

A.1   Decomposing Trust Impacts Into Direct Effects and a Selection Effect

We show that impacts on trust can be decomposed into two direct effects and a selection effect within the framework introduced in Section 5.3. For a change in trust from period t to $t+1$, we obtain:

$$\tau_{t+1} - \tau_t = \frac{\alpha_t}{\alpha_{t+1}} E[Trust_{t+1}|Aware_t = 1]$$
$$+ \frac{\alpha_{t+1} - \alpha_t}{\alpha_{t+1}} E[Trust_{t+1}|Aware_t = 0,\ Aware_{t+1} = 1]$$
$$- E[Trust_t|Aware_t = 1],$$

noting that τ_{t+1} is a weighted average of trust in period $t+1$ in the sets of people already aware of ONORC in period t, and those newly aware of ONORC in period $t+1$. Breaking

the last term into two and rearranging gives:

$$\tau_{t+1} - \tau_t = \frac{\alpha_t}{\alpha_{t+1}} E[Trust_{t+1} - Trust_t | Aware_t = 1]$$
$$+ \frac{\alpha_{t+1} - \alpha_t}{\alpha_{t+1}} \left(E[Trust_{t+1} | Aware_t = 0, \ Aware_{t+1} = 1] - E[Trust_t | Aware_t = 1] \right).$$

Finally, adding and subtracting $E[Trust_t | Aware_t = 0, \ Aware_{t+1} = 1]$ gives:

$$\tau_{t+1} - \tau_t = \frac{\alpha_t}{\alpha_{t+1}} E[Trust_{t+1} - Trust_t | Aware_t = 1]$$
$$+ \frac{\alpha_{t+1} - \alpha_t}{\alpha_{t+1}} E[Trust_{t+1} - Trust_t | Aware_t = 0, \ Aware_{t+1} = 1]$$
$$+ \frac{\alpha_{t+1} - \alpha_t}{\alpha_{t+1}} \left(E[Trust_t | Aware_t = 0, \ Aware_{t+1} = 1] - E[Trust_t | Aware_t = 1] \right).$$

The first line represents the direct impact on trust among those already aware of ONORC at time t. The second line represents the direct impact on trust among those newly aware of ONORC at time $t + 1$. The third line represents the selection effect on average trust created by any differences between (latent) trust at time t between those newly aware of ONORC at time $t + 1$ and those already aware at time t.

A.2 A Decline in Portability Beliefs Implies a Negative Direct Effect on Trust Among Those Already Aware of the ONORC Program

We show that negative treatment impacts on portability beliefs imply negative direct effects on trust among those already aware of the ONORC program, assuming treatment impacts on awareness are non-negative. We begin by expressing a change in average portability beliefs from time t to $t + 1$ following the notation of Table 4, then plug in using the expression for $\tau_{t+1} - \tau_t$ obtained in Section A.1:

$$E[Port_{i,t+1} - Port_{i,t}] = (\alpha_{t+1} - \alpha_t)\tau_t + (\tau_{t+1} - \tau_t)\alpha_t + (\alpha_{t+1} - \alpha_t)(\tau_{t+1} - \tau_t)$$
$$= (\tau_{t+1} - \tau_t)\alpha_{t+1} + (\alpha_{t+1} - \alpha_t)\tau_t$$
$$= \alpha_t E[Trust_{t+1} - Trust_t | Aware_t = 1]$$
$$+ (\alpha_{t+1} - \alpha_t) E[Trust_{t+1} - Trust_t | Aware_t = 0, \ Aware_{t+1} = 1]$$
$$+ (\alpha_{t+1} - \alpha_t) \left(E[Trust_t | Aware_t = 0, \ Aware_{t+1} = 1] - E[Trust_t | Aware_t = 1] \right)$$
$$+ (\alpha_{t+1} - \alpha_t) E[Trust_t | Aware_t = 1].$$

Simplifying yields:

$$E[Port_{i,t+1} - Port_{i,t}] = \alpha_t E[Trust_{t+1} - Trust_t | Aware_t = 1]$$
$$+ (\alpha_{t+1} - \alpha_t) E[Trust_{t+1} | Aware_t = 0, \ Aware_{t+1} = 1].$$

That is, a change in portability beliefs is equal to the direct effect on trust among those

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already aware of ONORC plus mean post-treatment trust among those newly aware of ONORC, with terms weighted by the respective population shares α_t and $(\alpha_{t+1} - \alpha_t)$.

Now, assuming $(\alpha_{t+1} - \alpha_t) \geq 0$, the second term in the above expression is non-negative. Therefore, $E[Port_{i,t+1}] < E[Port_{it}]$ can only come about by $E[Trust_{t+1} - Trust_t | Aware_t = 1] < 0$, that is, a negative direct effect on trust among those already aware of the ONORC program at time t.

A.3 Identifying Trust Impacts

The treatment impact on average portability beliefs at $t = 2$ is given by:

$$(\alpha_0 + \Delta_\alpha^{BOTH}) \times (\tau_0 + \Delta_\tau^{BOTH}) - (\alpha_0 + \Delta_\alpha^{GOV}) \times (\tau_0 + \Delta_\tau^{GOV}).$$

Applying Assumption 2, that $\Delta_\alpha^{GOV} = \Delta_\alpha^{BOTH}$, and pulling out $\alpha_0 + \Delta_\alpha^{BOTH} = \alpha_2$ gives:

$$\alpha_2 \times (\Delta_\tau^{BOTH} - \Delta_\tau^{GOV}).$$

Applying the decomposition of Δ_τ from Section A.1 gives:

$$\alpha_2 \times \frac{\alpha_0}{\alpha_2} E[Trust_2^{BOTH} - Trust_0 | Aware_0 = 1]$$
$$+ \alpha_2 \times \frac{\alpha_2 - \alpha_0}{\alpha_2} E[Trust_2^{BOTH} - Trust_0 | Aware_0 = 0, Aware_2^{BOTH} = 1]$$
$$+ \alpha_2 \times \frac{\alpha_2 - \alpha_0}{\alpha_2} \left(E[Trust_0 | Aware_0 = 0, Aware_2^{BOTH} = 1] - E[Trust_0 | Aware_0 = 1] \right)$$
$$- \alpha_2 \times \frac{\alpha_0}{\alpha_2} E[Trust_2^{GOV} - Trust_0 | Aware_0 = 1]$$
$$- \alpha_2 \times \frac{\alpha_2 - \alpha_0}{\alpha_2} E[Trust_2^{GOV} - Trust_0 | Aware_0 = 0, Aware_2^{GOV} = 1]$$
$$- \alpha_2 \times \frac{\alpha_2 - \alpha_0}{\alpha_2} \left(E[Trust_0 | Aware_0 = 0, Aware_2^{GOV} = 1] - E[Trust_0 | Aware_0 = 1] \right).$$

The fourth and fifth lines are both zero by Assumption 1: that there were no direct impacts on trust of government campaigns. The third and sixth lines cancel: the selection component of the trust impacts are equal for the government and combined campaigns by virtue of their equal impacts on awareness (Assumption 2). This leaves:

$$\alpha_0 E[Trust_2^{BOTH} - Trust_0 | Aware_0 = 1]$$
$$+ \Delta_\alpha^{BOTH} E[Trust_2^{BOTH} - Trust_0 | Aware_0 = 0, Aware_2^{BOTH} = 1].$$

This final expression represents the sum of two direct effects on trust: one on those already aware of ONORC at $t = 0$ and one on those newly aware of ONORC at $t = 2$).

A.4 Identifying Awareness Impacts

Under Assumption 3—that changes in awareness and trust in the control group are due solely to government campaigns—the change in portability beliefs from $t = 1$ to $t = 2$ in the control group identifies the impact of the government campaign:

$$
\begin{aligned}
(\alpha_0 + \Delta_\alpha^{GOV}) &\times (\tau_0 + \Delta_\tau^{GOV}) - \alpha_0 \times \tau_0 \\
&= \Delta_\tau^{GOV}(\alpha_0 + \Delta_\alpha^{GOV}) + \tau_0 \Delta_\alpha^{GOV} \\
&= \Delta_\alpha^{GOV} \left(E[Trust_0 | Aware_0 = 0, \ Aware_2^{GOV} = 1] - \tau_0 \right) + \tau_0 \Delta_\alpha^{GOV} \\
&= \Delta_\alpha^{GOV} E[Trust_0 | Aware_0 = 0, \ Aware_2^{GOV} = 1],
\end{aligned}
$$

where the third line follows by plugging in the decomposition of $\Delta_\tau^{GOV} \equiv \tau_2 - \tau_1$ from Section A.1 and applying Assumption 1 (that direct effects on trust are zero).

A.5 Decomposing Impacts on Emigration by Destination Type

We show that treatment impacts on emigration overall, emigration to rural destinations, and emigration to urban destinations (as shown in Table 6) jointly imply a positive treatment impact either on urban-to-rural switching or on non-emigrants switching to rural destinations, and argue that our impacts on beliefs are most consistent with the former.

Consider a decomposition of the population into nine "response types" based on three potential emigration outcomes—rural, urban, and non-emigration—which depend on a person's treatment status—treated or untreated. Let G_{XY} denote the gross flows per capita represented by the response type choosing destination X when untreated and Y when treated, with $X, Y \in \{R, U, N\}$ denoting a rural destination, urban destination, or non-emigration. For example, G_{NU} is the number of people per household who switch from non-emigration to an urban destination when treated. There are nine response types. Let $N_{XY} \equiv G_{XY} - G_{YX}$ denote net flows. For example, $N_{UR} = G_{UR} - G_{RU}$ is the number of people per household induced to travel to a rural destination instead of an urban destination minus the number induced to travel to an urban destination instead of a rural destination.

The estimate on any emigration (Table 6 Column 1) identifies (the equations below omit always-takers who appear in both treatment conditions):

$$
\begin{aligned}
(\text{Migrants if Treated}) &- (\text{Migrants if Untreated}) \\
&= (G_{NU} + G_{NR}) - (G_{UN} + G_{RN}) \\
&= N_{NU} + N_{NR}.
\end{aligned} \tag{3}
$$

The estimate on emigration to urban areas (Table 6 Column 2) identifies:

$$
\begin{aligned}
(\text{Emigrants to Urban Areas if Treated}) &- (\text{Emigrants to Urban Areas if Untreated}) \\
&= (G_{NU} + G_{RU}) - (G_{UR} + G_{UN}) \\
&= N_{NU} - N_{UR}.
\end{aligned} \tag{4}
$$

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The estimate on emigration to rural areas (Table 6 Column 3) identifies:

$$(\text{Emigrants to Rural Areas if Treated}) - (\text{Emigrants to Rural Areas if Untreated})$$
$$= (G_{NR} + G_{UR}) - (G_{RU} + G_{RN}) \tag{5}$$
$$= N_{NR} + N_{UR}.$$

Subtracting (4) from (5) and plugging in $-N_{NU} = N_{NR} + 0.010$ from (3) gives:

$$N_{NR} - N_{NU} + 2N_{UR} = 0.107$$
$$\implies N_{NR} + N_{UR} = 0.049.$$

That is, our treatment either increased net urban-to-rural switching, N_{UR}, or it increased net staying-to-rural switching, N_{NR}, while also increasing net urban-to-staying switching. However, a positive effect on N_{NR} is difficult to reconcile with the decrease in portability beliefs, which should decrease the perceived return to emigrating regardless of destination (but more so for urban destinations). Our finding that treatment did not impact selection into emigration (see Appendix Table B7) also suggests that treatment did not lead to both staying-to-rural switching and urban-to-staying switching in different sets of people. This leads us to conclude that the findings of Table 6 are driven by urban-to-rural switching.

