

The Returns to Temporary Migration: Experimental Evidence from the H-2A Program *

Melanie Morten [†]

Stanford University and NBER

Beatriz Magaloni [‡]

Stanford University

Sebastián Cubillos[§]

UCLA

Alice Yiqian Wang

Stanford University

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Abstract

In 2024, 315,000 temporary legal visas were issued to agricultural workers in the US. The program is controversial: earnings are high, but critics argue that workers face poor working and living conditions and that families bear the costs of separation, so the net benefit of migrating is unknown. We randomize H-2A seasonal visas for Mexican workers. Migrants earn more than USD 16,000 and send 70% of these earnings to origin households. Living standards in Mexico rise: food security increases, the probability of living in poverty falls by nine percentage points, and families invest in home improvements, durable assets, and debt reduction, with little investment in businesses or productive assets. Migration has spillovers onto other household members: their mental health worsens, they avoid higher-risk situations such as walking at night, and intra-household dynamics change. On working conditions, migrants

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[†]Email: melanie.morten@stanford.edu

[‡]Email: magaloni@stanford.edu

[§]Email: sebcub@ucla.edu

generally report satisfaction with H-2A jobs and contracts, all report that they would migrate again, and 85% do so the following season.

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1 Introduction

In 2024, 315,000 visas were issued to agricultural workers to legally migrate and work in the US through the H-2A visa program. These workers earned billions of dollars, much of which flowed back to their home communities. At face value, working legally in the US offers large income gains for workers, with average earnings in the US four times larger than earnings in Mexico. However, despite the potential for large income gains for workers, few direct estimates of the overall impact of participating in the H-2A program exist. Critics argue that workers face poor working and living conditions which would be important to account for in addition to income gains. Migration also affects origin families, who receive income but also face the loss of a member of the household for several months, and their impacts should also be included in an accounting of the benefits of migration.

To understand the impact of migrating on both migrants and their families, we conduct a randomized controlled trial where we randomize which workers receive an H-2A temporary migration visa. The setting is the Mexico–US corridor, the largest migration corridor in the world. The RCT was a waitlist design, with treatment participants prioritized for early visas relative to a control group who migrated later. During the two years of the study, participants in the treatment group were 80 percentage points more likely to migrate to the US than participants randomized to the control group, and spent a total of 40 additional weeks working and earning money in the US. We then collect extensive survey data on the experiences and outcomes for the participants and their family members, directly surveying both migrants and family members.

The type of migration we study – short-term legal temporary seasonal migration – is widespread throughout the world. [OECD \(2024\)](#) report that in 2023 there were 615,000 global authorizations for seasonal workers, with the US receiving 75% of these seasonal workers, with 311,000 H-2A visas and a further 135,000 H-2B (non-agricultural seasonal workers) visas. Because seasonal agriculture work is one of the only legal pathways to migrate for less-educated workers, these programs have been hailed as a key component of poverty alleviation, with some countries (such as New Zealand) explicitly tying their

seasonal migration programs to development objectives ([Gibson and McKenzie, 2014](#); [Clemens and Postel, 2017](#)).

Migration affects all aspects of an individual's life, and we organize our results into three groups. First, how did temporary migration affect the economic life of the household? Migrants receive a large increase in income, with monthly income close to quadrupling. Altogether, migrants earn more than USD 16,000 a year during their trip to the US, and of this, remit and repatriate 70% of their earnings. This large injection of cash into their home community is primarily consumed, with increases in home construction, durable assets, and reductions in debt. We find little investment in businesses in Mexico.

Second, the migrants in our context are all men who leave behind families when they migrate. The average participant is 27 years old, married, with at least one young child. Does the burden of being apart from the family – substituting physical presence with monetary resources – generate spillover effects on other household members? We show suggestive results that female household respondents (wives from here on) have a slight worsening in their mental health and start changing their behavior to avoid being in insecure situations such as walking alone at night. The relationship between the husband and wife also changes, with migrants developing more machista opinions such as thinking men should set rules for their wives. We find no impacts on child schooling (although primary school enrollment in Mexico is close to universal) and no effect on child labor.

Third, we report the experience of the H-2A program from the perspective of the migrant themselves. A key insight in this discussion is that workers are evaluating their options relative to their outside option of remaining and working in Mexico. We show that, relative to Mexican jobs, working conditions (and certainly income) are mostly preferable. Workers generally report good working conditions, although some workers report verbal abuse and restrictions on movement. Despite this, workers all report high satisfaction with the H-2A program and universally report a desire to return as an H-2A migrant; 85% of the migrants do return the following season.

Taken together, these results give rich insight into the complex effects of migration, and both the direct effects on the worker themselves and the indirect effects on families and communities more broadly.

To run the RCT, we partner with a recruiter and an employer. The recruiter is an NGO, Redes Sociales para el Desarrollo (REDDES), based in Mexico, that recruits H-2A workers. The employer is a farmer cooperative, wafla (The Worker and Farmer Labor Association), based in Washington state, that facilitates H-2A contracts for member farmers who want to hire H-2A workers. The number of H-2A visas permitted each year is not explicitly capped by legislation and so recruitment and hiring are decentralized rather than centrally coordinated through the federal government. Firms who want to hire an H-2A worker first apply for temporary labor certification from the Department of Labor and then file a petition with USCIS for a nonimmigrant worker. With this authorization, they are then able to directly recruit and hire the worker; the worker applies for an H-2A visa directly from the Department of State at an embassy or consulate.

The RCT was a business-as-usual waitlist design. As part of their recruitment process, the NGO runs large in-person recruitment fairs. The recruiter needs to recruit sufficient workers to be able to meet new contracts that are often received with little notice, and so the in-person events intentionally recruit more workers than the number of contracts expected over the following year. Because the number of contracts is limited, it is not feasible for all recruits to migrate in the same season and so some workers need to be selected before other workers. Previously, the NGO used an ad-hoc method to select workers. For this project, we simply randomized attendees of one of the recruitment fairs into two groups, “treatment” (prioritize for early visas) and “control” (do not prioritize for early visas), and provided this list to the recruiter. The study changed only the order in which workers migrated, not whether they eventually migrated – every eligible worker was eventually offered a visa. Since all had equal ex-ante claims to the scarce contracts, randomizing the order is no less fair to workers than the ad hoc method it replaced (we provide a full discussion of the ethical implications of the experiment in Appendix G). Other than providing the recruiter the randomized list of workers, the research team did not interfere in the recruitment, screening, or selection of the workers.

Randomization was at the individual level. We prespecified two levels of stratification to study possible heterogeneous effects. First, there is also a long history of migration between Mexico and the United States, often concentrated in specific regions ([Massey et al.](#),

2003). Strong migration networks may provide alternatives to legal migration, changing the returns of legal temporary migration, and so we stratified treatment by the baseline migration rate in the community. Second, Mexico has high levels of violence, with a homicide rate of 24.9 per 100,000 inhabitants in 2023 (relative to a US rate of 5.8 per 100,000) (UNODC, 2025). High levels of insecurity could plausibly affect whether participants interact with organized crime (either through participation or through informal taxation), which could affect the economic returns available locally. We therefore also stratified by the level of violence in the community where the migrant lived. We find limited evidence of heterogeneity in treatment effects in either dimension and generally delegate reporting to appendix tables.

The broader context of the H-2A experience may naturally depend on the recruitment process and the state where migrants move. While the H-2A program is federally administered by DHS and DoL, state labor departments play a large role in inspection and enforcement. States may also introduce additional requirements to the H-2A program, for example around housing, transportation, and labor rights. Our study focuses on workers traveling to Washington and Oregon. To speak to external validity, we provide comparisons of our study population with the broader H-2A population across three dimensions. First, we compare the observable characteristics of the worker and the job against administrative data of the universe of all H-2A workers and the universe of all H-2A jobs. Second, we compare our study sample to the universe of Mexican rural workers. Third, we conduct a broader survey of 600 H-2A workers, both first-time migrants and repeat workers, who migrate across the U.S. and not only to Washington and Oregon states, and compare the demographics and prior experiences of this H-2A program to the RCT population.

Our study differs from most previous work on the returns to migration in three key respects. First, it is the first to randomize migration on the US–Mexico corridor, the largest in the world (International Organization for Migration, 2024). Second, it studies short-term seasonal migration—trips lasting less than a year—rather than the multi-year and permanent moves examined in most of this literature. Third, we survey both migrants and the family members who remain at the origin, which lets us study how the effects of

migration are shared between them.

International-migration RCTs remain rare; [Gaikwad et al. \(2025\)](#) and [Naidu et al. \(2023\)](#) are recent exceptions, both studying guestworker migration between India and the Persian Gulf for 12-24 month contracts.¹ Estimating the returns to migration is difficult because migrants differ from non-migrants on observed and unobserved dimensions (see, e.g., [Chiquiar and Hanson, 2005](#)), so simple comparisons do not recover the causal effect of migrating. Researchers have addressed this with national visa lotteries, which generate exogenous variation in who migrates. Winning H-1B applicants earn roughly six times their home wage ([Clemens, 2013](#)); winning a lottery to permanently migrate from Tonga to New Zealand raises income by 263% ([McKenzie et al., 2010](#)); and winning a lottery to work for several years in Malaysia triples migrant income and doubles home-household income through remittances ([Mobarak et al., 2023](#)). We build a comparable experiment where no lottery operates—on the US–Mexico corridor and within a seasonal guestworker program—randomizing visa access across an applicant pool we survey at baseline and follow over time.

Our setting—short-term temporary migration—also differs from much previous work on two dimensions. The first is duration. Migrants in the studies above traveled for at least one year or more, whereas the average H-2A trip in our data is seven months, although workers can, and do, migrate again in consecutive years. The second is attachment to the origin. Because the seasonal migrant returns home, the origin household remains their economic base, and investments made at home are ones the migrant will themselves consume—unlike a long-term migrant, who may bring their household to the destination or lose contact over time. [Dustmann and Görlach \(2016\)](#) argue that return intentions of this kind change savings, remittance, and investment behavior, and note that temporary and seasonal migration remains understudied. For low-income workers, seasonal programs such as H-2A are among the few legal channels to a high-wage labor market, which makes their effects first-order to understand. Evidence specific to H-2A and to seasonal guestworker programs is thin: previous work on the program’s effects on

¹Several papers have randomized internal migration. See, for example, [Bryan et al. \(2014\)](#), who gave financial incentives, and [Baseler \(2023\)](#), who gave information.

migrants studied a small pilot extending H-2A visas to 30 Haitian households ([Clemens and Postel, 2017](#)). Work on other seasonal agricultural programs points the same way, with non-experimental estimates from New Zealand finding increases in income, consumption, and non-durable assets ([Gibson and McKenzie, 2014](#)).

Our results also highlight the distributional effects of migration. With any migration, the benefits and costs of migration are shared between the migrant and the household that remains. A central part of our data collection was to survey migrants as well as their household members so that we observe each side's experience directly. This allows us to study outcomes that cannot just be inferred from remittances. In our case, we find that family members bear some of the cost of migrating. Mental health for the wife worsens, and she starts taking preemptive measures such as avoiding walking at night. In contrast, we see no effect on mental health of the migrant themselves, in contrast to the case of migrants in the UAE who have lower subjective well-being despite earning higher wages ([Naidu et al., 2023](#)). We also find that wives start taking preemptive measures to improve their security, such as not walking at night. A few other studies have examined the impact of migration on remaining family members – for example, having a household migrant affects political attitudes of remaining household member ([Gaikwad et al., 2025](#)) and having a permanent migrant negatively affects economics outcome for extended family who remain behind as remittances do not offset the loss of household income ([Gibson et al., 2011](#)), but our study is the first to look at the spillovers in a broad range of outcomes for temporary migration.

Putting our economic results together, the households of H-2A migrants repay debt, repair their homes, and raise consumption, but do not start businesses. This is, in fact, quite consistent with the broader literature on the returns to migration, despite the different geographic contexts and types of migration, at least in the short- to medium-run, for example [Mobarak et al. \(2023\)](#) report similar household responses. Over the longer run, [Khanna et al. \(2026\)](#) find that an increase in migration income stimulates local business and generates an increase in (primarily college) education.

On the policy side, much of the debate over guestworker programs – and migration in general – has focused on negative recruitment and working experiences of guestworkers.

Naidu et al. (2023) find that 50% of Indian workers randomly offered employment to work in construction in the Persian Gulf do not take up the offer, which they attribute to known concerns about working conditions. Das et al. (2019) estimate that up to a third of Bangladeshi workers who attempt to migrate may be unsuccessful, in part due to fraudulent middlemen, losing on average USD 250, 24% of average earnings, in the process. For the H-2A program in particular, H-2A workers are recruited to work only with a single employer, and there are concerns that this generates conditions ripe for exploitation, with some calling the program “close to slavery” (Newman, 2011; Urban Institute, 2015; Equitable Food Initiative, 2021; Centro de los derechos del migrante, 2020; Southern Poverty Law Center, 2013). Farmers themselves complain that the program is overly bureaucratic and cumbersome (US Chamber of Commerce, 2015; Nowrasteh, 2013). We directly ask workers about working and living conditions they face during their employment in the US and their recruitment experience in Mexico.