B   Additional Tables

Table B1: Correlates of Baseline Portability Beliefs

	(1)	(2)	(3)
	Believes Their Ration is Portable:		
	Somewhere	Across Districts	Across States
Household Size			0.01
Highest Education			0.01
OBC/ST/SC Caste	-0.02		-0.02
Literacy Rate	0.02	0.01	0.01
# of Current Migrants	-0.01		
Household Income	0.03	0.05	
Total Consumption			
Food Consumption	0.02	0.01	
Employment Rate	-0.02	-0.02	-0.01
Outcome Mean	0.33	0.22	0.17
Observations	36,732	36,732	36,732

An observation is a family (household + emigrants) at baseline. Ration portability beliefs are binary variables indicating whether the respondent replied "Yes" to the question "This question is about food ration claimed through the Public Distribution System. Can you use your ration card at ration shops other than your designated shop?" and two analogous follow-up questions about out-of-district and out-of-state shops respectively. If a person did not answer "Yes" to one of these questions, we code the following questions as "No." Each column shows post-lasso OLS coefficients from a lasso regression (Belloni and Chernozhukov, 2013). All continuous variables are standardized to mean 0, standard deviation 1. Sample is restricted to respondents who were asked updated beliefs questions (see Section 4.5).

Table B2: Treatment Impacts on Portability Beliefs (No Controls)

	(1)	(2)	(3)
		Believes Their Ration is Portable:	
	Somewhere	Across Districts	Across States
Immediate Impacts			
Treatment	0.201***	0.145***	0.155***
	(0.044)	(0.039)	(0.036)
	[0.00]	[0.00]	[0.00]
Outcome Mean in Control	0.35	0.26	0.20
Observations	36,776	36,776	36,776
4-Month Impacts			
Treatment	-0.087***	-0.099***	-0.072**
	(0.033)	(0.035)	(0.034)
	[0.01]	[0.01]	[0.03]
Outcome Mean in Control	0.55	0.43	0.37
Observations	48,297	48,297	48,297

An observation is a family (household + emigrants). Ration portability beliefs are binary variables indicating whether the respondent replied "Yes" to the question "This question is about food ration claimed through the Public Distribution System. Can you use your ration card at ration shops other than your designated shop?" and two analogous follow-up questions about out-of-district and out-of-state shops respectively. If a person did not answer "Yes" to one of these questions, we code the following questions as "No." Immediate impacts are measured in the baseline survey (Oct–Dec 2021) after information is provided; 4-month results are measured in a follow-up survey (Feb–Apr 2022). Baseline sample is restricted to respondents who were asked updated beliefs questions (see Section 4.5). All regressions include a randomization-stratum fixed effect. Standard errors in parentheses are clustered at the village/town (primary sampling unit) level; two-sided p-values in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B3: Treatment Impacts on Portability Beliefs (Balanced Sample)

	(1)	(2)	(3)
	Believes Their Ration is Portable:		
	Somewhere	Across Districts	Across States
Immediate Impacts			
Treatment	0.246***	0.218***	0.222***
	(0.033)	(0.031)	(0.031)
	[0.00]	[0.00]	[0.00]
Outcome Mean in Control	0.38	0.28	0.23
Observations	28,510	28,510	28,510
4-Month Impacts			
Treatment	-0.086**	-0.086**	-0.050
	(0.037)	(0.038)	(0.036)
	[0.02]	[0.02]	[0.16]
Outcome Mean in Control	0.56	0.45	0.38
Observations	28,510	28,510	28,510

An observation is a family (household + emigrants). Ration portability beliefs are binary variables indicating whether the respondent replied "Yes" to the question "This question is about food ration claimed through the Public Distribution System. Can you use your ration card at ration shops other than your designated shop?" and two analogous follow-up questions about out-of-district and out-of-state shops respectively. If a person did not answer "Yes" to one of these questions, we code the following questions as "No." Immediate impacts are measured in the baseline survey (Oct–Dec 2021) after information is provided; 4-month results are measured in a follow-up survey (Feb–Apr 2022). Both the baseline and the 4-month samples are restricted to respondents who were asked updated beliefs questions at baseline (see Section 4.5), were surveyed at both baseline and followup, and had a ration card linked to Aadhar in the follow-up survey. All regressions include a randomization-stratum fixed effect, a control for the pre-treatment value of the outcome variable, and other pre-treatment controls chosen through lasso regression from the set of all baseline variables. Pre-treatment beliefs y_{ic0} in the control group are imputed to be the same as "immediate post-intervention" beliefs y_{ic1}. Standard errors in parentheses are clustered at the village/town (primary sampling unit) level; two-sided p-values in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B4: Transition Matrices of Beliefs About Ration Portability

	Pre-Intervention Belief (Treatment Group):			
	Nowhere	In-District Only	In-State Only	Anywhere
Post-Intervention Belief (%):				
Nowhere	63	7	1	12
In-District Only	9	70	6	3
In-State Only	3	4	27	1
Anywhere	25	19	66	84
Observations	12,648	2,421	854	2,415

	Post-Intervention Belief (Control Group):			
	Nowhere	In-District Only	In-State Only	Anywhere
Follow-Up Belief (%):				
Nowhere	55	39	43	16
In-District Only	7	29	21	13
In-State Only	9	5	5	3
Anywhere	28	27	31	69
Observations	8,837	1,473	775	3,263

	Post-Intervention Belief (Treatment Group):			
	Nowhere	In-District Only	In-State Only	Anywhere
Follow-Up Belief (%):				
Nowhere	72	49	69	38
In-District Only	11	16	13	11
In-State Only	3	5	1	2
Anywhere	14	31	16	49
Observations	6,020	2,274	632	5,236

An observation is a family (household + emigrants). Ration portability beliefs are binary variables indicating whether the respondent replied "Yes" to the question "This question is about food ration claimed through the Public Distribution System. Can you use your ration card at ration shops other than your designated shop?" and two analogous follow-up questions about out-of-district and out-of-state shops respectively. If a person did not answer "Yes" to one of these questions, we code the following questions as "No." Each panel shows a transition matrix of beliefs about ration portability from right before to right after treatment (measured in the baseline survey, treatment group only) or right after treatment to the follow-up survey (shown separately for treatment and control groups). Beliefs are categorized into four groups: believes ration is not portable, believes it is portable within district but not within state, believes it is portable within state but not outside of state lines, and believes it is portable outside of state lines. Each cell shows the percent of respondents in a given belief category; column totals within a panel sum to 100 (net of rounding). Pre- and post-intervention beliefs are measured in the baseline survey (Oct–Dec 2021); follow-up beliefs are measured in the 4-month follow-up survey (Feb–Apr 2022). Baseline sample is restricted to respondents who were asked updated beliefs questions (see Section 4.5).

Table B5: Treatment Impacts on Portability Beliefs (In States Where Assumptions 1 and 2 Are Likely to Hold)

	(1)	(2)	(3)
		Believes Their Ration is Portable:	
	Somewhere	Across Districts	Across States
Immediate Impacts			
Treatment	0.386***	0.392***	0.470***
	(0.073)	(0.077)	(0.074)
	[0.00]	[0.00]	[0.00]
Outcome Mean in Control	0.42	0.37	0.33
Observations	6,837	6,837	6,837
4-Month Impacts			
Treatment	-0.051	-0.046	-0.053
	(0.049)	(0.050)	(0.052)
	[0.30]	[0.36]	[0.31]
Outcome Mean in Control	0.89	0.78	0.77
Observations	8,415	8,415	8,415

An observation is a family (household + emigrants). Ration portability beliefs are binary variables indicating whether the respondent replied "Yes" to the question "This question is about food ration claimed through the Public Distribution System. Can you use your ration card at ration shops other than your designated shop?" and two analogous follow-up questions about out-of-district and out-of-state shops respectively. If a person did not answer "Yes" to one of these questions, we code the following questions as "No." Immediate impacts are measured in the baseline survey (Oct–Dec 2021) after information is provided; 4-month results are measured in a follow-up survey (Feb–Apr 2022). Baseline sample is restricted to respondents who were asked updated beliefs questions (see Section 4.5). Sample includes the four states with the highest out-of-sample beliefs about across-state ration portability, as shown in Appdendix Figure D5—Delhi, Karnataka, Punjab, and Tamil Nadu. All regressions include a randomization-stratum fixed effect, a control for the pre-treatment value of the outcome variable, and other pre-treatment controls chosen through lasso regression from the set of all baseline variables. Pre-treatment beliefs y_{ic0} in the control group are imputed to be the same as "immediate post-intervention" beliefs y_{ic1}. Standard errors in parentheses are clustered at the village/town (primary sampling unit) level; two-sided p-values in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B6: Baseline Correlates of Predictors of Treatment Effect Heterogeneity

	(1) Food Is a Migration Barrier	(2) Says Ration Is Not Portable	(3) Poor Household	(4) Poor Household (No Credit)	(5) Low-Wealth Households	(6) Had Any Emigrant at Baseline
Household Size	-0.03		0.25	0.13	0.01	-0.04
Highest Education			-0.06	-0.03	-0.07	-0.03
OBC/ST/SC Caste		0.02	0.06	0.01	0.07	0.02
Literacy Rate	0.01	-0.02	-0.02	-0.02		
# of Current Migrants	-0.01	0.01	0.02	0.03	-0.01	
Household Income	0.01	-0.03			-0.06	-0.00
Total Consumption					-0.09	-0.03
Food Consumption	0.02	-0.02			-0.07	
Employment Rate		0.02	-0.04	-0.04	0.03	-0.03
Outcome Mean	0.19	0.67	0.40	0.23	0.55	0.33
Observations	62,074	36,732	62,074	62,074	62,074	62,074

An observation is a family (household + emigrants) at baseline. Each column shows post-lasso OLS coefficients from a lasso regression (Belloni and Chernozhukov, 2013). *Food Is a Migration Barrier* equals 1 if the household reports finding food at the destination as one of the top three challenges a hypothetical migrant would face. *Says Ration Is Not Portable* equals 1 if the household reported it cannot claim ration outside its designated shop. *Poor Households* are those in the bottom 40% of per-adult-equivalent household consumption in our sample. *Poor Households (No Credit)* adds the additional restriction that the household does not have an outstanding loan. *Low-Wealth Households* are those in the bottom 40% of the first principal component of a set of 12 durable asset measures. *Had Any Emigrant at Baseline* equals 1 if the household had non-zero emigrants as of the baseline survey. All continuous variables are standardized to mean 0, standard deviation 1. Sample in Column 2 is restricted to respondents who were asked updated beliefs questions (see Section 4.5). Consumption and income variables are excluded from the regression predicting *Poor Household* and *Poor Household (No Credit)*; number of migrants is excluded from the regression predicting *Had Any Emigrant at Baseline*.

Table B7: There are no significant average differences in baseline characteristics between emigrants in the treatment and control groups.

Variable	(1) Control Mean/(SD)	(2) Treatment Mean/(SD)	(1)-(2) Pairwise t-Test p-Value
Age (Years)	25.76 (43.07)	25.88 (45.07)	0.86
Education (Years)	7.69 (13.42)	7.62 (15.17)	0.71
Head of Household = 1	0.06 (0.69)	0.07 (0.69)	0.60
Literate	0.95 (0.34)	0.95 (0.38)	0.95
OBC/ST/SC Caste	0.65 (2.38)	0.67 (2.06)	0.94
Ever Migrated	0.94 (1.40)	0.94 (1.89)	0.80
Emigrant at Baseline	0.93 (1.53)	0.93 (1.95)	0.88
Emigrant to Urban Area at Baseline	0.66 (4.14)	0.62 (4.16)	0.22
Observations	23,942	22,413	46,355
Clusters	617	664	1,281

An observation is an emigrant in the 4-month follow-up survey. Baseline characteristics are measured in the baseline survey (Oct–Dec 2021); 4-month results are measured in a follow-up survey (Feb–Apr 2022). First two columns show means of baseline characteristics within control and treatment emigrants, respectively. Third column shows p-values from a two-sided t-test of equivalence of means, controlling for a randomization-stratum fixed effect and clustering standard errors at the village/town (primary sampling unit) level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

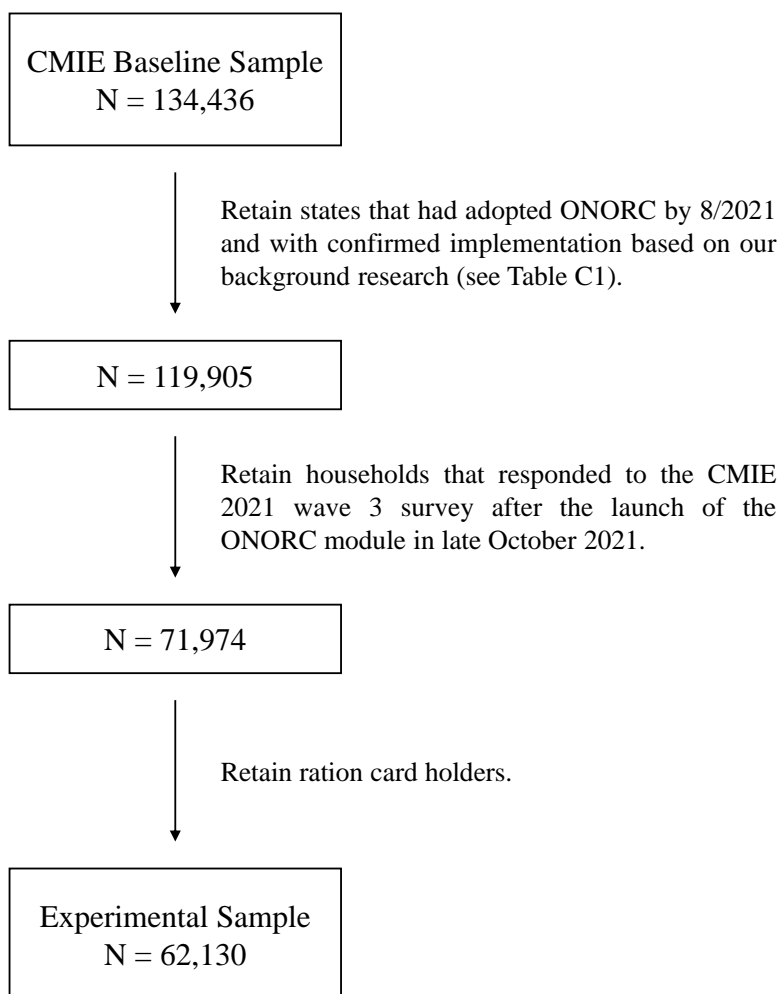Table B8: Correlations Between Predictors of Treatment Effect Heterogeneity

	(1) Says Ration Is Not Portable	(2) Food Is a Migration Barrier	(3) Poor Household	(4) Poor Household (No Credit)
Food Is a Migration Barrier	0.00 (0.01) [0.74]			
Poor Household	0.07*** (0.00) [0.00]	-0.07*** (0.00) [0.00]		
Poor Household (No Credit)	0.01** (0.01) [0.01]	-0.05*** (0.00) [0.00]	0.78*** (0.00) [0.00]	
Low-Wealth Household	0.12*** (0.00) [0.00]	-0.07*** (0.00) [0.00]	0.20*** (0.00) [0.00]	0.08*** (0.00) [0.00]
Outcome Mean	0.67	0.19	0.40	0.23
Observations	36,776	62,130	62,130	62,130

An observation is a family (household + emigrants) at baseline. Each cell shows the coefficient from a bivariate regression of two pre-specified predictors of treatment effect heterogeneity. *Food Is a Migration Barrier* equals 1 if the household reports finding food at the destination as one of the top three challenges a hypothetical migrant would face. *Says Ration Is Not Portable* equals 1 if the household reported it cannot claim ration outside its designated shop. *Poor Households* are those in the bottom 40% of per-adult-equivalent household consumption in our sample. *Poor Households (No Credit)* adds the additional restriction that the household does not have an outstanding loan. *Low-Wealth Households* are those in the bottom 40% of the first principal component of a set of 12 durable asset measures. Sample in Column 1 is restricted to respondents who were asked updated beliefs questions (see Section 4.5). Heteroskedasticity-robust standard errors in parentheses; two-sided p-values in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

C   Additional Details on Experimental Design

C.1   Sample and Randomization

Figure C1: Summary of Sample Selection Process

```
┌─────────────────────────┐
│  CMIE Baseline Sample   │
│      N = 134,436        │
└─────────────────────────┘
              │
              │   Retain states that had adopted ONORC by 8/2021
              │   and with confirmed implementation based on our
              │   background research (see Table C1).
              ▼
┌─────────────────────────┐
│      N = 119,905        │
└─────────────────────────┘
              │
              │   Retain households that responded to the CMIE
              │   2021 wave 3 survey after the launch of the
              │   ONORC module in late October 2021.
              ▼
┌─────────────────────────┐
│      N = 71,974         │
└─────────────────────────┘
              │
              │   Retain ration card holders.
              ▼
┌─────────────────────────┐
│  Experimental Sample    │
│      N = 62,130         │
└─────────────────────────┘
```

Details on Randomization.   Strata were formed from the following features: state identifier, an urban dummy, a dummy for clusters with an above-median share of households that had sent an emigrant anywhere since 2017, and a dummy for clusters with an above-median poverty rate (defined as being below the 40th percentile of per-adult-equivalent household consumption). The Stata command *randtreat* was used, assigning misfits using the global method.

Table C1: Summary of Pre-Experimental Research Into Ration Portability

State:	Adopted ONORC by Aug 2021	Shop Owner Surveys	Mig. Surveys and Mystery Shoppers	Interstate Transaction Data	Experimental Sample
Andhra Pradesh	X	X		X	X
Assam		X		X	
Bihar	X	X	X	X	X
Chandigarh	X			X	
Chhattisgarh		X		X	
Delhi	X	X		X	X
Goa	X			X	
Gujarat	X	X	X	X	X
Haryana	X	X		X	X
Himachal Pradesh	X	X		X	X
Jammu & Kashmir	X			X	
Jharkhand	X	X		X	X
Karnataka	X	X	X	X	X
Kerala	X			X	
Madhya Pradesh	X	X	X	X	X
Maharashtra	X	X	X	X	X
Meghalaya	X			X	
Odisha	X	X		X	X
Puducherry	X			X	
Punjab	X	X		X	X
Rajasthan	X	X		X	X
Sikkim	X			X	
Tamil Nadu	X	X	X	X	X
Telangana	X	X		X	X
Tripura	X			X	
Uttar Pradesh	X	X	X	X	X
Uttarakhand	X	X		X	X
West Bengal	X	X		X	X

This table shows state-level information for the 28 states in which CMIE operates surveys. *Adopted ONORC* indicates whether the state had implemented interstate ration portability by August 2021. *Shop Owner Surveys* indicates whether we sampled ration shops to survey owners by phone. *Mig. Surveys and Mystery Shoppers* indicates whether we surveyed migrants with out-of-state or out-of-district ration cards, and sent mystery shoppers with eligible ration cards to attempt to claim ration in a different district or state than their home location. *Interstate Transaction Data* indicates whether we could verify ONORC adoption through state-level portability transaction data provided by the Indian government (Department of Food & Public Distribution, 2021). *Experimental Sample* indicates whether clusters located in that state were assigned to a treatment or control condition.

Table C2: Test of Differential Attrition

	(1) Surveyed	(2) Surveyed Individual By Phone
Difference at 4 Months		
Treatment	0.002	0.000
	(0.014)	(0.015)
	[0.91]	[0.99]
Outcome Mean in Control	0.85	0.74
Observations	62,130	7,216
Difference at 8 Months		
Treatment	0.007	
	(0.020)	
	[0.74]	
Outcome Mean in Control	0.73	
Observations	62,130	
Pooled Difference		
Treatment	0.004	
	(0.013)	
	[0.75]	
Outcome Mean in Control	0.79	
Observations	124,260	

An observation is a family (household + emigrants). *Surveyed* is equal to 1 if the family was surveyed during the given round, and 0 otherwise. *Surveyed Individual by Phone* is equal to 1 if at least one emigrant from the family sampled for a phone survey was successfully surveyed, and 0 otherwise (see 4.2 for details on emigrant phone survey sampling). Four- and eight-month results are measured in follow-up surveys in Feb–Apr 2022 and Jun–Aug 2022 respectively. All regressions include a randomization-stratum fixed effect. Pooled impacts measured using ANCOVA regression including a survey-wave fixed effect. Standard errors in parentheses are clustered at the village/town (primary sampling unit) level; two-sided p-values in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C3: Baseline Sample Statistics and Randomization Balance