Finally, an intense public policy debate is underway about deterring unauthorized migration into the US. One hypothesis is that increasing legal pathways may reduce irregular migration if a potential migrant is choosing between either migrating legally or irregularly; other arguments are that increasing legal migration may increase irregular migration through network effects (Clemens, 2024).² Empirically, we study whether irregular migration increases for the control group relative to the treatment group. We find little evidence of irregular migration by either the treatment group or the control group, and no differential irregular migration by the control group. However, we note that our experimental design may not be the most relevant for this substitution since both the treatment and control groups are in the process of securing an H-2A position and unauthorized migration would invalidate eligibility for a visa.

We explain some background about the H-2A program, introduce our experimental design and data collection in Section 2. Section 3.1 discusses the effects of the experiment on migration. Section 3.2 presents the first set of results on the economic effects of H-

²Empirically, Clemens (2024) finds that an increase in lawful crossings at a specific border crossing point reduces subsequent unlawful crossings. Amuedo-Dorantes and Bucheli (2023) shows that a program of metering daily asylum applications, reducing the number of lawful crossings, increased the number of people apprehended for crossing the border illegally.

2A migration. Sections 3.3- 3.5 discusses the familial and social spillovers. Section 3.6 presents the experiences and policy preferences around the H-2A program from the point of view of the migrants themselves. We conclude in Section 4.

2 Setting and Data Collection

This section describes the H-2A program. Next, we turn to the RCT design and how we will analyze the data. Third, we discuss the data collection timeline.

We acknowledge that randomizing access to an opportunity as consequential as legal work in the United States raises serious ethical considerations, which we weighed carefully in designing the experiment. An ethical appendix is presented in Appendix G.

2.1 The H-2A program

The H-2A visa is a legal temporary work visa for agriculture. Figure 1 shows the number of H-2A visas issued since 1997. In 2024, 315,000 H-2A visas were issued, a three-and-a-half-fold increase over just the past ten years. Countries eligible to participate in the H-2A program are set by the Department of Homeland Security; in practice, 92% of visas issued in 2024 were to Mexican nationals.³ This rapid growth in temporary visas has been attributed to increasing labor scarcity in the agriculture sector due to increasing border security, an aging domestic agricultural workforce, changing migration patterns, and the fact that the H-2A program effectively allows employers to screen for a highly productive (young and male) labor force relative to local workers (Martin, 2025).

While on an H-2A visa, both workers and employers face several restrictions. The maximum length of an H-2A contract is ten months. However, contracts are usually

³Temporary labor migration between Mexico and the US has a long history. A wartime labor agreement (1917–1921) admitted Mexican agricultural and railroad workers, preceding the Bracero Program (1942–1964), which issued nearly half a million contracts annually at its late-1950s peak. In 1952, the Immigration and Nationality Act authorized the H-2 temporary visa act, which existed alongside the Bracero program. After the Bracero program ended in 1964, US agriculture continued to rely on Mexican labor, now largely circular, often unauthorized, and tolerated by farmers and immigration authorities (Massey et al., 2003; Minian, 2018). The Immigration Reform and Control Act (IRCA) of 1986 both legalized nearly three million migrants, introduced employer sanctions, and funded border enforcement as well as splitting the H-2 visa into H-2A for agricultural and H-2B for non-agricultural labor.

shorter—Appendix Table [A1](#) shows the national average is 7 months—and workers depart the US once their contract ends. Through 2024, the time limit reset after three months abroad.⁴ Workers must be paid at least the Adverse Effect Wage Rate (AEWR), set annually by the Department of Labor and varying by state; in 2024 the AEWR in Washington and Oregon, the locations of our study, was USD 19.25 an hour, above the minimum wages of USD 16.28 and USD 13.20 (non-urban) respectively. Employers must provide housing and transport to work, cover the US visa cost, and—once the worker completes half the contract—refund travel from the worker’s home country. Employers do not need to pay payroll taxes on H-2A wages, though workers remain eligible for workers’ compensation and need no additional health insurance. Workers, for their part, file their own tax returns to pay US income tax, and cover their passport fees; other payments, such as recruiter fees, are forbidden. On balance, employers pay more than they would for US workers, because the higher AEWR, housing, and travel costs outweigh the payroll-tax saving; estimates suggest they break even only if H-2A workers are 20% more productive ([Martin, 2025](#)). However, one additional benefit to employers from hiring H-2A workers is that, because H-2A workers may work only for the employer who sponsors them, they are a guaranteed and secure source of labor.

2.2 H-2A RCT

We partnered with a Mexican NGO, REDDES (Redes Sociales para el Desarrollo), that recruits H-2A workers through in-person recruitment fairs. At the fair, held in May 2023, workers received an overview of the program and were entered into a database.⁵ The NGO then requested documentation, screened applicants for work experience, and screened out anyone who had spent time in the US without authorization. The research team intervened at this point, randomizing the order of the waitlist of eligible, screened individuals.

⁴The time limit to reset the time limit was adjusted to 60 days in January 2025.

⁵Our original design, based on the expected number of H-2A contracts, was to include participants from two recruitment workshops. We held the second recruitment workshop in November 2023. However, storms in January 2024 disrupted the agricultural season in Washington and sharply reduced the number of first-time H-2A contracts available. We therefore dropped the second sample from the study and only tracked respondents from the May 2023 workshop. This reduced the sample from approximately 800 participants to 350.

To facilitate fieldwork, we focused on states with a minimum number of individuals per state.⁶ The randomization sample was workers who attended the fair, were first-time migrants, and had not been screened out for operational reasons.

2.3 Sample and balance tests

Randomization occurred shortly after the recruitment event and before baseline data collection due to a short timeline before first contracts. Figure 2 shows the sample flow. We randomized 374 applicants, assigning 224 to treatment and 150 to control. Final eligibility and documentation checks yielded a population of 349 participants, comprising 209 treatment and 140 control participants. Within this population, 340 participants completed the baseline survey, including 202 treatment and 138 control participants. These 340 participants define the experimental population for all ITT and IV estimands.

We randomized using `randtreat` in Stata, handling misfits with the `strata wglobal` option. We assigned 60% of the sample to treatment and 40% to control, randomizing at the individual level. We stratified on geographic variation, above/below median homicide rate, and above/below median baseline migration. After assignment, individuals were randomly ordered, and the ordered list was given to the recruiter. When REDDES received a contract request from the US-based employer, they prioritized workers from the treatment list. Contracts were allocated based on worker experience for the specific contract (e.g., experience with fruit) and employer preferences over worker origin (e.g., workers from a specific state). Workers also had to accept the contract: some were temporarily unavailable because they had migrated elsewhere in Mexico, gone to the US with another recruiter, or did not wish to migrate at the time.

Appendix Table A2 tests balance at assignment using locality-level information available for the full randomized sample, and Appendix Table A3 tests balance on baseline characteristics for the 340 participants who completed the survey shortly afterward. The average (control) participant is 29 years old, 70% of them are married, they live in a house-

⁶44% of the sample come from Tlaxcala, 21% from Oaxaca, and 11% from Michoacán. The remainder are split between Estado de México, Guerrero, Hidalgo, Puebla, and Morelos. We dropped individuals in localities unsafe to survey: all locations with homicide rates above 50 per 100,000, and any localities the survey company flagged as unsafe to work in.

hold with 4.3 people, and they have 1 child. The participant makes on average USD 581.3 per month in Mexico, and monthly per capita income is USD 227.5. We find that the sample is balanced, with a few individual characteristics unbalanced. To address this potential unbalancedness, we provide robustness tests using PDSLasso to select baseline covariates and show results are robust.⁷ We uploaded a preanalysis plan (PAP) to the AER registry. The results in the text present abbreviated results; full PAP tables are included in Appendix D.

2.4 Estimating equations

We estimate the effect of receiving an H-2A visa on economic, social, and political outcomes.

The intent-to-treat effect of being assigned to treatment is estimated by:

$$\text{outcome}_i = \beta \text{ assigned treatment}_i + \gamma_s + X_i' \delta + \epsilon_i \quad (1)$$

where γ_s are the stratification fixed effects described above and X_i are controls. The baseline excludes controls; as specified in the pre-analysis plan, the Appendix (Tables A23 - A30) reports results selecting baseline controls by pdslasso. We report clustered standard errors (at the individual, the unit of randomization) and Lee bounds that account for differential attrition between treatment and control.

Treatment assignment does not perfectly predict migration: some treated individuals decline visa offers, and some controls migrate through other channels (another H-2A recruiter, or without authorization). We therefore instrument migration (defined as having been in the US since August 1, 2023) with treatment assignment:⁸

⁷We prespecified possible baseline imbalance in a few variables, since treatment-group migrants were imminently migrating at the time of the baseline survey. Appendix Table A3 therefore splits into Panel A (prespecified balance tests) and Panel B (where imbalance may appear). Treatment households report more debt and fewer agricultural assets, but other outcomes—monthly income, expenditures, and mental health—are balanced. The joint p -value of 0.105 in panel A (and 0.105 in panel B) cannot reject equality of means between treatment and control in either panel.

⁸The PAP specified instrumenting both the effect of being in the US and the effect of holding an H-2A contract. We present the being-in-the-US results in the paper.

$$\text{outcome}_i = \beta \text{Migrated to the US}_i + \gamma_s + X_i' \delta + \epsilon_i \quad (2)$$

The local average treatment effect (LATE) from equation 2 is the causal effect of working in the US for compliers—individuals who migrate if and only if they are offered a REDDES visa.⁹

We stratified randomization on violence and migration, measured at the geographic level, and estimate heterogeneous effects by interacting treatment with above-median violence or above-median migration.

$$\text{outcome}_i = \beta_1 \text{assigned treatment}_i + \beta_2 \mathbb{I}(\text{het})_i \times \text{assigned treatment}_i + \gamma_s + X_i' \delta + \epsilon_i \quad (3)$$

where het_i is above-median violence or above-median migration, with the level effect absorbed by the strata fixed effects. We report the comparable IV specifications, again with clustered standard errors, Lee bounds, and a pdslasso robustness test. The hypotheses for violence are ambiguous: higher violence may lower the economic returns to migration if residents face informal taxation and insecure working conditions, or higher if migration substitutes for participation in crime. For migration prevalence, we expect less substitution to alternative forms of migration for the control group when baseline migration is low as outside options are fewer.

2.5 Data collection

We collected four rounds of data, yielding rich information over time on the impacts of migration on the participant and their family. Data was collected from the participant

⁹Identifying the LATE requires the exclusion restriction: assignment affects outcomes only through whether a worker migrates. This holds for compliers, who migrate only if assigned to treatment. It may fail for always-migrants, the 11% of the control group who migrate regardless of assignment. Their migration status does not change, but treatment may change the type of trip they take, for example a job in Washington or Oregon rather than an alternative H-2A job in North Carolina (or migrating without authorization, but we show this is rare). If the two differ, the IV estimate mixes the extensive-margin return to migration for compliers with a change in trip type for always-migrants. If the RCT contracts are better, the IV estimate is biased upward. We flag this as a caveat on the IV estimates.

(baseline, endlines 1 & 2) and the household member (midline, endlines 1 & 2). All data collection was undertaken in Mexico. Figure A1 illustrates the timeline of data collection and migration periods. The paper primarily reports treatment effects from EL2, approximately 16 months after the first wave of migration. Results from other surveys are provided in appendix tables and referenced when relevant.¹⁰ For the household member, our goal was to measure the effects of migration on the person most closely affected by the migration, the wife. Appendix Table A4 shows that for participants who were married at baseline, we survey the wife 83% of the time. If the wife was not available the next most common respondent is the mother.

Appendix Table A5 summarizes survey completion within the 340-person experimental population. At EL2, 80% of control participants completed the participant survey, and treatment assignment increased completion by 8 percentage points. The corresponding 4 percentage point difference in household-member survey completion was not statistically significant. To address differential attrition, we report Lee bounds (Lee, 2009) throughout the paper, reporting the Lee-bound estimate in each direction and underlining the bound if it is statistically significant at the 5% level.

2.6 External validity of sample

This section discusses how representative our sample is along the dimensions of population, H-2A contracts, and H-2A destination. Data sources for external data are provided in Appendix F.

2.6.1 Comparison to universe of H-2A contracts

Appendix Table A1 compares the RCT contracts with the universe of H-2A contracts, using US Department of Labor data. The RCT contracts resemble those in Washington and Oregon: 70 workers (vs. 64 in WA/OR, 18 nationally), 5 months on average (vs. 6.1 and 7.2), and 38 expected hours (vs. 39 and 44). The shorter duration is consistent with

¹⁰Endline 1 was collected between May–September 2024. The fieldwork was delayed, in part due to the 2024 Mexican election, and as a result several participants had already remigrated by the time the household was surveyed.

first-time contracts preceding longer repeat-visit contracts. Unlike the 16% of national contracts held by farm labor contractors, our contracts are held by employers directly.¹¹

2.6.2 Comparison of sample population to rural Mexican population

Appendix Table A6 compares the RCT sample to the Mexican population, using the Mexican National Survey of Household Income and Expenditure (ENIGH), the National Survey of Reported Well-being (ENBIARE), the National Survey of Victimization and Perception of Public Safety (ENVIPE), the World Values Survey, and the Latin American Public Opinion Project (LAPOP). Our RCT population is younger and slightly richer than the average rural household in their state, with per capita expenditures at the 56th percentile and less likely to be below the poverty line (measured by the PPI (poverty probability index)) – 70% vs 76%. This might be expected, since migrating requires investment in a passport and connections to learn about recruitment opportunities.¹²

2.6.3 Comparison of US destination

Our study focuses on workers who travel to Washington and Oregon, two states with relatively high state oversight of the H-2A program. Nationally, only 27% of H-2A workers are placed in the West, raising a natural concern that H-2A experiences differ by US destination. To address this, we conducted a survey during the 2024 H-2A season in Monterrey, Mexico, among migrants awaiting processing of their H-2A visas, who travel to a wider range of US destinations. We surveyed 563 of these migrants and collected information on their current and previous experiences with H-2A work. Appendix Table A7 shows that we surveyed migrants traveling to the Midwest, Northeast, Southeast, and Southwest.¹³ The sample is not necessarily representative of all migrants processed in

¹¹An increasing share of H-2A contracts and workers are employed by farm labor contractors (FLC). From FY 2020-2023, FLC held 15% of approved applications and accounted for 42% of approved jobs, but were overrepresented in investigations and debarments (54%) from the program ([United States Government Accountability Office, 2024](#)).

¹²[Gibson et al. \(2008\)](#) find that seasonal migrants in Tonga are poorer, rather than richer, than average rural households. However, recruitment in this setting was centralized, with village committees nominating households to participate with a focus on needy households, which may explain the difference in selection. [McKenzie et al. \(2008\)](#) find that seasonal migrant applicants in Vanuatu are richer than non-applicants.

¹³Relative to DOL certifications, the consulate sample over-represents the Southeast (59% against 46%) and the Midwest (21% against 15%), under-represents the West (8% against 27%), and closely matches the

Monterrey—we approached people in public spaces, and participation was voluntary—but it speaks to the broader experience of H-2A migration.

Appendix Table A8 compares the Monterrey and RCT samples on baseline characteristics. Respondents in Monterrey are slightly older than RCT participants (32.1 against 27.9 years), somewhat more likely to be married (73% against 67%), similarly likely to have children (71% against 74%), slightly less likely to have finished high school (36% against 40%), and report lower monthly earnings in Mexico (USD 492 against USD 557). The age gap is consistent with the RCT sample being first-time migrants. We compare work outcomes in this sample to the RCT in Section 3.6.2.

3 Effects of H-2A migration

This section presents the RCT results. We first show that the RCT increased migration to the US. Next, we show the effects on income, earnings, and remittances. We then consider spillovers to others in the household. Finally, we present results on the overall experience – working and living conditions – of migrating as an H-2A worker for the worker themselves.

3.1 First stage: migration to the US

Table 1 shows the effect of being assigned to treatment on migration. 92% of the treatment group migrated with a contract from the NGO.¹⁴ No control individual received a contract from the NGO during the active study period. The treatment effect on migration reported in the household surveys is 80 percentage points. This value is lower than the administrative figure because 11% of the control group migrated despite not being

Northeast and Southwest. The under-representation of the West is consistent with West-bound applicants being processed in Tijuana rather than Monterrey.

¹⁴All treatment individuals were offered a contract. Appendix Table A9 shows that of the 209 individuals assigned to treatment and screened eligible after the documentation check, 191 migrated, 4 had their visa rejected by the consulate, and 14 declined the offer. The match between the administrative data and self-reported migration data is high where REDDES records cover migration status: conditional on both reports, the two sources agree 95% of the time in 2023 and 88% in 2024. In the full 2024 treatment sample, the agreement rate is 60%; the lower rate is driven by participants whose planned REDDES contract was lost but who report migrating that year (see Appendix Table A10).

assigned an NGO contract. The RCT led migrants to work between 33 (ITT) and 40 (IV) more weeks in the US than the control group since August 1, 2023. For an individual induced to migrate by the treatment, the average 2024 trip length—combining first-time and repeat contracts—is 27 weeks (6.75 months).

Appendix Table A11 shows that most of the control group migration was through an alternative H-2A recruiter. We ask if there was substitution between legal and irregular migration. Irregular migration is coded from enumerator and household reports in the field. We find almost no irregular migration (an estimate of 2 of 340 individuals), and no difference between the control and treatment groups. However, we caution that our sample may not be best-suited to study the substitution between legal and irregular migration as both the treatment and control group were in the process of acquiring legal H-2A visas, and unauthorized migration would jeopardize their future eligibility.

3.2 Economic effects of migration

How did migrating to the US affect individuals' and households' economic lives? Working in the US is more lucrative than working in Mexico. The minimum *hourly* wage for H-2A agricultural workers in the US (AEWR) is USD 19.25 an hour, higher than the Mexican minimum *daily* wage of 245 pesos (approximately USD 13). This section shows that with the large increase in income, households improve their livelihoods: food security improves and the predicted probability of living in poverty falls. Households increase spending on consumption, home improvements, durable assets (including vehicles and internet), increase savings, and pay down debt. We do not find any change in business operation or business profits. There is a small increase in agricultural animals, but no change in land or machinery. We see no change in the probability of owning a non-farm business. The additional income from migrating appears to be consumed or saved rather than used for investment.

3.2.1 Income and remittances

Table 2 shows the effects on income earned. In September 2024— used as a reference month as September is a month when most migrants are in the US—participants assigned to the treatment group earned USD 1,677 more than the control group, who had mean earnings of USD 648. Adjusting for migration rates, the IV estimate implies that migrating increases monthly income by USD 2,034, an increase of 314% of the control mean. The increase in income for an average month (not just September) is USD 2,367. In other words, migrants earned four times more working in the US than working in Mexico. Benchmarking against the AEWR, the effect is reasonable: working 40 hours a week at the AEWR of USD 19.25 would earn USD 3,100 a month, or USD 2,450 more than the control mean—close to the IV treatment effect.

Panel (b) reports remittances. The estimated treatment effect is an additional USD 7,733 remitted, and an additional USD 3,909 repatriated in savings at the end of the trip, for a total of USD 11,642. The treatment effect on total earnings is USD 16,468, so this implies a remittance/saving rate of 70%. While a 70% remittance rate is higher than many estimates in the literature (for example, [Ashraf et al. \(2015\)](#) find El Salvadoran migrants remit 14% of their income and [Yang \(2011\)](#) reports average remittance rates ranging from 1-50% of earnings), this high remittance rate is plausible because H-2A migrants have almost all their direct costs covered: daily transportation costs, travel costs, and housing costs are covered by the employer, and the migrant is only responsible for food costs.

Panel (c) of Table 2 reports these flows as measured by the household member rather than the migrant. Migration raises household-reported remittances by USD 3,577, about half the effect on the remittances the migrant reports sending, and raises household-reported repatriated savings by USD 1,946, slightly more than half the corresponding migrant-reported effect. A discrepancy between migrant-reported and recipient-reported remittances could come from two sources. First, household members may underreport (or misremember) the amount of remittances received. This has been commonly found in the literature: [De Arcangelis et al. \(2023\)](#) use administrative records from a remittance-sending firm to compare reported and actual amounts. They find that migrant-reported

amounts closely match the administrative data (a difference of 6%, which is not statistically significant), whereas recipient households report receiving 23% less than the true administrative value. In our data, among households where both the migrant and the household report a single recipient, the household reports receiving about 40% less than the migrant reports sending, a number in the same ballpark as the [De Arcangelis et al. \(2023\)](#) results. The second explanation is that the migrant is sending money back to several different recipients, and the household member is only reporting what they receive. We also find some evidence of this in our data: the migrant reports sending money to someone outside the household about 14% of the time, and on the intensive margin, the migrant reports on average nearly twice as many recipients than the respondent as the household does. The total amount remitted back to the household, depending on who is reporting, is therefore between 35%-70% of the earnings from the trip.

The migrant's earnings gain could be offset if other household members respond to higher remittances by working less. We find no evidence of this: Table 2 shows there is no statistically significant effect on the income of non-participant household members during 2024. The income the migrant earned in the US therefore added to the household rather than displacing earnings at home. This additivity lets us compute the net change in household income. Migrants remit or repatriate around USD 12,000. Against this we net the earnings the migrant forgoes by leaving: based on the control-group mean, a participant who had instead stayed in Mexico for the same 27 weeks would have earned about USD 4,000. The net gain to the household is therefore around USD 8,000, an increase of 75% over baseline annual household income of USD 12,000.

3.2.2 Household economic outcomes

The migrant quadrupled their earnings while in the US. We now examine whether this raised living standards for the household, beginning with two basic measures: food security and poverty. Panel (a) of Table 3 reports these results. To measure food security we use three questions from the Household Food Insecurity Access Scale: whether, in the last two months and due to a lack of income or resources, the household (a) worried that food would run out, (b) ran out of food, or (c) had any adult skip a meal. We

count the number of “no” answers, so a higher count reflects greater food security. Control households are somewhat food insecure, answering no to 2.5 of 3 questions on average. The IV treatment effect is an additional 0.4 “no” answers, almost completely closing the gap of food insecurity. Alongside the food security results, the index of “expensive” calories - measured as how many of the last 7 days bread, fruit, red meat, white meat, seafood, and dairy were consumed – shows an increase for migrant households: control households consumed expensive calories 13 times; this increases to 16 times for migrant households.¹⁵ The predicted poverty rate (measured by the poverty probability index (PPI), a validated index that uses information about a household’s characteristics and asset index cross-referenced with national datasets) is 71% for the control group. Migrating reduces predicted poverty by 9 percentage points. Households are still economically vulnerable but the two years of migration experience has improved fundamental aspects of their livelihoods.

Panel (b) of Table 3 reports household expenditures. We find a small, statistically insignificant increase in high-frequency consumption (food, transportation, utilities, alcohol). Migrant households increase their infrequent consumption (health, education, clothes, entertainment, food out, vacation, Christmas, donations) by 60%: an increase of USD 130 over six months, relative to the control mean of USD 214.¹⁶ Households also increase spending on home improvements, which rises more than five-fold—from USD 54 to USD 308, an increase of USD 254. A breakdown in Appendix Table A15 shows households increase renovations, painting, and building additional rooms.

Panel (c) considers assets and finances. The count of measured household assets increases from 6.8 to 8; the components of the asset index are in Appendix Table A16. Households purchase many domestic appliances: a 11 percentage point increase in the likelihood of owning a washing machine (off a base of 71%) and a 16 percentage point increase in having a shower (off a base of 55%). They also acquire entertainment services and devices: a 23 percentage point increase in home internet (off a base of 48%), a 10

¹⁵Appendix Table A12 details the breakdown of the types of food a household consumes. We see increases in bread (a more expensive substitute for tortillas), beef, chicken, and dairy products.

¹⁶Appendix Table A13 shows the breakdown in expenditures. The timing of our second endline survey—in January, directly after the holiday period—may have masked some changes in food consumption. Appendix Table A14 shows a 20% increase in food expenditure at endline 1, for example.

percentage point increase in a streaming service (off a base of 4%), and a 12 percentage point increase in a TV service (off a base of 21%). Tablet ownership rises by 16 percentage points, off a base of 4%. Households also purchase larger assets: a 24 percentage point increase in owning a car or truck, off a base of 40%. We see no change in the likelihood of owning a mobile phone, but the base mean of 2.9 devices is already close to one phone per adult member. Among financial assets, reported savings rise 140% from a base of USD 220. Households are also 12 percentage points less likely to hold debt (off a base of 25%), notable because they often borrow to pay the fixed costs of migrating, such as passport and visa fees. Finally, having a bank account rises by 21 percentage points (off a base of 39%), indicating that migration leads individuals to enter the formal banking sector.

3.2.3 Household productive capacity

The migrant reports remitting and repatriating close to an additional USD 12,000. We next examine whether these resources changed the household's productive capacity. Table 4 reports the results, all measured after the second year of the study.