Variable	(1) Control Mean/(SD)	(2) Treatment Mean/(SD)	(1)-(2) Pairwise t-Test p-Value
Highest Education (Years)	11.32 (18.31)	11.18 (16.99)	0.82
Household Size	3.72 (8.44)	3.77 (7.99)	0.76
# of Adult-Equivalents	3.51 (7.53)	3.55 (7.14)	0.80
OBC/ST/SC Castes, % of Household	0.67 (2.59)	0.68 (2.15)	0.74
Literacy, % of Adults	0.99 (0.17)	0.99 (0.38)	0.12
Ever Migrated	0.56 (1.98)	0.56 (1.92)	0.94
Any Current Migrant	0.32 (1.83)	0.33 (1.87)	0.92
# of Current Migrants	0.94 (6.25)	0.91 (5.82)	0.33
# of Current Urban Migrants	0.63 (6.83)	0.56 (6.23)	0.12
# of Current Inter-State Migrants	0.02 (0.51)	0.03 (1.52)	0.08*
Household Income (USD/Month)	261 (1,499)	252 (1,176)	0.75
Total Consumption (USD/Month)	158 (579)	157 (615)	0.59
Food Consumption (USD/Month)	45 (146)	45 (167)	0.12
Employment, % of Adults	0.40 (0.90)	0.41 (0.80)	0.80
Has a Bank Account	1.00 (0.01)	1.00 (0.01)	0.38
Observations	31,456	30,674	62,130
Clusters	848	892	1,740

First two columns show means within control and treatment households, respectively. Third column shows p-values from a two-sided t-test of equivalence of means, controlling for a randomization-stratum fixed effect and clustering standard errors at the village/town (primary sampling unit) level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C4: Randomization Balance (Among Households Surveyed at 4-Month Follow-Up)

Variable	(1) Control Mean/(SD)	(2) Treatment Mean/(SD)	(1)-(2) Pairwise t-Test p-Value
Highest Education (Years)	11.38 (16.91)	11.24 (16.16)	0.71
Household Size	3.74 (8.23)	3.78 (7.67)	0.82
# of Adult-Equivalents	3.52 (7.35)	3.56 (6.83)	0.83
OBC/ST/SC Castes, % of Household	0.67 (2.47)	0.69 (2.06)	0.58
Literacy, % of Adults	0.99 (0.17)	0.99 (0.38)	0.08*
Ever Migrated	0.57 (1.91)	0.57 (1.91)	0.89
Any Current Migrant	0.33 (1.81)	0.33 (1.90)	0.99
# of Current Migrants	0.95 (6.21)	0.93 (5.92)	0.40
# of Current Urban Migrants	0.65 (6.72)	0.59 (6.19)	0.17
# of Current Inter-State Migrants	0.02 (0.51)	0.03 (1.41)	0.08*
Household Income (USD/Month)	269 (1,471)	257 (1,183)	0.54
Total Consumption (USD/Month)	159 (552)	159 (616)	0.48
Food Consumption (USD/Month)	45 (143)	46 (164)	0.08*
Employment, % of Adults	0.40 (0.82)	0.41 (0.79)	0.82
Has a Bank Account	1.00 (0.01)	1.00 (0.01)	0.79
Observations	26,852	26,050	52,902
Clusters	735	760	1,495

First two columns show means within control and treatment households, respectively. Third column shows p-values from a two-sided t-test of equivalence of means, controlling for a randomization-stratum fixed effect and clustering standard errors at the village/town (primary sampling unit) level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C5: Randomization Balance (Among Households Surveyed at 8-Month Follow-Up)

Variable	(1) Control Mean/(SD)	(2) Treatment Mean/(SD)	(1)-(2) Pairwise t-Test p-Value
Highest Education (Years)	11.35 (16.70)	11.25 (16.07)	0.85
Household Size	3.74 (8.21)	3.79 (7.21)	0.96
# of Adult-Equivalents	3.53 (7.33)	3.57 (6.45)	0.98
OBC/ST/SC Castes, % of Household	0.67 (2.25)	0.69 (2.00)	0.35
Literacy, % of Adults	0.99 (0.18)	0.99 (0.32)	0.18
Ever Migrated	0.58 (1.84)	0.58 (1.78)	0.79
Any Current Migrant	0.33 (1.74)	0.33 (1.84)	0.93
# of Current Migrants	0.97 (6.05)	0.94 (5.81)	0.35
# of Current Urban Migrants	0.67 (6.70)	0.60 (6.23)	0.13
# of Current Inter-State Migrants	0.02 (0.49)	0.04 (1.63)	0.08*
Household Income (USD/Month)	263 (1,401)	254 (1,097)	0.72
Total Consumption (USD/Month)	158 (548)	157 (564)	0.59
Food Consumption (USD/Month)	45 (141)	46 (155)	0.12
Employment, % of Adults	0.40 (0.83)	0.41 (0.73)	0.35
Has a Bank Account	1.00 (0.01)	1.00 (0.01)	0.86
Observations	22,980	22,371	45,351
Clusters	641	651	1,292

First two columns show means within control and treatment households, respectively. Third column shows p-values from a two-sided t-test of equivalence of means, controlling for a randomization-stratum fixed effect and clustering standard errors at the village/town (primary sampling unit) level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

C.2 Information Intervention

Information Script (English)

I would now like to share some information with you about your right to claim food ration through the Public Distribution System. Afterward I'll ask you a question about this information to make sure that everything made sense to you. Our team has conducted research in partnership with The World Bank to determine where you are able to claim your ration. The Government of India has recognized that migrants have historically been excluded from the Public Distribution System because ration cards were tied to each household's location of residence. In response to this, the Government has launched a program called One Nation, One Ration Card to ensure that households can use their ration card anywhere in India, not just at their designated ration shop.

As of August 2021, this program has been adopted in all states and union territories except for Assam and Chhattisgarh, which are planning to join in the next few months. What that means is that, if a member of your household travels to one of these states, that person can continue to claim food ration while living there. For example, if a household member travels from $STATE to $EXAMPLE_STATE, he or she can claim total or partial ration there. Whatever portion the migrant doesn't claim, his or her family can claim back in $STATE. The same is true for migration within your state: for example, if someone from your household traveled to a different city in $STATE, you could claim your ration there. To claim ration, you should bring your Aadhaar and a copy of your ration card, which should be linked to your Aadhaar. If you have any additional ID cards, we recommend you bring a copy of each with you in case the shop owner asks to see it. You must visit a shop with an ePoS machine, which will take a biometric read. Not all ration shop owners may be aware of One Nation One Ration Card, so you may need to visit a few shops. If you have an android smartphone, you can use the Mera Ration app once you arrive to locate ration shops near you. If you have not yet been issued a standardized, 12-digit ration card, you can try adding your 2-digit state code to the beginning of your ration card number, or adding your 2-digit household member code to the end of your ration card number to produce a unique number. Migrating to a new city can be difficult, and a goal of the One Nation, One Ration Card program is to ensure that migrants are not excluded from the government's ration allocations while living away from their home.

Many households in India do not know about the One Nation, One Ration Card program, which is why we are telling you about it today. We are sharing this information with you to help you make the best possible decisions about where to look for jobs and where to claim ration. I'm going to leave this information sheet with you which includes all the information I've told you already.

We have partnered with an organization called LEAD at Krea University to set up a toll-free phone number that you can call to speak with a member of our team who can offer you personalized information on the One Nation, One Ration Card program. You can call this number to learn about claiming ration in the place that you are considering migrating to. Our team member can share contact information and addresses of ration shops at your location of interest. We have information on 29 states, and the availability of information depends on what state you're interested in. You can use this information to call ration shops

ahead of time to ask about what documents they require to give ration to migrants. The toll-free phone number is on the sheet that I will leave with you. This service is completely free to you: you will never be charged for this service, even for the phone call.

I am going to leave this sheet with you so you can remember the main points of our discussion. I'm going to go through and explain each part to you. Stop me at any point if something doesn't make sense.

- One Nation, One Ration Card allows you to claim food ration in any participating state: as of August 2021, that is all states and union territories except for Assam and Chhattisgarh, which are joining in the next few months. You can also claim ration in any district within your state of $STATE.

- To claim ration at a different shop, you should bring your Aadhaar card and a copy of your ration card. You must visit a shop with an electronic point-of-sale (ePoS) machine.

- A migrant can claim ration in one city at the same time that his or her family claims ration in a different city. In this case, each person will claim part of the household's ration allocation.

- Here is the toll-free hotline number. You can use this number to find the location of ration shops in almost any district in India, and phone numbers for many ration shops as well.

- To use the free hotline service, you will need to enter a unique access code. Your access code is $ACCESS_CODE and is listed here on your sheet.

- Not all ration shop owners may be aware of One Nation One Ration Card, so you may need to visit a few shops. We recommend you call several shops in your intended destination to ask about ration portability before migrating. You should also ask about claiming partial ration, if you are interested in that option, when you contact the shop owner. To find phone numbers of shops in your intended destination, you can call the free hotline service I just mentioned at 1800-309-4134. The hotline will run until March 18, 2022.

- If you encounter difficulties claiming ration, contact the local government office in charge of public distribution or consumer protection. You can also call 14445 to report any grievances to the government, or with other questions about the program. That government line is totally separate from the information hotline we are providing.

Do you have any questions for me right now?

1 NATION, 1 RATION CARD

SUMMARY OF PROGRAMS

The One Nation, One Ration Card (ONORC) scheme allows ration card holders to claim ration at any ration shop in participating states.

You are not restricted to only your designated ration shop.

STATE COVERAGE

By August 2021, every state and union territory has joined ONORC except for Assam and Chhattisgarh, which are planning to join in the next few months.

ELIGIBILITY

Bring Aadhar and a copy of your ration card, which must be linked. The ration shop must be equipped with an ePoS machine. It is possible to claim partial ration if you want to share between migrant and non-migrant household members.

FREE INFORMATION HOTLINE

Call 1800-309-4134 to learn more about ration portability.

- Learn ration shop phone numbers
- Learn ration shop addresses
- Free to call
- Information on 29 states
- Open now until March 18, 2022
- Open 9:30–5:30 Mon–Fri

AVAILABLE IN 9 LANGUAGES. PRESS:

1. HINDI
2. BENGALI
3. MARATHI
4. TELUGU
5. TAMIL
6. GUJARATI
7. URDU
8. KANNADA
9. ODIA

Your unique code for access is:

If you encounter difficulties claiming ration, contact the local government office in charge of public distribution or consumer protection. You can also call 14445 to report any grievances to the government, or with other questions about the ONORC program.