Panel (a) examines business activity. Households are no more likely to operate a business (a 4 percentage point increase off a base of 12%, not statistically significant), and we find no significant change in business revenue, costs, or profits. The one significant result is that treatment households are 15 percentage points more likely to report future investment plans (off a base of 77%, significant at the 5% level).

Panel (b) considers farm assets. 17% of the control group own agricultural land, but only 1% report having an agricultural business. There is no significant change in the likelihood of owning farm machines, farm animals, or agricultural land.

Panel (c) reports income and labor supply after return: treatment participants work less once back in Mexico, reducing hours by 11.7 per week (off a control mean of 47). Because they work fewer hours, participant labor income falls by USD 50 (ITT) or USD 61 (IV), approximately a 14% reduction off a control mean of USD 447 and significant at the 10% level (although not significant in both directions of Lee bounds adjustment). However, because hours fall by roughly a quarter while income falls by only 14%, implied hourly earnings, if anything, rise. Other household members maintain the same number

of working hours.

Taken as a whole, the increase in income did not translate into substantial productive investment in Mexico. The exceptions are modest—more livestock and a higher likelihood of reporting future investment plans—with no change in operating businesses, business revenue, or land. This result might be surprising: standard models of poverty traps, such as [Balboni et al. \(2022\)](#), suggest that a one-time cash injection can let a household overcome fixed costs and grow rapidly. However, in this context the highest-return investment may be migrating back to the US. The returns to migrating—a more than four-fold increase in income—are likely much larger than the returns to a local business, so the decision not to invest locally may be rational given how many migrants migrate again. A more mechanical explanation is also possible: if the participant re-migrates, they are not present to operate a business. We also note that a fairly small proportion – just 12% of the control group – operate a business. The sample is not a highly-entrepreneurial sample but rather a sample where individuals are primarily earning income from labor earnings. They may not therefore be marginal entrepreneurs for whom additional income is invested rather than consumed.

Our economic results are consistent with the broader literature on temporary labor migration, despite differences in setting and duration. We find that households increase consumption, spend on home repairs and durable assets, and do not start businesses — the same pattern that [Mobarak et al. \(2023\)](#) document for Bangladeshi seasonal migrants to Malaysia and [Clemens and Postel \(2017\)](#) document for Haitian H-2A workers. [Mobarak et al. \(2023\)](#) finds no increase, and if anything a decrease, in entrepreneurial activity, and suggest this could be because the migrant who would run the business remains absent. Across these short-run seasonal settings, the common finding is consumption and durable accumulation without local business investment. [Gibson et al. \(2011\)](#) study permanent migrants from the Pacific to New Zealand and likewise find higher per-capita expenditure, a 10 to 11 percentage point increase in home improvements, and more durable purchases, with no increase in non-agricultural business. Over longer horizons the pattern differs: [Khanna et al. \(2026\)](#) find that increased remittances stimulate local business and raise education, primarily college enrollment in the twenty years after an increase in

migration opportunities.

We can also benchmark our results to the cash transfer literature. [Egger et al. \(2022\)](#) transfer a one-time amount of USD 1,871 to households in Kenya, equal to roughly 75% of annual household expenditure, and [Haushofer and Shapiro \(2016\)](#) make an average one-time transfer of USD 709. The income flowing to households in our setting is of comparable magnitude: as discussed above, the net increase to household income per year of migrating is 75% of annual income. One difference between a cash transfer and a migration opportunity is persistence: a cash transfer arrives once, whereas 85% of our migrants return the following season. A permanent income hypothesis would suggest that consumption should increase by the permanent change in income; a one-time shock may be expected to be amortized instead of consumed all at once. The two settings nonetheless produce fairly similar changes in household expenditure: cash transfer recipients increase consumption and durable purchases but do not start businesses or increase business profits; we likewise find higher consumption, home improvements, durable assets, and savings, alongside debt repayment, with no change in business ownership, business profits, or agricultural investment.

3.3 Spillovers of migration: wellbeing and human capital

In the case of H-2A migration, the male husband leaves the family behind during their trip. The migrant sends back financial resources but migration leads to a separation of the family. We now turn to asking whether there are effects of migration on broader outcomes – health, wellbeing, and interactions – for both the migrant and their family.¹⁷ We measure this by surveying both the migrant and their family member. Surveys were conducted in-person (with a small number conducted via telephone in the case of migrant absence or insecurity in villages). Overall, we find that while the migrant is the one who leaves, some of the spillovers of this decision are felt by the family and community—a negative externality of the decision to migrate. This finding differs from other work where the

¹⁷As discussed in Section 2.2, the original design planned for approximately 800 participants, but we dropped those recruited at the second workshop because of the shortage of first-time H-2A contracts. The resulting sample of 350 remains adequately powered for the economic outcomes but not for many of the non-economic outcomes in this section. We therefore present these results as suggestive.

migrant is the one who faces the direct costs of migrating: for example, [Naidu et al. \(2023\)](#) document reductions in the subjective well-being of migrants.

3.3.1 Wellbeing and human capital

Panels (a) and (b) of Table 5 consider the effect of migrating on mental health of the participant and their household member. We consider two primary indices of mental health: PHQ-9, which is an index of depression ([Kroenke et al., 2001](#)), and GAD-7 (generalized anxiety disorder) which is an index of anxiety. Participants report very low levels of depression, and if anything, migrating leads to lower depression, although this effect is not statistically significant. Migrants have low levels of anxiety and again, if anything, migrating reduces anxiety, although this effect is not statistically significant. Turning to the household participant, we find an increase in depression, with the the PHQ score increasing from 2.2 to 3.3, although this outcome is still below the clinically significant score of 5. Anxiety for household members does not change.

3.3.2 Outcomes for children

Panel (c) considers outcomes for children. We start by considering child labor. Migration may increase economic resources for the household, reducing the need for child labor ([Edmonds and Theoharides, 2021](#)). 14% of control households have a child worker between the ages of 6 and 15, although only 2% of households have a child worker who is paid. We see that migration reduces the probability of having a child that works, but the result is not statistically significant. Next, we consider school attendance. Primary school attendance in Mexico is high in general (and in our case in particular: 93% of households have all children attending school). Given high participation rates, there is little scope for treatment effects on attending school, and indeed we find no effect.¹⁸

¹⁸The migration literature has found conflicting results on the effects of remittances and migration on education. For example, [McKenzie and Rapoport \(2011\)](#) find children drop out of high school when father migrates. [Antman \(2012\)](#) find remittances increase schooling for girls, not boys. Results in [Khanna et al. \(2026\)](#) find long-run increases in education, especially college attainment, after an increase in migration opportunities.

3.4 Household relations and engagement

Table 6 reports effects on security and victimization; intra-household dynamics; and politics and trust.

3.4.1 Security and victimization

Mexico is one of the most violent countries in the world and extortion has become a major illicit business for organized criminal groups. Organized criminal groups in Mexico have transformed their activities. Rather than focusing primarily on the trafficking of illegal drugs, they have diversified into a broad range of illicit and licit economic activities, including extortion, kidnapping, human trafficking, and the collection of protection payments, as well as illegal logging, mining, and other forms of resource extraction. There is a concern that a lucrative opportunity such as migrating may affect a household's security. This could occur through a rapacity effect where higher income attracts armed groups, worsening security (Grossman, 1991; Dube and Vargas, 2013). The alternative hypothesis is an opportunity effect, where higher income may reduce incentives to join armed groups, improving security (Collier, 1998; Fearon and Laitin, 2003; Miguel et al., 2004). In this section we present results on behavioral change, security, and victimization.

Panel (a) considers the effect of migration on the household respondent (primarily the wife). The first index, behavioral change, counts the activities the respondent has stopped out of "fear or insecurity." The index rises by 1.03 from a baseline of 1.6. Appendix Table A17 shows the change concentrates in daily activities that involve leaving the house or handling money: women in treatment households are 14 percentage points more likely to report having stopped walking the streets at night (off a base of 31%), 19 points more likely to have stopped going to the bank or ATM (16%), 17 points more likely to have stopped going to the market (11%), and 9 points more likely to have stopped interacting with the authorities (12%), the last perhaps reflecting extortion. These adjustments occur while the husband is away. Women may be more physically vulnerable in his absence, and in small communities it may be common knowledge that the husband is in the US and remitting. This pattern is one way the costs of migration fall on other household

members, and may be especially relevant in high-violence settings.

The second index, security, asks whether respondents felt secure or insecure over the last two months across seven locations (the community, home, the streets, walking alone at night, the market, public transport, and the bank/ATM). Control households report feeling insecure in 3.6 locations on average, with no change for migrants. The third index, victimization, records actual experiences of crime (assault, robbery, extortion, fraud, vehicle theft, card cloning, and gang threats). Such events are rare—control households report 0.2 in the last two months—and the treatment effect is positive (0.1) but statistically insignificant.¹⁹

3.4.2 Intra-household dynamics

Panel (b) of Table 6 reports results for intra-household dynamics.

We first consider whether women take on more financial management when the male migrates, as [Mobarak et al. \(2023\)](#) find. We find no statistically significant treatment effect, off a control mean of 24.8%.

Next, we consider social changes in the household. The partner emotions index measures whether the partner has become angry, controlling, or mistrusting over the last two months.²⁰ Household members answer no to almost every question, with a mean of 4.7 out of 5. The treatment effects are small, positive, and statistically insignificant, though the index is bounded above by 5. The final two indices measure machismo, drawing on questions from LAPOP and the World Values Survey (whether men make better leaders, whether men are entitled to higher education and jobs over women, and whether domestic violence is acceptable).²¹ We asked these questions of both the household respondents and the participants. We find that migrants become more patriarchal, increasing their

¹⁹Appendix Table A18 breaks the victimization index out by its components and finds no effect on any individual component.

²⁰The full index comprises: gets angry; is controlling; is jealous; gives orders; and is mistrusting with finances.

²¹The full index comprises: in general, men make better political leaders than women; a university education is more important for a man than for a woman; when work is scarce, men have more right to a job than women; if a woman earns more than her husband it will cause problems; a husband should set rules for his wife, especially when he is away; there are occasions when a man may hit his wife; and they would never have a gay friend.

“yes” answers by 0.4 relative to a control participant who answers yes to 0.9 questions on average. We find no treatment effect for household members. Appendix Table A19 breaks down the index component. For the participant the only individually significant component is that migrants are more likely to agree that “men should set rules for women”. Female household respondents answer yes to 1.5 questions, with no treatment effect of migration. Appendix Table A20 breaks down the components of the index for the household respondent. Migration thus shifts the participant’s own attitudes toward machismo, particularly around setting rules for the wife while he is away, without moving those of his wife.

3.4.3 Politics and trust

Panel (c) considers effects on trust and community engagement. Migration may change how the participant and household relate to the community: the migrant is no longer present to participate, the wife may rely more on community support in his absence, and migration can shift attitudes toward collective support—migrants in India, for example, become less supportive of taxation and redistribution (Gaikwad et al., 2025).

For the most part, the results are suggestive. The trust index combines three questions (most people are honest; most people are trustworthy; trust neighbors with the house when away). The control group answers affirmatively to 1.5 on average, and migration reduces this by 0.3. Participants also become more trusting of the US government (an increase of 13 percentage points off a base of 33%), with no change in trust toward the Mexican government.

The community engagement index counts participation in six community and political activities.²² The control mean is 1, and treatment household members show a reduction of 0.2. This could reflect household members being busier in the husband’s absence, or a reduced need to rely on community members as income rises.

The remaining two indices show no significant effects. The efficacy index, which

²²The community engagement index sums three binary indicators: whether the respondent worked with other citizens to solve a problem in their community; attended community meetings at least a few times per month; and was somewhat or very likely to attend a community meeting to persuade the government to act. The index ranges from 0 to 3, with higher values indicating greater community engagement.

measures whether the respondent believes life is under their control,²³ increases slightly but insignificantly. The social support index, the expected support from family, friends, neighbors, community, and church in an emergency (maximum 5), has a control mean of 3, with a small, insignificant reduction for treatment households.

3.5 Household migration

Table 7 considers whether the experiment led to more migration by other household members. In 2% of control households, a non-participant member migrates abroad. Receiving a visa to work in the US increases this rate by 7 percentage points.²⁴ In about half the cases, the additional migrant is a sibling of the participant. This spillover is not a direct effect of the experiment: REDDES gave contracts only to the participant, not to other household members. We do not have direct information of how the household member traveled to the US, but consider three explanations. First, a household member who migrates may form new connections with recruiters that enable others in the household to migrate. Second, a migrating member earns additional income, which can cover the migration costs (such as the cost of a coyote to cross the border) of others. Third, family members may prefer to coordinate the timing of their trips to the US, as in Akram et al. (2017). Appendix Table A21 shows that the household member's migration was typically contemporaneous with, rather than subsequent to, the participant's migration, most consistent with the coordination channel. The third row of Table 7 shows no statistically significant increase in non-participant members migrating within Mexico.