Table C6: Summary of Information Provided in Hotline

Potential Destination State:	Location of Shops	Phone Numbers of Shops	General Info About ONORC	Experimental Sample
Andaman & Nicobar Islands			X	
Andhra Pradesh	X		X	X
Arunachal Pradesh			X	
Assam	X	X	X	
Bihar			X	X
Chandigarh			X	
Chhattisgarh	X		X	
Dadra & Nagar Haveli & Daman & Diu	X		X	
Delhi	X		X	X
Goa	X		X	
Gujarat	X	X	X	X
Haryana	X	X	X	X
Himachal Pradesh	X	X	X	X
Jammu & Kashmir	X		X	
Jharkhand	X		X	X
Karnataka	X	X	X	X
Kerala	X		X	
Ladakh	X		X	
Lakshadweep	X		X	
Madhya Pradesh			X	X
Maharashtra	X		X	X
Manipur	X		X	
Meghalaya			X	
Mizoram	X		X	
Nagaland	X		X	
Odisha		X	X	X
Puducherry			X	
Punjab	X	X	X	X
Rajasthan	X	X	X	X
Sikkim	X		X	
Tamil Nadu	X		X	X
Telangana	X		X	X
Tripura	X		X	
Uttar Pradesh	X	X	X	X
Uttarakhand	X	X	X	X
West Bengal	X	X	X	X

This table shows which information was provided through the hotline as a function of which state the caller was interested in. *Location of Shops* refers to addresses of ration shops. *Phone Numbers of Shops* refers to phone numbers of ration shops. *General Info About ONORC* refers to the information contained in the CMIE script, which the hotline staff can repeat. *Experimental Sample* indicates whether households located in that state were assigned to a treatment or control condition.

Figure C3: Map Interface Used by Hotline Staff to Identify Ration Shop Locations

Ration shop addresses and phone numbers were uploaded to Mapbox for use by hotline staff.

Figure C4: Map Interface Used by Hotline Staff to Identify Ration Shop Phone Numbers

In the event that shop-level phone numbers were missing from an area of interest, hotline staff could pull lists of phone numbers at the sub-district (approximately, township) level. Numbers were matched to district polygons in Google Earth. Map data: Google, Airbus.

D Additional Surveys on Portability Beliefs

D.1 Pre-Experimental Research

Figure D1: Beliefs and usage of ration portability were low prior to our experiment.
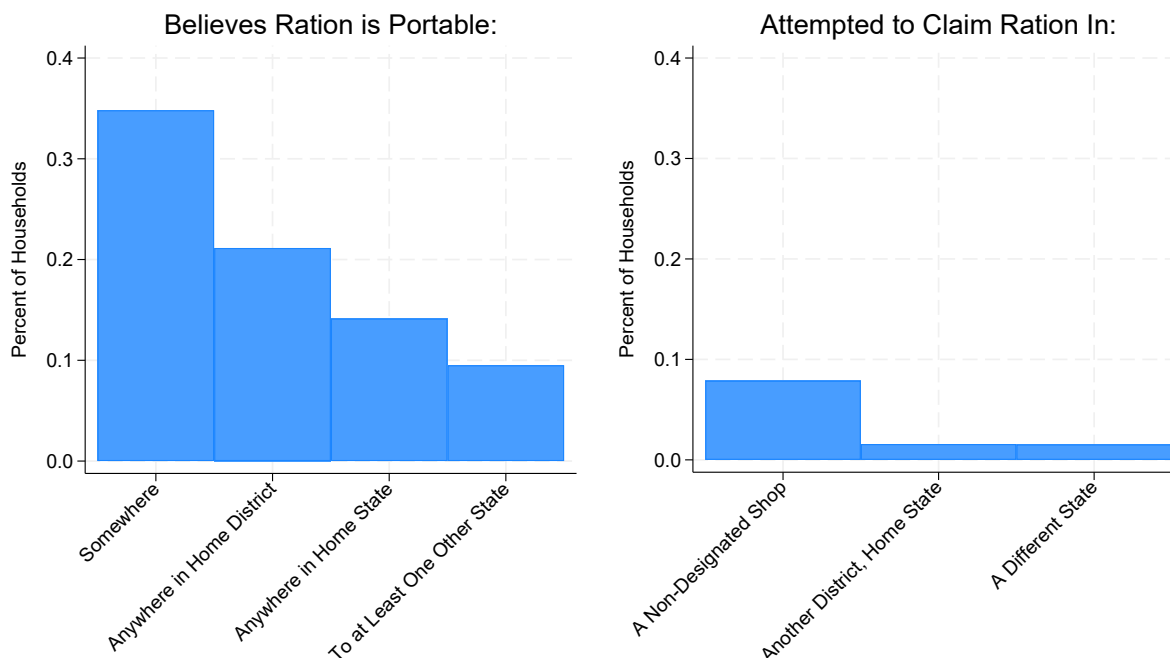
Data collected in January 2021 from surveys of ration card holders across 12 states that had implemented ONORC as of March 2020. Ration portability beliefs were measured with a series of four questions: "Can you use your ration card at a ration store/fair price shop other than your designated store?" If the respondent answered "Yes," they were asked "If you wanted to, could you use your ration card in a fair price shop that is located... Anywhere within your home district? Anywhere within your home state? At least one state other than your home state?" Attempts to claim ration were measured using the question "Except at your designated FPS, have you tried to use a ration card in any of the following places?... Somewhere within your home district? Somewhere in your home state but outside your home district? At least one state other than your home state?" *A Non-designated Shop* refers to any ration shop other than the one at which the respondent is listed as a ration claimant.

Figure D2: Reason Why Household Believes Ration Is Not Portable
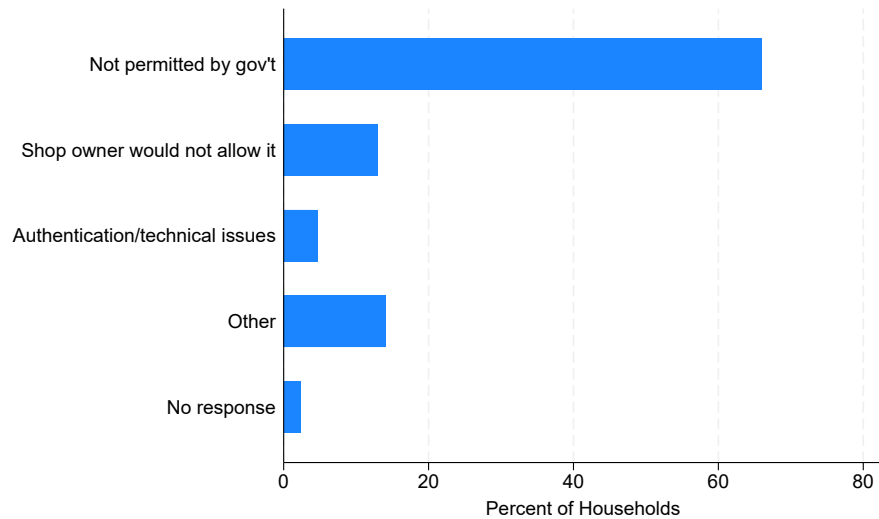
Data collected in January 2021 from surveys of ration card holders across 12 states that had implemented ONORC as of March 2020. This question was asked to all respondents who responded "No" to any of the portability questions shown in Figure D1 as a follow-up question: "Why not?"

Figure D3: Reason Why Household Has Not Tried to Claim Ration Outside Their Designated Ration Shop
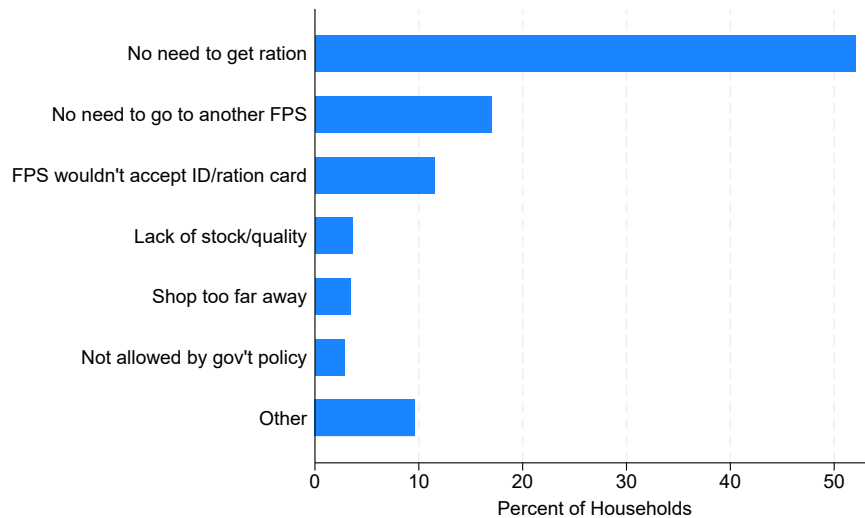
Data collected in January 2021 from surveys of ration card holders across 12 states that had implemented ONORC as of March 2020. This question was asked to all respondents who responded "No" to any of the questions about attempts to use their ration card outside their designated ration shop shown in Figure D1 as a follow-up question: "What was the main reason that the household has not tried to use a ration card in those places?"

D.2 Measuring External Changes in Beliefs

In this section, we provide additional details on the out-of-sample data on portability beliefs described in Section 5.2. Because our study launched partway through one of the data firm's survey waves, part of the sample was never exposed to our baseline survey or information intervention. We use this unexposed sample to test whether changes in beliefs in our control group were reflected in general changes occurring outside of our sample.

Because changes in perceived inter-state portability are most likely among our belief measures to reflect exposure to an awareness campaign—as opposed to self-experimentation—we assess goodness-of-fit according to these changes. We find that some states experienced small or no changes in beliefs about ration portability, while others experienced substantial increases, as shown in Appendix Figure D5. We use the median out-of-sample change in beliefs to divide our sample into households residing in states with a high or low change in beliefs. The median change is 15 pp., and produces a stark divide between our two groups of states: the average out-of-sample change in beliefs in above-median-change states is 52 pp., compared to 2 pp. in below-median-change states. We refer to these two groups as *high-campaign* and *low-campaign* states respectively. We then estimate heterogeneous treatment impacts based on the intensity of government awareness campaigns—with the caveat that this intensity is measured by proxy—by modifying (1) to include an interaction between our treatment indicator T_c and an indicator for residing in a low-campaign state.

We find that the negative treatment impacts on beliefs about ration portability are pronounced in high-campaign states, as shown in Appendix Table D1, although the differences between low-and high-campaign states are generally not statistically significant. In high-campaign states, treatment reduces overall portability beliefs by 12 pp. (p-val < 0.01). Impacts in high-campaign states on perceived inter-district and inter-state portability are similar. Treatment impacts in low-campaign states are small and statistically indistinguishable from zero. This null result is largely driven by the much lower initial treatment impacts in low-campaign states compared to high-campaign states (coeffs. $= 11$ pp. and 34 pp. respectively). The dissipation of the initially small treatment effect on beliefs in low-campaign states is consistent with either the treatment group's forgetting the information over time, or with some catch-up by the control group due to learning, or both.

Differences in impacts on migration are consistent with patterns in beliefs. The shift from urban to rural destinations is pronounced in high-campaign states, although again the differences are not statistically significant. In those states, the number of emigrants to urban areas decreases by 0.08 (p-val < 0.01) and the number of emigrants to rural areas increases by 0.06 (p-val $= 0.01$), amounting again to a small and insignificant decrease in the total number of emigrants by 0.01 (p-val $= 0.57$). Treatment impacts in low-campaign states are small and statistically indistinguishable from zero.