3.6 Worker Experiences of the H-2A program

Our last section reports on workers' experiences in the H-2A program. Table 8 reports working conditions. The treatment effects here represent the impact of working in the US

²³The efficacy index sums six binary items: disagreement that what happens is determined by fate, that life is controlled by others, and that planning for the future is futile; and agreement that life is under the respondent's control, that hard work leads to success, and that life is determined by the respondent's own actions. The index ranges from 0 to 6, with higher values indicating greater efficacy.

²⁴This household spillover effect is also stronger in locations with higher migration rates (see Appendix Table A32).

instead of Mexico, the relevant counterfactual for migrants: absent the H-2A program, their outside option is to work in Mexico, not elsewhere in the US.

3.6.1 Work hours and wages

Panel (a) of Table 8 reports hours worked and desired. Control workers work 53 hours per week—six full days—but would prefer to work 38 hours, so they work 15 hours more per week than preferred. The ITT estimates yield that treatment workers work less – 9 hours for the ITT, 11 hours for the IV – and have higher preferred hours relative to the control group (8 hours for the ITT / 10 hours for the IV). The shortfall between migrants’ desired and actual hours likely reflects binding agricultural overtime above 40 hours per week in Washington, the destination for most H-2A workers in our sample; to avoid paying the time-and-a-half premium, employers limit weekly hours, leaving migrants working fewer hours than they would choose.²⁵

Next, we examine whether wages meet legal minimums. H-2A workers are entitled to the AEWR, set at USD 19.25 per hour in Washington and Oregon in 2024. Appendix Table A22 reports two measures: a directly reported hourly wage, and an implied wage equal to usual weekly earnings divided by usual weekly hours. In Column (1) the reported wage averages USD 19.30, at the AEWR. The implied average wage is USD 18, slightly below the AEWR. Columns (2) and (3) split the sample at the overtime threshold (40 hours in Washington, and 55 hours in Oregon), above which each hour is owed time-and-a-half (USD 28.88). Conditional on reporting working more than 40 hours a week the modal response is 48 hours, which would imply an average wage of USD 21.10. The implied wage is USD 16.7, below this value. While this could suggest that not all workers are paid overtime, we only have a small number of observations (35 people) reporting

²⁵The agricultural industry historically did not have overtime laws: agriculture was excluded from the 1938 Fair Labor Standards Act that implemented time-and-a-half overtime for regular hours over 40 hours a week. In WA overtime was introduced in 2022; in 2023 it was due for every hour above 48 per week; in 2024, overtime at time-and-a-half was due for every hour above 40 per week. Oregon, the second destination for migrants, also introduced overtime laws during the course of the study, but the phase-in is slower: only hours above 55 per week are eligible for time-and-a-half overtime during 2023 and 2024. Research on the roll-out of overtime in California also found reductions in working hours and therefore earnings for workers (Hill, 2023).

overtime-eligible hours.²⁶

3.6.2 Working conditions

An H-2A visa is employer-specific; a worker can change employer only if a new petition is filed. Protections exist against retaliation (see, e.g., [Federal Register \(2024\)](#)), but concerns remain that workers are mistreated, in particular that they are vulnerable to exploitation by their employer.

Panel (b) considers worker-reported attributes of their job. We ask these questions to both the treatment (primarily working in the US) and the control group (primarily working in Mexico) and so can create comparisons between positions in Mexico and in the US. Many administrative features—being paid on time, exposure to chemicals—are better in the US than in Mexico, though workers report more verbal abuse and threats. 41% of the control group are exposed to harmful chemicals at work, falling to 6% in the US.²⁷ 14% report being paid late in Mexico, falling to 2% in the US. Verbal abuse and threats rise, though levels are low: verbal abuse goes from 2% in Mexico to 7% in the US (and is not statistically significantly different after the Lee bounds adjustment), and 4% of US workers report being threatened (off a control mean of 0% in Mexico), although not significant after Lee bounds adjustment.

Figure 3 reports whether workers' expectations were met across aspects of their H-2A trip, for the treatment group that migrated. Satisfaction (measured as being as good or better than expected) was generally high: 94% said that were satisfied with sanitation, 96% with cleanliness, and 94% with safety; 94% were satisfied with their income and 95% with working conditions; 96% report having wifi in their housing. However, 30% reported needing to ask permission to leave the accommodation, an illegal requirement. Overall, 95% were satisfied with the overall H-2A experience, and 100% said they would

²⁶The Wage and Hour Division (WHD) of the DOL is responsible for investigating agricultural employers. The majority of these investigations (85%) are agency-driven rather than complaint-driven. Between FY2018 and FY2023, WHD conducted 2,857 investigations; in 84% at least one violation was found. The most common violations relate to pay (42%), provision and safety of transport (30%), and illegal charges for items such as bedding or work supplies (9%). Over this period, WHD assessed USD 20 million in H-2A back wages ([United States Government Accountability Office, 2024](#)).

²⁷Many of the H-2A workers in our sample work at organic farms, so this may be a property of the type of farm rather than holding more generally.

return on an H-2A visa.

The additional survey we ran in Monterrey (“consulate survey”) also lets us ask whether the working- and living-condition results extend to workers in states with less oversight, addressing the concern that migrants in such places face worse conditions than those in the RCT. Appendix Table A8 shows that working conditions are similar across the two samples, despite different employers, destinations, and trips. Pay arriving late is rare in both (4% against 5%), nearly all workers report a full refund of travel costs (91% against 90%), and the harassment items are almost identical: verbal abuse 6% in both, threats 2% against 3%, humiliation 6% against 5%, and no reports of sexual harassment in either sample. The one working-condition item on which they differ is the preferred number of hours on the previous trip: 75% of consulate respondents preferred more hours, against 50% in the RCT. Living conditions are rated as good as or better than expected by at least 98% of consulate respondents on sanitation, cleanliness, and safety, against 94–97% in the RCT. The one living-condition item on which the samples diverge is the availability of WiFi in housing: 39% against 97% in the RCT.

3.6.3 Recruitment experience

Finally, one additional area of concern with the H-2A program is the recruitment experience. H-2A workers are recruited either directly by the employer, or indirectly through a recruiting contractor (formal) or returning workers (informal). Workers report a range of abuses during the recruitment progress, ranging from recruitment fees for jobs or visas that may not exist to illegal recruitment fees for visas that do eventuate ([United States Government Accountability Office, 2015](#); [Centro de los derechos del migrante, 2020](#)). Our baseline survey collected experiences of recruitment fraud prior to participating in the study (i.e., with recruiters that were not our partner recruiter). We found 5% of the sample had previously been scammed by a recruiter but had not received an H-2A visa; conditional on paying a fee, the average participant had paid USD 396. Anecdotal evidence collected during fieldwork supported frequent scamming by recruiters promising H-2A visas that do not materialize.

3.6.4 Migration preferences

Finally, Panel (c) of Table 8 reports migrants' preferences over migration. Participants do not express a strong desire to settle in the US. Asked whether they would prefer to improve their life in Mexico or to move their family to the US, 85% of the control group choose to improve their life in Mexico, and migrating does not change this answer. The ideal contract length is 7.4 months in the control group; the treatment effect is an increase of one week and is not statistically significant.

Guestworker migration therefore matches what these workers say they want: high earnings abroad and a life based in Mexico. The program gives them access to a high-wage labor market; they remit 70% of what they earn, and they spend it in Mexico, where a dollar buys more than it does in the US and where they prefer to live. This interpretation also accounts for the finding that migrants would like to work about ten more hours per week than they currently do. The cost of a trip is largely fixed: months away from the family. If that cost is paid regardless of hours worked, then each additional hour raises the return to the trip at little additional cost, and so binding weekly hours caps may have some unintended consequences on migrant worker wellbeing. The pattern is consistent with models of temporary migration in which migrants who intend to return work and save intensively while abroad (Dustmann and Görlach, 2016). We note one caveat. Our participants selected into recruitment for a seasonal program, so their preferences need not represent those of all potential migrants from Mexico.

4 Conclusion

This paper provides the first experimental evidence on the effects of temporary legal migration through the H-2A visa program. The H-2A program is one of the few legal pathways for less-educated workers to migrate to the United States. By randomizing which Mexican workers received priority for H-2A visas, we estimate the causal effects of migration on workers, their families, and their communities over a 16-month period. Our findings suggest it delivers substantial economic benefits to migrants and families. How-

ever, there are some externalities to family members who remain in Mexico.

The economic returns to H-2A migration are large. Migrants earn four times more working in the US than in Mexico. Between 35 and 70% of these earnings return to origin households through remittances and repatriated savings, increasing net household income by 75%. Households improve their living standards: food security rises, the probability of living in poverty falls by nine percentage points, and families invest in home improvements, durable assets, and debt reduction. We find little evidence of investment in businesses or productive assets in Mexico, consistent with the returns to repeat migration exceeding local investment opportunities.

Migration also imposes costs beyond the migrant. Household respondents, usually the wife, report modest increases in depression and curtail daily activities out of fear for their safety. Migrants themselves return with more controlling attitudes toward their spouses. The migrant captures the economic gains, but some of the social costs fall on those who remain.

Working conditions under H-2A compare favorably to the alternatives in Mexico on most dimensions: workers are paid on time, exposure to harmful chemicals is rare, and 95% are satisfied with their experience. Some workers nonetheless report verbal abuse, restrictions on movement, and threats, which point to gaps in enforcement. Despite these gaps, workers want to return: all report they want to migrate again, and 85% do so the following season. Few want to settle, however: more than four in five participants would rather improve their life in Mexico than move their family to the US. Seasonal migration, which pairs US earnings with a life based in Mexico, matches that preference.

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Figures and Tables

Table 1: Migration Outcomes

	Respondent	N	Control Mean	Treatment Effects	
				ITT	IV
	(I)	(II)	(III)	(IV)	(V)
NGO contract 2023 or 2024?	Admin	340	0.00	0.93*** (0.02) <u>[0.93, 0.93]</u>	
Participant migrated abroad?	Both respondents	296	0.11	0.80*** (0.03) <u>[0.80, 0.84]</u>	
Number of weeks in US since Aug 1 2023	Participant	288	2.35	32.85*** (1.83) <u>[29.33, 35.20]</u>	40.32*** (2.14) <u>[36.00, 43.20]</u>
Number of weeks in US in 2024	Participant	288	2.35	22.26*** (1.46) <u>[19.74, 24.08]</u>	27.32*** (1.58) <u>[24.23, 29.55]</u>

Notes: Survey data from the second endline (EL2). Admin data from our partner, REDDES. The indicator for whether the participant migrated abroad is coded as 1 if either respondent indicated that the participant migrated abroad since August 2023. Column (IV) reports intent-to-treat estimates; Column (V) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table 2: Remittances and Income in 2024

	N	Control Mean	Treatment Effects	
			ITT	IV
	(I)	(II)	(III)	(IV)
<i>Panel A: Participant income</i>				
Monthly income Sept. 2024	253	648.3	1676.9*** (114.8) [1566.6, 1862.4]	2034.1*** (108.3) [1900.3, 2259.1]
Total income US trip 2024	271	950.7	13685.4*** (921.3) [13271.3, 14053.0]	16468.4*** (1009.0) [15970.2, 16910.8]
Monthly income from US work	271	189.7	1967.3*** (129.5) [1910.4, 2021.8]	2367.4*** (130.5) [2298.9, 2433.0]
<i>Panel B: Remittances (Participant report)</i>				
Remittances US trip 2024	268	972.7	6231.6*** (687.7) [6195.3, 6624.8]	7733.0*** (770.1) [7688.0, 8221.0]
Money brought back US trip 2024	269	103.9	3201.1*** (426.4) [3201.0, 3201.9]	3909.6*** (530.3) [3909.4, 3910.5]
<i>Panel C: Remittances (HH mem. report)</i>				
Remittances 2024	218	520.1	2977.0*** (304.3) [2683.7, 3155.1]	3577.4*** (349.3) [3225.0, 3791.4]
Money brought back 2024	260	321.7	1592.7*** (215.7) [1472.4, 1631.0]	1946.2*** (257.0) [1799.1, 1993.0]
Non-participant income 2024	221	3661.1	148.9 (393.0) [-21.2, 432.7]	179.8 (475.0) [-25.6, 522.3]

Notes: Survey data from the second endline (EL2). Income and remittances in USD. Non-zero values of income and remittances trimmed at 5th and 95th percentile. Column (III) reports intent-to-treat estimates; Column (IV) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table 3: Household Economic Outcomes