In high-campaign states, total income is about 7% lower among treatment-group households at 4 months, consistent with positive income gaps between urban and rural areas. However, total consumption and food consumption were essentially unaffected, even in high-campaign sates (effect sizes $\approx 1\%$).[29]

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[29]Although we deflate monetary values by an urban-rural-specific CPI, migrants may pay a premium for

Figure D4: Google Trends Data on Searches for Ration Portability
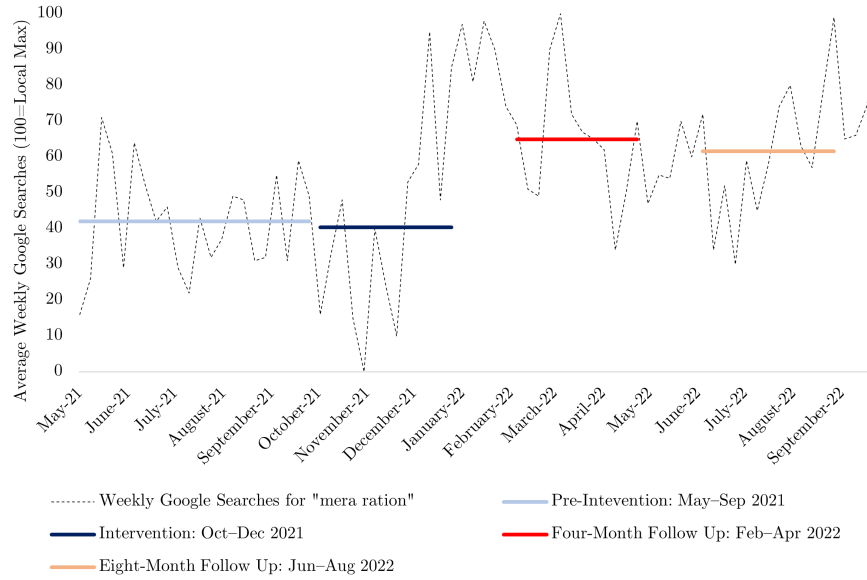
Horizontal bars show averages within the pre-intervention period and each survey period. Source: Google Trends search activity within India from May 2021 to September 2022. Search activity is normalized so that the maximum within the period shown is 100.

Figure D5: Out-of-sample beliefs data correspond well with control-group changes.
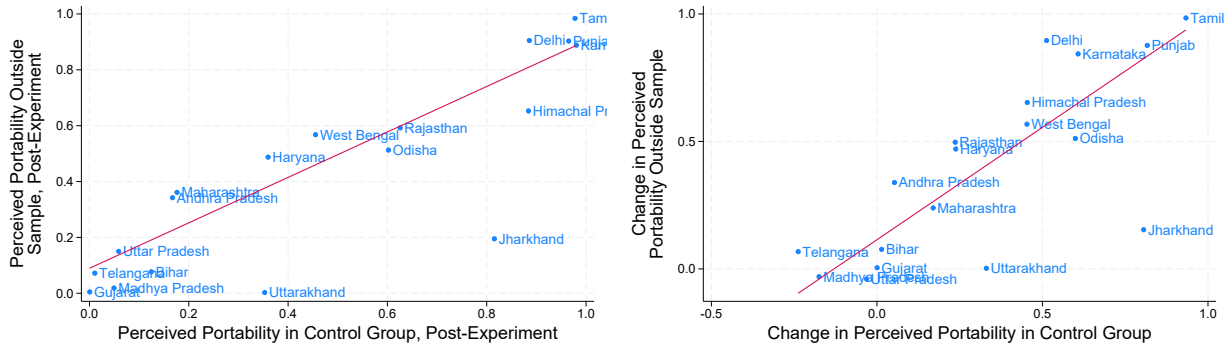
Each dot shows the share of households reporting that they can claim ration outside their home state (in the left panel) or the change in that share from before to after our experiment (in the right panel). Red lines show OLS regression estimates weighted by the number of treatment-sample observations. Pre-experimental data collected in January 2021 outside sample, and from October–December 2021 within sample. Post-experimental data collected in May 2022 outside sample, and from June–August 2022 within sample. Averages estimated using sampling and non-response weights.

short-term housing. This could explain the negative impact on income in high-campaign states without an associated reduction in consumption.

Table D1: Treatment impacts are more pronounced in states where out-of-sample beliefs changed more.

Beliefs and Emigration Outcomes:	(1) Somewhere	(2) Across Districts	(3) Across States	(4) # of Emigrants	(5) # of Emigrants to Urban Areas	(6) # of Emigrants to Rural Areas
	Believes Their Ration is Portable:					
Treatment	-0.118***	-0.108**	-0.093**	-0.012	-0.075***	0.060***
	(0.040)	(0.044)	(0.044)	(0.021)	(0.023)	(0.021)
	[0.00]	[0.02]	[0.03]	[0.57]	[0.00]	[0.01]
Treatment × Low-Campaign State	0.088	0.050	0.083	0.005	0.033	-0.030
	(0.057)	(0.058)	(0.052)	(0.047)	(0.047)	(0.041)
	[0.12]	[0.39]	[0.11]	[0.92]	[0.48]	[0.47]
p-val: Treatment in Low-Campaign States = 0	0.47	0.13	0.74	0.86	0.30	0.39
Observations	48,297	48,297	48,297	52,902	52,902	52,902

Economic Outcomes:	(1) Total Income	(2) Total Consumption	(3) Food Consumption	(4) Remittances
Treatment	-0.074**	-0.007	0.012	-0.004
	(0.033)	(0.016)	(0.021)	(0.013)
	[0.02]	[0.65]	[0.56]	[0.77]
Treatment × Low-Campaign State	0.088**	0.027	0.023	-0.004
	(0.040)	(0.024)	(0.031)	(0.018)
	[0.03]	[0.26]	[0.46]	[0.81]
p-val: Treatment in Low-Campaign States = 0	0.53	0.27	0.13	0.52
Observations	52,902	52,902	52,902	52,902

An observation is a family (household + emigrants). *Low-Campaign State* is a dummy equal to 1 if change in beliefs about ration portability in that state (outside our sample) is below the median change. Ration portability beliefs are binary variables indicating whether the respondent reports they can claim ration somewhere outside their designated shop, across district lines, or across states lines. Monetary values are measured in USD/month and transformed using the inverse hyperbolic sine function. Four-month impacts are measured in a follow-up survey (Feb–Apr 2022). All regressions include a randomization-stratum fixed effect, a control for the pre-treatment value of the outcome variable, and other pre-treatment controls chosen through lasso regression from the set of all baseline variables. Pre-treatment beliefs y_{ic0} in the control group are imputed to be the same as "immediate post-intervention" beliefs y_{ic1}. Standard errors in parentheses are clustered at the village/town (primary sampling unit) level; two-sided p-values in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

E All Pre-Specified Results

Table E1: Treatment Impacts on Portability Beliefs and Total Emigration

	(1)	(2)	(3)	(4)	(5)
	Believes Ration is Portable:			Number of	Any
	Somewhere	Across Districts	Across States	Number of Emigrants	Any Emigrants
4-Month Impacts					
Treatment	-0.079***	-0.085***	-0.055**	-0.010	-0.001
	(0.029)	(0.030)	(0.028)	(0.022)	(0.006)
	[0.01]	[0.00]	[0.05]	[0.65]	[0.83]
Outcome Mean in Control	0.55	0.43	0.37	0.87	0.30
Observations	48,297	48,297	48,297	52,902	52,902
8-Month Impacts					
Treatment	-0.058**	-0.048*	-0.019	-0.007	-0.007
	(0.028)	(0.026)	(0.026)	(0.021)	(0.009)
	[0.04]	[0.06]	[0.46]	[0.73]	[0.40]
Outcome Mean in Control	0.53	0.45	0.35	0.99	0.34
Observations	41,388	41,388	41,388	45,351	45,351
Pooled Impact					
Treatment	-0.068***	-0.068***	-0.039*	-0.012	-0.005
	(0.024)	(0.025)	(0.023)	(0.018)	(0.006)
	[0.01]	[0.01]	[0.09]	[0.51]	[0.41]
Outcome Mean in Control	0.54	0.44	0.36	0.93	0.32
Observations	89,685	89,685	89,685	98,253	98,253

An observation is a family (household + emigrants). Ration portability beliefs in Columns 1–3 are binary variables indicating whether the respondent replied "Yes" to the question "This question is about food ration claimed through the Public Distribution System. Can you use your ration card at ration shops other than your designated shop?" and two analogous follow-up questions about out-of-district and out-of-state shops respectively. If a person did not answer "Yes" to one of these questions, we code the following questions as "No." *Number of Emigrants* is the number of family members listed as emigrants in that survey round whose reason for emigration is not "Shifted to in-laws/new residence after marriage." *Any Emigrants* is a binary variable indicating whether the family had a non-zero number of emigrants. All regressions include a randomization-stratum fixed effect, a control for the pre-treatment value of the outcome variable, and other pre-treatment controls chosen through lasso regression from the set of all baseline variables. Pre-treatment beliefs y_{ic0} in the control group are imputed to be the same as "immediate post-intervention" beliefs y_{ic1}. Pooled impacts measured using ANCOVA regression including a survey-wave fixed effect. Standard errors in parentheses are clustered at the village/town (primary sampling unit) level; two-sided p-values in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table E2: Treatment Impacts on Emigration Behavior

	(1) # of Planned Emigrants	(2) # of New Emigrants	(3) # of Emigrants to Urban Areas	(4) # of Emigrants to Rural Areas	(5) # of Inter-District Emigrants	(6) # of Inter-State Emigrants	(7) # of Emigrants (High Migration Propensity Only)
4-Month Impacts							
Treatment	0.000	0.003	-0.060***	0.047**	-0.009	-0.003	-0.018
	(.)	(0.009)	(0.022)	(0.020)	(0.017)	(0.003)	(0.033)
	[.]	[0.78]	[0.01]	[0.02]	[0.58]	[0.39]	[0.58]
Outcome Mean in Control	0.00	0.04	0.61	0.23	0.16	0.02	0.85
q-Value: Treatment = 0	.	1.00	0.04	0.05	0.88	0.88	0.88
Observations	52,902	52,902	52,902	52,902	52,902	52,902	16,409
8-Month Impacts							
Treatment	0.000	-0.018	0.004	0.008	0.004	-0.002	-0.031
	(.)	(0.011)	(0.025)	(0.019)	(0.018)	(0.003)	(0.028)
	[.]	[0.10]	[0.87]	[0.68]	[0.82]	[0.46]	[0.27]
Outcome Mean in Control	0.00	0.07	0.68	0.26	0.17	0.02	1.01
q-Value: Treatment = 0	.	1.00	1.00	1.00	1.00	1.00	1.00
Observations	45,351	45,351	45,351	45,351	45,351	45,351	14,460
Pooled Impact							
Treatment	0.000	-0.009	-0.032	0.026*	-0.002	-0.002	-0.028
	(.)	(0.008)	(0.021)	(0.014)	(0.015)	(0.002)	(0.024)
	[.]	[0.26]	[0.12]	[0.07]	[0.87]	[0.34]	[0.25]
Outcome Mean in Control	0.00	0.05	0.64	0.25	0.16	0.02	0.93
q-Value: Treatment = 0	.	0.58	0.58	0.58	0.64	0.58	0.58
Observations	98,253	98,253	98,253	98,253	98,253	98,253	30,869

Each outcome is a count of emigrants (excluding marriage migrants). *Planned Emigrants* are those saying they intend to emigrate in the future (this variable is zero for all observations). *New Emigrants* are those who were not emigrants as of the baseline survey. *High Migration Propensity* is a binary household-level indicator measured at baseline and equal to 1 if the household has used their ration card within the past month, is in the bottom 40% of per-adult-equivalent consumption in our sample, and has at least one male household member aged 18–45. All regressions include a randomization-stratum fixed effect, a control for the pre-treatment value of the outcome variable, and other pre-treatment controls chosen through lasso regression from the set of all baseline variables. Pooled impacts measured using ANCOVA regression including a survey-wave fixed effect (McKenzie, 2012). Standard errors in parentheses are clustered at the village/town (primary sampling unit) level; two-sided p-values in brackets. Sharpened q-values computed within a domain that includes secondary outcomes 2–5 and 16 as described in Baseler et al. (2022b). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table E3: Treatment Impacts on Family Economic Well-Being

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
								Baseline Emigrant Outcomes		
	Total Income	Total Consumption	Food Consumption	Income Score	Finances Improved	Remittances	Well-Being Index	Food Security	Ration Claiming	Job Search
Treatment (At 4 Months)	-0.006	-0.004	0.020	-57	-0.001	0.012	-0.020	-0.008	-0.001	-0.145
	(0.027)	(0.013)	(0.016)	(48)	(0.022)	(0.015)	(0.020)	(0.021)	(0.031)	(0.440)
	[0.82]	[0.77]	[0.22]	[0.23]	[0.97]	[0.40]	[0.32]	[0.72]	[0.98]	[0.74]
Outcome Mean in Control	279	169	50	4,509	0.67	6.00	0.00	0.85	0.47	2.29
q-Value: Treatment = 0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Observations	52,902	52,902	52,902	52,902	52,902	52,902	52,902	3,351	3,370	3,160
Treatment (At 8 Months)	0.048*	0.011	0.025	1.6	-0.008	0.023	0.030	-0.022		
	(0.027)	(0.015)	(0.017)	(38.1)	(0.023)	(0.020)	(0.033)	(0.035)		
	[0.08]	[0.45]	[0.14]	[0.97]	[0.73]	[0.25]	[0.37]	[0.52]		
Outcome Mean in Control	257	170	48	5,190	0.73	5.96	-0.00	0.37		
q-Value: Treatment = 0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Observations	45,351	45,351	45,351	45,351	45,351	45,351	45,351	13,407		
Treatment (Pooled)	0.018	0.005	0.026*	-40	-0.004	0.015	0.004	-0.017		
	(0.024)	(0.012)	(0.014)	(38)	(0.019)	(0.016)	(0.023)	(0.029)		
	[0.44]	[0.71]	[0.06]	[0.29]	[0.82]	[0.35]	[0.86]	[0.54]		
Outcome Mean in Control	269	169	49	4,823	0.70	5.86	-0.00	0.39		
q-Value: Treatment = 0	1.00	1.00	0.87	1.00	1.00	1.00	1.00	1.00		
Observations	98,253	98,253	98,253	98,253	98,253	98,253	98,253	16,777		

Columns 8–10 show averages across baseline emigrants. Monetary values are measured in USD/month and transformed using the inverse hyperbolic sine function. *Total Income* includes wage income, agricultural production, and business profit of the household averaged over the past four months plus emigrants' incomes over the past month. *Total Consumption* is computed by adding average monthly household expenditure (over the past four months) to the past month's value of each emigrant's expenditure. *Food Consumption* restricts to food expenditure only. *Remittances* are monetary transfers from all emigrants to the household over the preceding month. *Income Score* is the median occupational income averaged across household members. *Finances Improved* equals 1 if the household says its financial situation improved from one year ago. *Well-Being Index* is an Anderson (2008) index combining each measure of economic well-being. *Food Security* is an indicator for whether the migrant frequently skipped a meal. *Ration Claiming* is an indicator for whether the migrant claimed ration. *Job Search* is the hours per week spent looking for a job. All regressions include a randomization-stratum fixed effect, a control for the pre-treatment value of the outcome variable (except in Columns 8–10), and other pre-treatment controls chosen through lasso regression from the set of all baseline variables. Pooled impacts measured using ANCOVA regression including a survey-wave fixed effect. Standard errors in parentheses are clustered at the village/town (primary sampling unit) level; two-sided p-values in brackets. Sharpened q-values computed within a domain that includes secondary outcomes 6–15 as described in Baseler et al. (2022b). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table E4: Heterogeneity in Treatment Impacts on Total Emigration

	(1) Food Is a Migration Barrier	(2) Says Ration Is Not Portable	(3) Poor Households	(4) Poor Households (No Credit)	(5) Low-Wealth Households
4-Month Impacts					
Treatment $\times$ X	0.071	0.026	-0.008	-0.041	0.020
	(0.044)	(0.039)	(0.031)	(0.036)	(0.033)
	[0.11]	[0.50]	[0.80]	[0.26]	[0.56]
Treatment	-0.024	-0.028	-0.006	0.000	-0.020
	(0.022)	(0.034)	(0.024)	(0.024)	(0.032)
	[0.27]	[0.42]	[0.81]	[0.99]	[0.54]
q-Value: Treatment $\times$ X $= 0$	1.00	1.00	1.00	1.00	1.00
Observations	52,902	52,902	52,902	52,902	52,902
8-Month Impacts					
Treatment $\times$ X	0.020	-0.048	-0.028	-0.019	0.011
	(0.039)	(0.049)	(0.026)	(0.033)	(0.025)
	[0.61]	[0.32]	[0.27]	[0.56]	[0.65]
Treatment	-0.012	0.026	0.003	-0.005	-0.014
	(0.023)	(0.046)	(0.023)	(0.025)	(0.026)
	[0.61]	[0.57]	[0.89]	[0.84]	[0.58]
q-Value: Treatment $\times$ X $= 0$	1.00	1.00	1.00	1.00	1.00
Observations	45,351	45,351	45,351	45,351	45,351
Pooled Impact					
Treatment $\times$ X	0.052	-0.004	-0.019	-0.028	0.011
	(0.034)	(0.038)	(0.023)	(0.029)	(0.024)
	[0.12]	[0.91]	[0.42]	[0.33]	[0.63]
Treatment	-0.022	-0.009	-0.004	-0.006	-0.018
	(0.019)	(0.036)	(0.021)	(0.021)	(0.025)
	[0.25]	[0.80]	[0.84]	[0.78]	[0.48]
q-Value: Treatment $\times$ X $= 0$	1.00	1.00	1.00	1.00	1.00
Observations	98,253	98,253	98,253	98,253	98,253

An observation is a family (household + emigrants). The outcome is a count of emigrants (excluding marriage migrants). Column titles show the dimension of heterogeneity, X (not shown in output), interacted with treatment. All heterogeneity dimensions are binary variables measured at baseline. *Food Is a Migration Barrier* equals 1 if the household reports finding food at the destination as one of the top three challenges a hypothetical migrant would face. *Says Ration Is Not Portable* equals 1 if the household reported it cannot claim ration outside its designated shop. *Poor Households* are those in the bottom 40% of per-adult-equivalent household consumption in our sample. *Poor Households (No Credit)* are poor households without any outstanding loan. *Low-Wealth Households* are those in the bottom 40% of the first principal component of a set of 12 durable asset measures. All regressions include a randomization-stratum fixed effect, a control for the pre-treatment value of the outcome variable, and other pre-treatment controls chosen through lasso regression from the set of all baseline variables. Pooled impacts measured using ANCOVA regression including a survey-wave fixed effect. Standard errors in parentheses are clustered at the village/town level; two-sided p-values in brackets. Sharpened q-values computed within a domain that includes each heterogeneous treatment impact test. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table E5: Treatment Impacts on Family Income, Consumption, and Remittances (Without Hyperbolic Sine Transform)

	(1) Total Income	(2) Total Consumption	(3) Food Consumption	(4) Remittances
4-Month Impacts				
Treatment	-6.648	1.236	0.941	-0.151
	(4.843)	(2.484)	(1.142)	(0.252)
	[0.17]	[0.62]	[0.41]	[0.55]
Outcome Mean in Control	279	169	50	6
Observations	52,902	52,902	52,902	52,902
8-Month Impacts				
Treatment	2.938	2.987	1.169	0.242
	(3.952)	(2.646)	(0.860)	(0.379)
	[0.46]	[0.26]	[0.17]	[0.52]
Outcome Mean in Control	257	170	48	6
Observations	45,351	45,351	45,351	45,351
Pooled Impact				
Treatment	-2.804	2.160	1.270	0.014
	(3.669)	(2.078)	(0.799)	(0.278)
	[0.44]	[0.30]	[0.11]	[0.96]
Outcome Mean in Control	269	169	49	6
Observations	98,253	98,253	98,253	98,253

An observation is a family (household + emigrants). Monetary values are measured in USD/month. All regressions include a randomization-stratum fixed effect, a control for the pre-treatment value of the outcome variable, and other pre-treatment controls chosen through lasso regression from the set of all baseline variables. Pooled impacts measured using ANCOVA regression including a survey-wave fixed effect. Standard errors in parentheses are clustered at the village/town (primary sampling unit) level; two-sided p-values in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table E6: Treatment Impacts on Family Income, Consumption, and Remittances (Quantile Transformation)

	(1) Total Income	(2) Total Consumption	(3) Food Consumption	(4) Remittances
4-Month Impacts				
Treatment	-0.007	0.001	0.013	-0.000
	(0.005)	(0.007)	(0.009)	(0.001)
	[0.15]	[0.93]	[0.14]	[0.59]
Outcome Mean in Control	0.43	0.43	0.43	0.43
Observations	52,902	52,901	52,902	52,901
8-Month Impacts				
Treatment	0.008*	0.011	0.016*	0.001
	(0.005)	(0.007)	(0.009)	(0.001)
	[0.09]	[0.14]	[0.08]	[0.33]
Outcome Mean in Control	0.37	0.37	0.37	0.37
Observations	45,350	45,347	45,350	45,347
Pooled Impact				
Treatment	-0.000	0.006	0.015*	0.000
	(0.004)	(0.006)	(0.008)	(0.001)
	[0.93]	[0.38]	[0.06]	[0.73]
Outcome Mean in Control	0.40	0.40	0.40	0.40
Observations	98,252	98,248	98,252	98,248