	N	Control Mean	Treatment Effects	
			ITT	IV
	(I)	(II)	(III)	(IV)
<i>Panel A: Poverty indices</i>				
Food Security index	279	2.47	0.29*** (0.09) [0.29, 0.32]	0.36*** (0.11) [0.35, 0.39]
Likelihood below poverty line	279	71.3	-7.8*** (2.4) [-8.5, -6.6]	-9.7*** (3.0) [-10.5, -8.2]
<i>Panel B: Expenditures</i>				
Frequent exp., 1 month	252	251.0	3.5 (16.1) [3.2, 3.8]	4.5 (20.5) [4.1, 4.8]
Expensive calorie index	279	13.5	2.6*** (0.8) [2.2, 2.9]	3.2*** (1.0) [2.8, 3.6]
Infrequent exp., 6 months	256	214.0	107.5*** (32.0) [69.2, 125.9]	130.2*** (38.8) [83.8, 152.4]
Exp. on home improvements	266	53.5	208.8*** (67.2) [204.7, 209.2]	254.0*** (82.8) [249.0, 254.5]
<i>Panel C: Assets and Finances</i>				
Asset index	279	6.77	1.00*** (0.30) [0.85, 1.13]	1.24*** (0.38) [1.05, 1.40]
Has savings?	278	0.42	0.09 (0.06) [0.08, 0.10]	0.12 (0.08) [0.10, 0.13]
Total savings	254	225.1	258.5*** (88.5) [255.9, 274.5]	317.8*** (108.4) [314.6, 337.5]
Savings buffer: Over 1 month	271	0.32	0.22*** (0.06) [0.22, 0.22]	0.27*** (0.07) [0.27, 0.27]
Has debt?	279	0.25	-0.10** (0.05) [-0.12, -0.10]	-0.12** (0.06) [-0.15, -0.12]
Total debt	274	238.4	-107.5 (84.4) [-159.3, -99.4]	-132.2 (103.5) [-195.9, -122.2]
<i>Panel D: Financial Inclusion</i>				
Has a bank account	279	0.39	0.17*** (0.06) [0.16, 0.19]	0.21*** (0.07) [0.20, 0.23]

Notes: Survey data from the second endline (EL2). Expenditures, savings, and debt in USD. Non-zero values of expenditures, savings, and debt trimmed at 5th and 95th percentile. The food security index is an additive indices of survey questions for which a higher score indicates more food security, scored on a 0-3 scale. The expensive-calorie index is the sum of the number of days in the previous week (0-7 each) that the household consumed six relatively expensive foods — bread, fruit, beef, chicken, dairy, and fish — giving a 0-42 scale on which higher values indicate more frequent consumption of higher-cost foods. The asset index is the sum of 17 indicators for whether the household owns each asset or has each service. For questions that record the number owned, the indicator equals one if the household owns at least one. The index ranges from 0 to 17. Frequent expenditure includes food prepared at home, transportation, billed services (e.g., utilities), and alcohol/tobacco. Infrequent expenditures include health, education, clothing, entertainment, food prepared outside the home, vacations, Christmas-related spending, and donations. We calculate the PPI score for each household and use Mexico's 2018 reference numbers to estimate the likelihood of falling below the national poverty line. Column (III) reports intent-to-treat estimates; Column (IV) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table 4: Post-Migration Productive Capacity

	Respondent	N	Control Mean	Treatment Effects	
				ITT	IV
	(I)	(II)	(III)	(IV)	(V)
<i>Panel A: Business</i>					
HH has business?	HH mem.	274	0.12	0.03 (0.04) [0.01, 0.04]	0.04 (0.05) [0.01, 0.05]
Has agricultural business?	HH mem.	274	0.01	0.00 (0.01) [-0.00, 0.00]	0.00 (0.01) [-0.01, 0.00]
Has non-agricultural business?	HH mem.	274	0.11	0.03 (0.04) [0.01, 0.03]	0.04 (0.05) [0.01, 0.04]
Business Revenue	HH mem.	262	142.3	119.1 (107.8) [117.0, 140.0]	149.4 (135.3) [146.7, 175.5]
Business profits	HH mem.	258	-29.5	-870.9 (995.2) [-874.8, -869.6]	-1073.1 (1225.4) [-1077.8, -1071.4]
Business costs	HH mem.	264	163.2	1028.0 (1020.2) [1027.7, 1031.2]	1258.2 (1248.0) [1257.9, 1262.1]
Has future investment plans	Participant	288	0.77	0.12** (0.05) [0.11, 0.16]	0.15** (0.06) [0.13, 0.20]
<i>Panel B: Farm assets</i>					
Has farm machines?	HH mem.	279	0.05	-0.02 (0.03) [-0.03, -0.02]	-0.02 (0.03) [-0.04, -0.02]
Number of farm machines	HH mem.	279	0.06	-0.03 (0.03) [-0.04, -0.03]	-0.04 (0.04) [-0.05, -0.03]
Has farm animals?	HH mem.	279	0.17	0.06 (0.05) [0.04, 0.07]	0.08 (0.06) [0.05, 0.08]
Number of farm animals	HH mem.	279	2.16	1.40 (0.86) [0.88, 1.51]	1.73 (1.06) [1.08, 1.86]
Has agricultural land?	HH mem.	279	0.17	-0.00 (0.05) [-0.01, 0.00]	-0.00 (0.06) [-0.02, 0.01]
Number of agricultural plots	HH mem.	275	0.29	0.17 (0.19) [0.03, 0.18]	0.21 (0.24) [0.04, 0.23]
<i>Panel C: Labor market outcomes</i>					
Participant Income Jan 2025	Participant	252	447.2	-49.6* (28.7) [-84.7, -19.4]	-61.0* (35.3) [-104.1, -23.9]
Total Income from Non-Participant Jan 2025	HH mem.	279	245.3	-33.9 (38.4) [-52.8, -28.1]	-41.8 (47.5) [-65.3, -34.7]
Migrant working hours per week	Participant	279	47.2	-9.5*** (2.3) [-12.1, -6.8]	-11.7*** (2.8) [-14.8, -8.4]
HH members' avg. weekly work hours	HH mem.	268	11.4	1.3 (1.5) [0.9, 2.2]	1.5 (1.8) [1.0, 2.6]

Notes: Survey data from the second endline (EL2). Income in USD. Non-zero values of income trimmed at 5th and 95th percentile. Column (IV) reports intent-to-treat estimates; Column (V) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table 5: Spillovers I: Wellbeing and Human Capital

	N	Control Mean	Treatment Effects	
			ITT	IV
	(I)	(II)	(III)	(IV)
<i>Panel A: Participant Mental Health (Higher score : More depressed/anxious)</i>				
PHQ score	249	1.51	-0.44 (0.37) [-0.56, -0.41]	-0.54 (0.45) [-0.69, -0.51]
GAD score	249	1.35	-0.46 (0.37) [-0.57, -0.44]	-0.56 (0.45) [-0.70, -0.54]
<i>Panel B: HH mem. Mental Health (Higher score : More depressed/anxious)</i>				
PHQ score	260	2.18	0.90** (0.42) [0.81, 0.94]	1.12** (0.53) [1.01, 1.16]
GAD score	260	2.04	0.47 (0.41) [0.36, 0.50]	0.58 (0.51) [0.45, 0.62]
<i>Panel C: Children</i>				
HH has working children	129	0.14	-0.04 (0.07) [-0.07, 0.06]	-0.05 (0.08) [-0.08, 0.08]
HH has paid working children	129	0.02	0.06 (0.04) [0.06, 0.07]	0.08 (0.05) [0.07, 0.09]
All children attending school (6-15)	129	0.93	-0.00 (0.05) [-0.07, 0.01]	-0.00 (0.06) [-0.08, 0.01]
All children attending school (15-18)	42	0.58	-0.04 (0.15) [-0.05, -0.04]	-0.06 (0.21) [-0.07, -0.06]

Notes: Survey data from the second endline (EL2). The PHQ index is scored on a 0-27 scale, where values below 5 indicate no depression, 5-9 indicate mild symptoms, 10-14 indicate moderate symptoms, 15-19 indicate moderately severe symptoms, and above 19 indicate severe depression. Similarly, the GAD index is scored on a 0-21 scale, where values below 5 indicate no anxiety, 5-9 indicate mild symptoms, 10-14 indicate moderate symptoms, and values above 14 indicate severe anxiety. We define children in the work variables as those aged 6-15. Column (III) reports intent-to-treat estimates; Column (IV) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table 6: Spillovers II: HH Relations and Engagement

	Respondent	N	Control Mean	Treatment Effects	
				ITT	IV
	(I)	(II)	(III)	(IV)	(V)
<i>Panel A: Security, victimization, and behavioral indices</i>					
Behavioral change index	HH mem.	260	1.56	0.78** (0.32) <u>[0.72, 0.81]</u>	0.97** (0.40) <u>[0.90, 1.00]</u>
Security index	HH mem.	259	3.57	-0.26 (0.29) [-0.28, -0.25]	-0.33 (0.36) [-0.35, -0.31]
Victimization index	HH mem.	260	0.22	0.08 (0.09) [0.05, 0.09]	0.10 (0.12) [0.06, 0.11]
<i>Panel B: Intra HH Dynamics</i>					
Female manages finances	HH mem.	265	0.24	-0.00 (0.05) [-0.00, 0.01]	-0.00 (0.07) [-0.00, 0.01]
Partner emotions index	Spouse	151	4.68	0.11 (0.13) <u>[-0.14, 0.15]</u>	0.13 (0.16) <u>[-0.18, 0.19]</u>
Machismo index	HH mem.	260	0.84	0.10 (0.14) [0.08, 0.11]	0.13 (0.17) [0.09, 0.14]
Machismo index	Participant	249	0.87	0.30* (0.18) [0.23, 0.32]	0.37* (0.22) [0.28, 0.40]
<i>Panel C: Politics and trust</i>					
Trust index	Participant	247	1.45	-0.24 (0.15) [-0.28, -0.21]	-0.30 (0.18) [-0.35, -0.26]
Trust US govt.?	Participant	249	0.33	0.13** (0.06) <u>[0.11, 0.13]</u>	0.15** (0.08) <u>[0.14, 0.17]</u>
Trust MX govt.?	Participant	249	0.28	0.03 (0.06) [0.02, 0.04]	0.04 (0.07) [0.02, 0.05]
Community engagement index	HH mem.	260	1.01	-0.17 (0.10) [-0.18, -0.16]	-0.21 (0.13) [-0.23, -0.19]
Efficacy index	Participant	247	2.97	0.14 (0.15) [0.10, 0.18]	0.18 (0.18) [0.12, 0.22]
Social Support index	HH mem.	260	3.00	-0.08 (0.20) [-0.10, -0.06]	-0.10 (0.25) [-0.13, -0.07]

Notes: Survey data from the second endline (EL2). The fear, security, and victimization indices are additive indices of survey questions. Higher values indicate worse outcomes, greater fear, greater insecurity, and greater victimization. The behavioral change index is scored on a 0-9 scale. Victimization index is scored on a 0-11 scale. The Machismo index is coded so that higher values indicate more machismo; the other Intra-HH dynamics measures are coded so that higher values indicate better outcomes. The Efficacy index is scored on a 0-6 scale. The Machismo, and Security indices are scored on a 0-7 scale. Trust index is an additive index of respondents beliefs on the trustworthiness of others, scored on a 0-3 scale. Community engagement on a 0-3 scale. The Social Support and Partner Emotions indices are additive and scored on a 0-5 scale. The Partner Emotions index was only administered to respondents who identified as the participant's spouse. Column (IV) reports intent-to-treat estimates; Column (V) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table 7: Household Migration

	N	Control Mean	Treatment Effects	
			ITT	IV
	(I)	(II)	(III)	(IV)
Any HH member migrated abroad	279	0.02	0.05** (0.02) <u>[0.03, 0.06]</u>	0.07** (0.03) <u>[0.04, 0.07]</u>
Any sibling migrated abroad	279	0.01	0.03 (0.02) [0.02, 0.03]	0.03 (0.02) [0.02, 0.03]
Any HH member migrated within Mexico	279	0.11	0.01 (0.04) [-0.01, 0.02]	0.02 (0.05) [-0.01, 0.02]

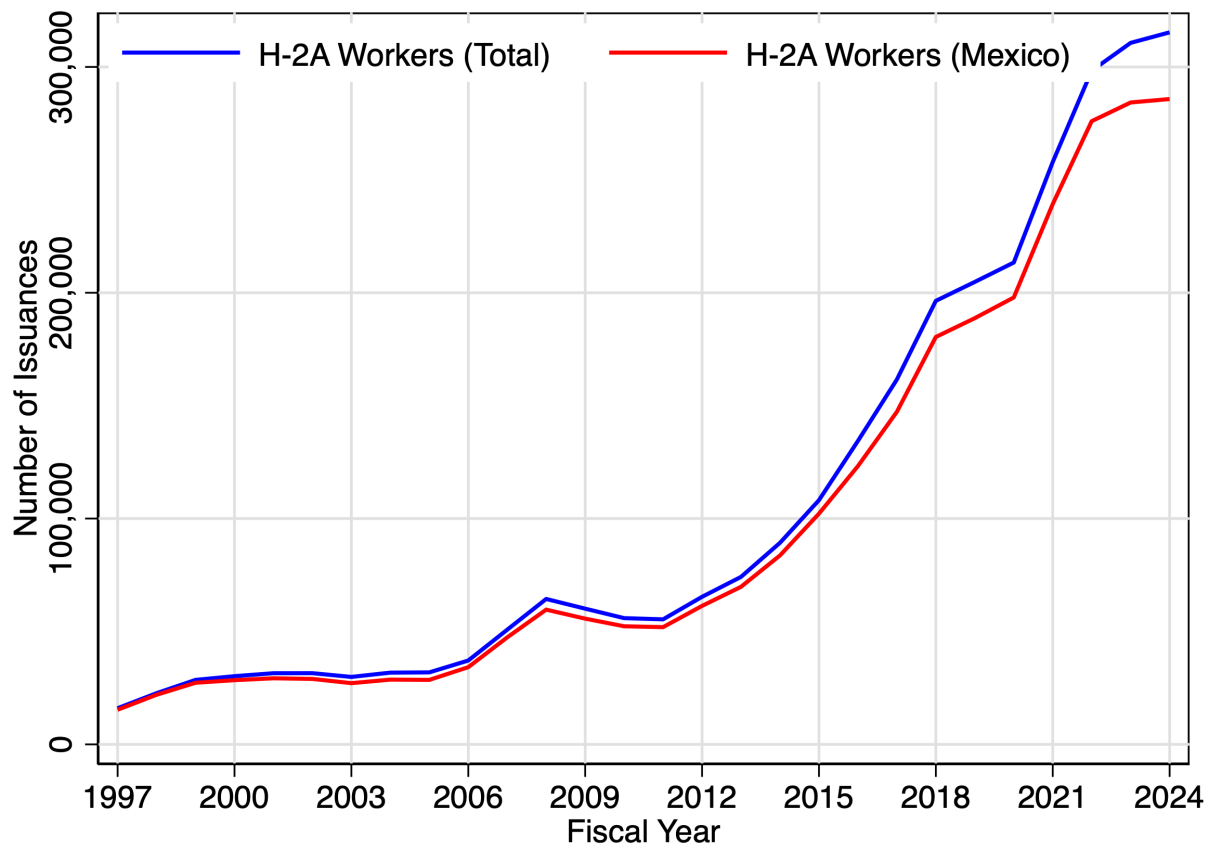
Notes: Survey data from the second endline (EL2). Admin data from our partner, REDDES. The indicator for whether the participant migrated abroad is coded as 1 if either respondent indicated that the participant migrated abroad since August 2023. Column (III) reports intent-to-treat estimates; Column (IV) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table 8: Working Conditions

	N	Control Mean	Treatment Effects	
			ITT	IV
	(I)	(II)	(III)	(IV)
<i>Panel A: Work in Sept. 2024</i>				
Avg. weekly work hours	279	52.8	-9.2*** (1.6) [-11.5, -6.7]	-11.3*** (1.9) [-14.2, -8.3]
Desired num. works hrs in Sept.	280	38.2	8.1*** (2.5) [6.1, 11.1]	10.0*** (3.1) [7.5, 13.7]
<i>Panel B: Workplace conditions</i>				
Paid late by employer?	288	0.14	-0.10*** (0.04) [-0.14, -0.10]	-0.12*** (0.04) [-0.17, -0.12]
Experienced verbal abuse?	288	0.02	0.04* (0.02) [-0.01, 0.05]	0.05* (0.03) [-0.01, 0.06]
Experienced humiliation?	288	0.04	-0.00 (0.02) [-0.03, 0.00]	-0.00 (0.03) [-0.04, 0.00]
Threatened?	288	0.00	0.03** (0.01) [0.01, 0.03]	0.04** (0.02) [0.01, 0.04]
Exposed to harmful chemicals?	288	0.41	-0.28*** (0.05) [-0.34, -0.27]	-0.35*** (0.06) [-0.42, -0.33]
<i>Panel C: Migration preferences</i>				
Pref. stay in MX vs move to US	288	0.85	0.01 (0.04) [-0.01, 0.06]	0.01 (0.05) [-0.01, 0.08]
Ideal H2A contract length, months	288	7.43	0.21 (0.25) [-0.06, 0.39]	0.25 (0.30) [-0.07, 0.47]

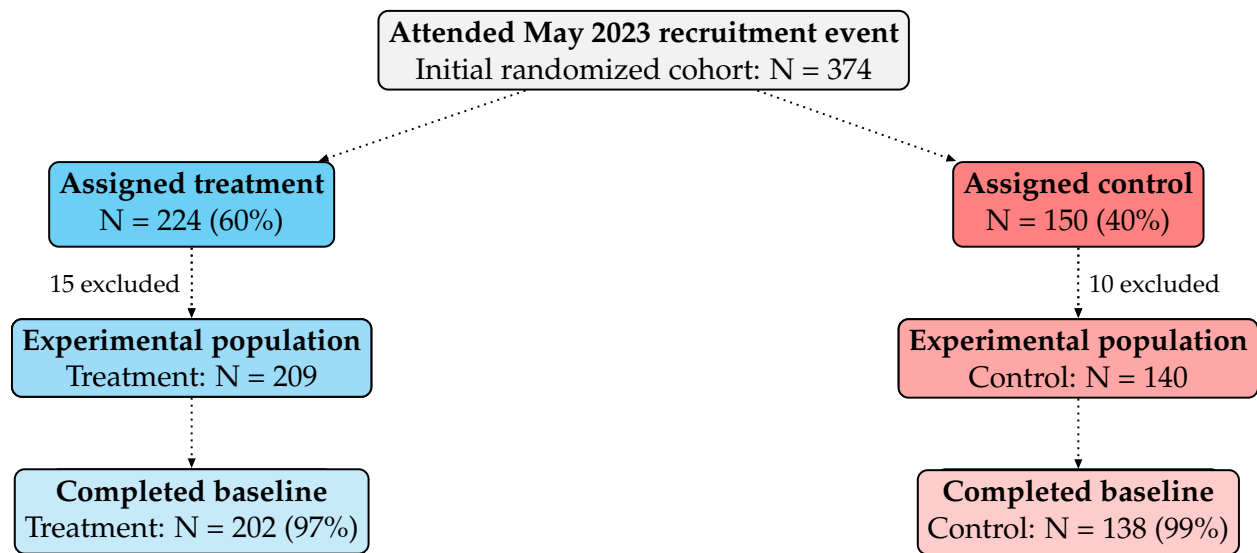
Notes: Survey data from the second endline (EL2). Column (III) reports intent-to-treat estimates; Column (IV) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Figure 1: H-2A visas over time



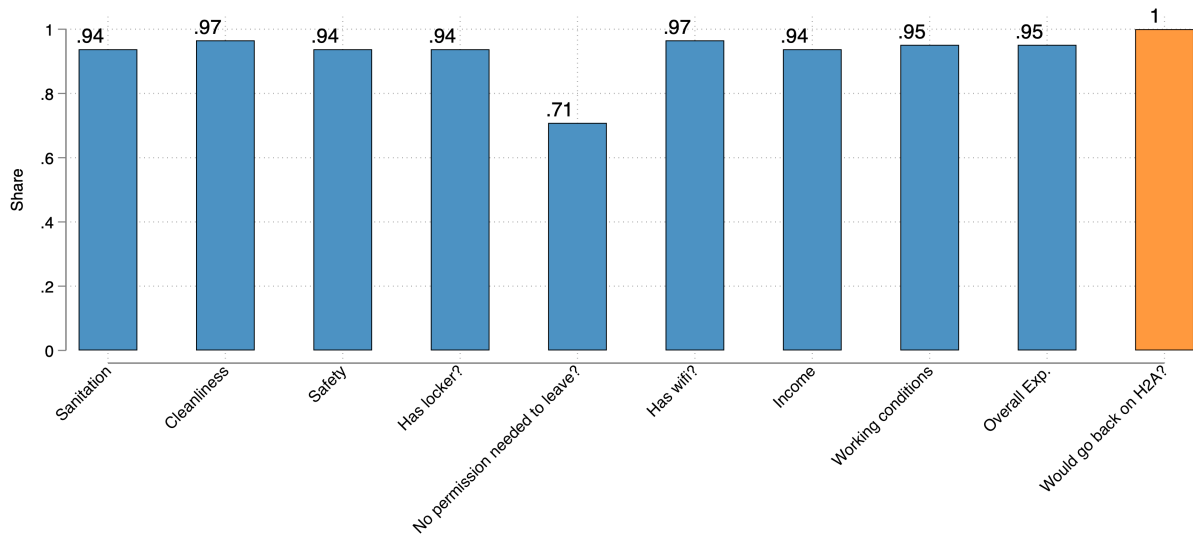
Notes: "Issuances" are nonimmigrant visas *issued* by U.S. consulates during the federal fiscal year (Oct. 1–Sep. 30); they are not DHS admissions and not counts of unique individuals. "Total" sums H-2A issuances across all nationalities; "Mexico" includes only Mexican nationals. Sources. U.S. Department of State, *Nonimmigrant Visa Statistics—NIV Detail Table* (FY1997–FY2024).

Figure 2: Randomization and experimental population ($N = 349$)



Notes: We randomized 374 applicants before REDDES completed its final eligibility and documentation checks. We exclude 15 treatment applicants (6 screened ineligible because of prior unauthorized migration and 9 who did not complete documentation) and 10 control applicants (2 screened ineligible and 8 who did not complete documentation). This leaves an experimental population of 349 participants, including 209 assigned to treatment and 140 assigned to control. All ITT and IV estimates begin with this population. Baseline completion is reported within the experimental population using the final survey-completion definition.

Figure 3: Living conditions and overall experience of H-2A workers



Notes: The figure summarizes self-reported living conditions and overall H-2A experience of those participants in who worked in the United States on an H-2A visa through our NGO partner. The first six bars describe U.S. housing and living conditions: *Sanitation*, *Cleanliness*, and *Safety* show the share who rated each dimension as good as or better than they had expected; *Has locker* and *Has wifi* report the share whose housing provided personal storage and wifi; and *No permission needed to leave* gives the share who did not need their employer's permission to leave their housing. The last four bars describe the overall experience: *Income*, *Working conditions*, and *Overall Exp.* show the share for whom each was at least as good as expected, and *Would go back on H-2A?* the share who would choose to migrate again on an H-2A visa.

Part I

Appendix

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A Additional tables

Table A1: Comparison of RCT contracts with DOL universe of H2A contracts

	(1) RCT	(2) WA/OR	(3) National
<i>Labor demand</i>			
Total workers needed	70.31	94.23	22.27
Total workers H2A requested	70.31	64.16	17.96
Total workers H2A certified	70.31	64.40	17.94
H2A labor contractor	0.00	0.07	0.16
<i>Contract terms</i>			
Contract duration	5.10	6.08	7.24
Anticipated number of hours	37.69	39.05	43.62
Wage offer	18.66	18.82	16.39
Overtime pay	1.00	1.00	1.00
<i>Job requirements</i>			
Work experience months	2.54	3.10	2.47
Training months	0.00	0.04	0.03
Certification requirements	0.00	0.06	0.09
Driver requirements	0.08	0.15	0.37
Criminal background check	0.08	0.01	0.16
Drug screen	0.08	0.33	0.51
<i>Job characteristics</i>			
Lifting requirements	1.00	1.00	0.88
Lifting amount	60.38	58.95	63.45
Exposure to temperatures	1.00	0.98	0.86
Extensive pushing pulling	1.00	0.88	0.67
Extensive sitting walking	1.00	0.91	0.80
Frequent stooping bending over	1.00	0.88	0.65
Repetitive movements	1.00	0.89	0.76
<i>Housing characteristics</i>			
Total units	4.62	7.55	3.53
Total occupancy	41.15	59.48	26.54
Housing compliant with State Workforce Agency (SWA) standards	1.00	0.94	0.90
N	13	1284	43502

Notes: Data source: H2A Disclosure Data from Department of Labor, 2023-2024. Column (1) reports characteristics of contracts included in the RCT. Column (2) reports characteristics of all contracts in WA and OR states. Column (3) reports characteristics of all contracts nationwide.