An observation is a family (household + emigrants). Monetary values are measured in USD/month and quantile transformed using the methodology of Delius and Sterck (2024). All regressions include a randomization-stratum fixed effect, a control for the pre-treatment value of the outcome variable, and other pre-treatment controls chosen through lasso regression from the set of all baseline variables. Pooled impacts measured using ANCOVA regression including a survey-wave fixed effect. Standard errors in parentheses are clustered at the village/town (primary sampling unit) level; two-sided p-values in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table E7: Return Migration and Alternative Income Score

	(1) Income Score (Alt.)	(2) Return Migration Rate (New Emigrants)	(3) Return Migration Rate (New Emigrants)
Difference at 4 Months			
Treatment	-0.004		
	(0.007)		
	[0.62]		
Outcome Mean in Control	0.81		
Observations	52,902		
Difference at 8 Months			
Treatment	0.011	0.033	0.015
	(0.007)	(0.042)	(0.055)
	[0.13]	[0.43]	[0.78]
Lasso Controls?	Yes	Yes	No
Outcome Mean in Control	0.93	0.59	0.59
Observations	45,351	1,057	1,057
Pooled Difference			
Treatment	0.000		
	(0.007)		
	[0.98]		
Outcome Mean in Control	0.86		
Observations	98,253		

An observation is a family (household + emigrants). *Return Migration* is defined as returning to the household by the 8-month survey, and is measured among new emigrants as of the 4-month survey. *Income Score (Alt.)* is an alternative occupational income score using the labor ministry's NCO-2004 skill classification codes. All regressions include a randomization-stratum fixed effect; Columns 1 and 2 also include other pre-treatment controls chosen through lasso regression from the set of all baseline variables. Pooled impacts measured using ANCOVA regression including a survey-wave fixed effect. Standard errors in parentheses are clustered at the village/town (primary sampling unit) level; two-sided p-values in brackets. Sharpened q-values computed within a domain that includes secondary outcomes 6–15 as described in Baseler et al. (2022b). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Weighted Results

Table E8: Treatment Impacts on Portability Beliefs and Total Emigration (Weighted)

	(1)	(2)	(3)	(4)	(5)
	Believes Ration is Portable:				
	Somewhere	Across Districts	Across States	Number of Emigrants	Any Emigrants
4-Month Impacts					
Treatment	-0.050**	-0.042*	-0.033	-0.037*	-0.006
	(0.022)	(0.022)	(0.020)	(0.022)	(0.006)
	[0.03]	[0.05]	[0.11]	[0.09]	[0.32]
Outcome Mean in Control	0.55	0.43	0.37	0.87	0.30
Observations	48,297	48,297	48,297	52,902	52,902
8-Month Impacts					
Treatment	-0.044**	-0.042*	-0.014	-0.011	-0.007
	(0.021)	(0.022)	(0.019)	(0.019)	(0.007)
	[0.03]	[0.05]	[0.45]	[0.54]	[0.30]
Outcome Mean in Control	0.53	0.45	0.35	0.99	0.34
Observations	41,388	41,388	41,388	45,351	45,351
Pooled Impact					
Treatment	-0.047**	-0.043**	-0.025	-0.034**	-0.009*
	(0.018)	(0.020)	(0.017)	(0.017)	(0.005)
	[0.01]	[0.03]	[0.15]	[0.04]	[0.10]
Outcome Mean in Control	0.54	0.44	0.36	0.93	0.32
Observations	89,685	89,685	89,685	98,253	98,253

An observation is a family (household + emigrants). Ration portability beliefs in Columns 1–3 are binary variables indicating whether the respondent replied "Yes" to the question "This question is about food ration claimed through the Public Distribution System. Can you use your ration card at ration shops other than your designated shop?" and two analogous follow-up questions about out-of-district and out-of-state shops respectively. If a person did not answer "Yes" to one of these questions, we code the following questions as "No." *Number of Emigrants* is the number of family members listed as emigrants in that survey round whose reason for emigration is not "Shifted to in-laws/new residence after marriage." *Any Emigrants* is a binary variable indicating whether the family had a non-zero number of emigrants. All regressions include sampling and non-response weights, a randomization-stratum fixed effect, a control for the pre-treatment value of the outcome variable, and other pre-treatment controls chosen through lasso regression from the set of all baseline variables. Pre-treatment beliefs y_{ic0} in the control group are imputed to be the same as "immediate post-intervention" beliefs y_{ic1}. Pooled impacts measured using ANCOVA regression including a survey-wave fixed effect. Standard errors in parentheses are clustered at the village/town (primary sampling unit) level; two-sided p-values in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table E9: Treatment Impacts on Emigration Behavior (Weighted)

	(1) # of Planned Emigrants	(2) # of New Emigrants	(3) # of Emigrants to Urban Areas	(4) # of Emigrants to Rural Areas	(5) # of Inter-District Emigrants	(6) # of Inter-State Emigrants	(7) # of Emigrants (High Migration Propensity Only)
4-Month Impacts							
Treatment	0.000	-0.011	-0.046***	0.019	-0.023	-0.004	-0.061*
	(.)	(0.008)	(0.017)	(0.022)	(0.016)	(0.003)	(0.035)
	[.]	[0.20]	[0.01]	[0.38]	[0.14]	[0.17]	[0.08]
Outcome Mean in Control	0.00	0.04	0.61	0.23	0.16	0.02	0.85
q-Value: Treatment = 0	.	0.26	0.04	0.33	0.26	0.26	0.25
Observations	52,902	52,902	52,902	52,902	52,902	52,902	16,409
8-Month Impacts							
Treatment	0.000	-0.010	-0.016	0.024	0.004	-0.005	-0.029
	(.)	(0.009)	(0.023)	(0.023)	(0.018)	(0.004)	(0.030)
	[.]	[0.30]	[0.47]	[0.30]	[0.82]	[0.18]	[0.33]
Outcome Mean in Control	0.00	0.07	0.68	0.26	0.17	0.02	1.01
q-Value: Treatment = 0	.	0.99	0.99	0.99	0.99	0.99	0.99
Observations	45,351	45,351	45,351	45,351	45,351	45,351	14,460
Pooled Impact							
Treatment	0.000	-0.010	-0.035**	0.014	-0.009	-0.004*	-0.053**
	(.)	(0.007)	(0.016)	(0.017)	(0.013)	(0.003)	(0.026)
	[.]	[0.14]	[0.03]	[0.42]	[0.50]	[0.09]	[0.04]
Outcome Mean in Control	0.00	0.05	0.64	0.25	0.16	0.02	0.93
q-Value: Treatment = 0	.	0.16	0.13	0.26	0.26	0.14	0.13
Observations	98,253	98,253	98,253	98,253	98,253	98,253	30,869

Each outcome is a count of emigrants (excluding marriage migrants). *Planned Emigrants* are those saying they intend to emigrate in the future (this variable is zero for all observations). *New Emigrants* are those who were not emigrants as of the baseline survey. *High Migration Propensity* is a binary household-level indicator measured at baseline and equal to 1 if the household has used their ration card within the past month, is in the bottom 40% of per-adult-equivalent consumption in our sample, and has at least one male household member aged 18–45. All regressions include sampling and non-response weights, a randomization-stratum fixed effect, a control for the pre-treatment value of the outcome variable, and other pre-treatment controls chosen through lasso regression from the set of all baseline variables. Pooled impacts measured using ANCOVA regression including a survey-wave fixed effect (McKenzie, 2012). Standard errors in parentheses are clustered at the village/town (primary sampling unit) level; two-sided *p*-values in brackets. Sharpened *q*-values computed within a domain that includes secondary outcomes 2–5 and 16 as described in Baseler et al. (2022*b*). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table E10: Treatment Impacts on Family Economic Well-Being (Weighted)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
								Baseline Emigrant Outcomes		
	Total Income	Total Consumption	Food Consumption	Income Score	Finances Improved	Remitt-ances	Well-Being Index	Food Security	Ration Claiming	Job Search
Treatment (At 4 Months)	-0.034	-0.010	-0.005	-4.4	-0.004	0.024	-0.024	-0.001	0.021	0.384
	(0.033)	(0.011)	(0.013)	(41.7)	(0.020)	(0.020)	(0.019)	(0.022)	(0.032)	(0.498)
	[0.30]	[0.38]	[0.68]	[0.92]	[0.84]	[0.25]	[0.20]	[0.96]	[0.52]	[0.44]
Outcome Mean in Control	279	169	50	4,509	0.67	6.00	0.00	0.85	0.47	2.29
q-Value: Treatment $= 0$	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Observations	52,902	52,902	52,902	52,902	52,902	52,902	52,902	3,351	3,370	3,160
Treatment (At 8 Months)	0.024	0.008	0.015	-19	-0.022	0.021	-0.014	-0.010		
	(0.029)	(0.013)	(0.015)	(38)	(0.022)	(0.023)	(0.033)	(0.027)		
	[0.42]	[0.54]	[0.31]	[0.61]	[0.32]	[0.37]	[0.67]	[0.71]		
Outcome Mean in Control	257	170	48	5,190	0.73	5.96	-0.00	0.37		
q-Value: Treatment $= 0$	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Observations	45,351	45,351	45,351	45,351	45,351	45,351	45,351	13,407		
Treatment (Pooled)	-0.011	-0.003	0.003	-57	-0.010	0.019	-0.029	-0.005		
	(0.026)	(0.011)	(0.010)	(41)	(0.019)	(0.020)	(0.024)	(0.025)		
	[0.66]	[0.81]	[0.78]	[0.16]	[0.57]	[0.34]	[0.24]	[0.83]		
Outcome Mean in Control	269	169	49	4,823	0.70	5.86	-0.00	0.39		
q-Value: Treatment $= 0$	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Observations	98,253	98,253	98,253	98,253	98,253	98,253	98,253	16,777		

Columns 8–10 show averages across baseline emigrants. Monetary values are measured in USD/month and transformed using the inverse hyperbolic sine function. *Total Income* includes wage income, agricultural production, and business profit of the household averaged over the past four months plus emigrants' incomes over the past month. *Total Consumption* is computed by adding average monthly household expenditure (over the past four months) to the past month's value of each emigrant's expenditure. *Food Consumption* restricts to food expenditure only. *Remittances* are monetary transfers from all emigrants to the household over the preceding month. *Income Score* is the median occupational income averaged across household members. *Finances Improved* equals 1 if the household says its financial situation improved from one year ago. *Well-Being Index* is an Anderson (2008) index combining each measure of economic well-being. *Food Security* is an indicator for whether the migrant frequently skipped a meal. *Ration Claiming* is an indicator for whether the migrant claimed ration. *Job Search* is the hours per week spent looking for a job. All regressions include sampling and non-response weights a randomization-stratum fixed effect, a control for the pre-treatment value of the outcome variable (except in Columns 8–10), and other pre-treatment controls chosen through lasso regression from the set of all baseline variables. Pooled impacts measured using ANCOVA regression including a survey-wave fixed effect. Standard errors in parentheses are clustered at the village/town (primary sampling unit) level; two-sided p-values in brackets. Sharpened q-values computed within a domain that includes secondary outcomes 6–15 as described in Baseler et al. (2022b). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.