Table A2: Balance checks: administrative regional database

	Control mean	Treatment mean	ttest p value
Mig rate to US per 100,000	648.0	590.4	0.205
Homicide rate per 100,000	18.24	18.47	0.897
Age	28.53	27.51	0.215
Distance to nearest road	0.878	1.017	0.204
Distance to nearest airport with direct flights to Tijuana	65.41	67.15	0.686
Distance to nearest big municipality	7.873	8.259	0.782
Has passport already	0.753	0.812	0.170
Has started doc check	0.567	0.558	0.869
Has completed doc check	0.393	0.402	0.870
n.treat	224		
n.control	150		
n.study	374		

Notes: Table shows individual assignment to treatment and control. Randomization stratified on state_group dum_mig_strata dum_hom_strata. 60% of observations assigned to treatment, 40% of observations assigned to control.

Table A3: Balance checks for randomization

	Treatment	Control	p-value
<i>Panel A: Household demographics, housing, migration history, recruiter experience</i>			
Number of people living on the property	5.203	4.877	0.193
HH size	4.272	4.326	0.795
Share of women in household	0.441	0.471	0.191
Participant's age at BL	27.39	29.20	0.046**
Average age of members	26.80	26.73	0.894
Participant married?	0.653	0.703	0.359
Participant has children?	0.530	0.623	0.095*
Number of participant's children	0.941	1.159	0.091*
Number of children in household	1.233	1.413	0.147
Num. rooms	3.762	3.710	0.811
Home quality index	0.0623	-0.119	0.209
Piped water inside the house?	0.535	0.536	0.903
Cement or better floor?	0.975	0.964	0.532
Plastered walls?	0.748	0.674	0.143
Other member migrated to US?	0.135	0.119	0.627
Other member migrated inside Mexico?	0.0725	0.0741	0.986
Scammed by other recruiter?	0.0591	0.0234	0.061*
<i>Joint F-test p-value (Panel A, N = 306)</i>			0.105
<i>Panel B: Consumption, work, time use, income, assets, savings/debt, health, social networks, trust</i>			
HH has child in school?	0.500	0.587	0.120
Total Consumption, 1 month	542.9	505.8	0.189
Num. hours spent on work	9.124	9.289	0.595
Num. hours free time	1.478	1.191	0.151
Participant monthly income	537.7	581.3	0.169
HH per capita monthly income	234.1	227.5	0.745
Total business revenue	519.6	637.9	0.480
Asset index	5.896	5.746	0.556
Agricultural assets index (0-3)	0.560	0.721	0.055*
Total savings	202.3	202.0	0.956
Total debt	230.7	137.0	0.102
Food security index	2.048	2.085	0.659
Public health insurance?	0.258	0.242	0.661
PHQ score	1.656	1.758	0.685
GAD score	1.468	1.305	0.464
Social support index	3.005	2.898	0.632
Efficacy index	2.914	2.930	0.785
Trust index	1.403	1.406	0.778
Victimization index - Any HH member	0.604	0.331	0.009***
<i>Joint F-test p-value (Panel B, N = 208)</i>			0.105

Notes: The p-value column comes from regressions of each variable on treatment with strata fixed effects and standard errors clustered by participant. Each joint F-test regresses treatment on all variables in the panel and strata fixed effects, with standard errors clustered by participant, using the N participants with nonmissing values for every variable. Monetary values are in USD at 17.2 pesos per dollar, and nonzero values outside the 5th to 95th percentile range are set to missing. The home quality index is the first principal component of six housing characteristics. The agricultural assets index counts ownership of land, farm machinery, and farm animals. The victimization index counts, out of 11 types of aggression, those that any household member experienced in the past 12 months. * (0.10) ** (0.05) *** (0.01)

Table A4: HH member survey respondent relationship to the Participant

	Experimental Population	Married at Baseline
<i>Surveyed</i>	279	191
Spouse	58.06 % (162)	82.72 %
Mother	16.85 % (47)	2.09 %
Sister	6.09 % (17)	1.57 %
Daughter	2.51 % (7)	3.66 %
Sister-in-law	0.36 % (1)	0.00 %
Other male member	16.13 % (45)	9.95 %
<i>Not surveyed</i>	70	38
Total	349	229

Notes: The first column contains all 349 participants in the experimental population, including those whose household member did not complete the second endline survey. Data from the second endline survey. Our preferred respondent to the HH member survey is the spouse of the participant. In the cases where the spouse is not available or the participant is unmarried, we prefer the respondent to be a woman of the household above the age of 18.

Table A5: Attrition

	Wave	Control Mean	ITT
	(I)	(II)	(III)
<i>Panel A: Baseline survey</i>			
Completed survey	BL	0.99	-0.02 (0.02)
<i>Panel B: Midline survey</i>			
Completed survey	ML	0.98	-0.04* (0.02)
<i>Panel C: First endline survey</i>			
Completed participant survey	EL1	0.85	0.02 (0.04)
Completed HH member survey	EL1	0.85	0.06 (0.03)
Completed either survey	EL1	0.91	0.05* (0.03)
<i>Panel D: Second endline survey</i>			
Completed participant survey	EL2	0.80	0.08** (0.04)
Completed HH member survey	EL2	0.80	0.04 (0.04)
Completed either survey	EL2	0.83	0.07* (0.04)

Notes: Panel A covers the 349-person experimental population; Panels B to D cover the 340 participants who completed the baseline survey. Completion is observed separately for each survey. Column (III) reports intent-to-treat estimates. All specifications include strata fixed effects and cluster SEs at the individual level. SEs in parentheses. * (0.10) ** (0.05) *** (0.01)

Table A6: Comparison of RCT sample with nationally representative datasets

	All states (I)	RCT states (II)	Main RCT states (III)	RCT (IV)	Percentile (V)
<i>Panel A: ENIGH (2022) - Demographic measures</i>					
Total HH members	3.94	3.92	3.83	4.32	0.68
Total occupied HH members	2.21	2.26	2.20	2.20	0.69
Average HH age	39.61	39.63	39.86	26.77	0.30
Eligible Work hours	2.96	3.09	3.02	9.19	0.89
Eligible Free-time hours	1.28	1.13	1.18	1.36	0.73
Food Security Index (0-3)	2.20	2.16	2.19	2.06	0.54
Asset index (sum assets)	5.03	4.69	4.68	5.71	0.65
Home Quality Index (PCA)	-0.98	-1.04	-1.02	-0.12	0.72
Number of rooms in the house	3.51	3.49	3.41	3.74	0.58
Likelihood below poverty line	73.71	75.22	75.67	68.92	0.24
<i>Panel B: ENIGH (2022) - Economic measures</i>					
HH monthly income	633.04	624.77	632.73	916.20	0.82
PC monthly income	200.01	190.88	197.87	231.40	0.75
HH monthly expenditures	467.74	462.99	455.53	527.74	0.71
PC monthly expenditures	147.98	143.84	150.07	130.85	0.56
HH monthly expenditures on food	163.09	163.86	162.48	223.69	0.78
Business profits	-21.88	-24.51	-17.64	186.64	0.96
Savings	119.00	109.42	91.23	202.17	0.89
Debt	16.47	16.40	20.70	193.27	0.97
<i>Panel C: ENBIARE (2021)</i>					
Social Support Index (0-1)	0.83	0.81	0.81	0.82	0.35
Trust in Guardia Nacional	0.20	0.19	0.21	0.17	0.79
Trust in Political Parties	0.06	0.05	0.05	0.03	0.95
Trust in Congress representatives	0.09	0.09	0.09	0.04	0.91
Trust in people	0.09	0.07	0.08	0.04	0.92
<i>Panel D: ENVIPE (2023)</i>					
Security Index (0-1)	0.48	0.43	0.52	0.58	0.48
Victimization Index (self)	0.19	0.22	0.15	0.15	0.88
Victimization Index (HH)	0.10	0.09	0.07	0.04	0.93
<i>Panel E: World Values Survey, Wave 7 (2018)</i>					
Machismo index (0-1)	0.26	0.26	0.26	0.14	0.26
<i>Panel F: LAPOP (2023)</i>					
Trust in the Mexican President	0.78	0.76	0.72	0.53	0.28
Trust in the US Government	0.33	0.32	0.28	0.52	0.72

Notes: Percentile is the share of comparison households in the main RCT states whose value falls below the RCT mean. RCT states include: Guerrero, Hidalgo, Estado de México, Michoacán de Ocampo, Morelos, Oaxaca, Puebla, Tlaxcala. Main RCT states include: Michoacán de Ocampo, Oaxaca, Tlaxcala. The two ENIGH panels compare the RCT sample with agricultural households only; ENBIARE, ENVIPE, the World Values Survey, and LAPOP compare with all households, since those surveys carry no agricultural indicator. HH indicates household, PC indicates per capita, and Eligible indicates males aged 18-45. All monetary values are in USD, converting ENIGH pesos at 17.2 MXN per USD, and are trimmed at the 5th and 95th percentiles on both sides, with zeros excluded from the cutoffs and restored afterwards. Likelihood below poverty line maps each household's PPI score to a poverty probability using the official Mexico lookup table and averages those probabilities across households; lower values indicate less poverty. Food Security Index measures how food secure is a household (higher values indicate higher food security). Asset Index is the total number of assets in the HH (higher values indicate more assets). Home Quality Index is a PCA based on housing walls, floor, toilet, source of water, kitchen, and number of rooms (higher values indicate better quality). Social Support Index is the total number of social support networks the respondent has access to (higher values indicate larger networks). Security Index is the share of three situations in which the respondent reports feeling safe: their own community, the highway, and walking alone at night (higher values indicate feeling safer). ENVIPE items are reversed in cleaning so that they run in the same direction as the RCT survey items. Victimization Index, both at the individual and the HH level, count the crime types the respondent or HH reports having been a victim of (higher values indicate more crime types). All three indices are left missing when a component is unanswered rather than scoring it as a no. For the RCT column the victimization items come from the baseline instrument, where respondents report whether each crime happened to them or to a family member; the self and HH indices use those two responses respectively. ENVIPE asks whether the household suffered the crime, which includes the respondent, while the baseline instrument asks the migrant whether a family member was the victim, which excludes him and is a proxy report about other members. Machismo Index is the total number of positive answers about machismo behavior in politics, education, labor market, and interpersonal relationships (higher values indicate higher machismo). ENIGH, ENVIPE, and ENBIARE data downloaded from <https://en.inegi.org.mx/programas/>. While the former two were accessed on February 25, 2025, the latter was accessed on March 18, 2025. Wave 7 of the World Values Survey data downloaded from <https://www.worldvaluessurvey.org/wvs.jsp> on March 18, 2025. LAPOP data downloaded from <https://www.vanderbilt.edu/lapop/> on March 21, 2025.

Table A7: Geographic coverage of the H-2A universe

	DOL (I)	Consulate (II)	RCT (III)
Midwest	14.8	20.7	0.0
Northeast	5.3	5.9	0.0
Southeast	46.2	58.6	0.0
Southwest	7.1	6.7	0.0
West	26.6	8.0	100.0
Total	100.0	100.0	100.0
States reached	48	39	2
Share of H-2A universe in those states (%)	100.0	94.2	10.6

Notes: Administrative data from the Department of Labor and survey data from the consulate study. Column (I) reports the distribution of H-2A positions certified by the Department of Labor in FY2023 across worksite regions. Column (II) reports the distribution of consulate study respondents across their reported worksite regions. Column (III) reports the distribution of positions certified under the H-2A contracts in the RCT sample across contract worksite regions; all of these contracts have worksites in Washington or Oregon. Region entries report shares within each column. States reached counts the worksite states represented in each column. The last row reports the share of the FY2023 H-2A universe in those states. Alaska and Hawaii are excluded. Regions follow the Census divisions used throughout the consulate study. *Sources.* U.S. Department of Labor, *H-2A Disclosure Data* (FY2023–FY2024).

Table A8: Consulate Survey and RCT sample

	Consulate		RCT	
	N (I)	Mean (II)	N (III)	Mean (IV)
<i>Panel A: Demographics</i>				
Age	563	32.08	349	27.88
Married	561	0.73	340	0.67
Has children	563	0.71	340	0.74
Finished HS	563	0.36	340	0.40
Migrant Income (USD)	509	491.70	294	555.48
Psychological distress	563	0.05	316	0.01
<i>Panel B: H-2A background</i>				
Has travelled with H-2A before	563	0.63		
Times travelled with an H-2A	357	5.38		
Knows hourly wage	563	0.52		
<i>Panel C: Working conditions</i>				
Received pay late	357	0.04	145	0.05
Received lower pay	357	0.03		
Passport confiscated	357	0.03		
Refunded travel expenses	357	0.91	136	0.90
Prefers more hours	357	0.75	145	0.49
Received breaks	357	0.95	145	0.94
Number of breaks per day	339	1.86	137	1.55
Break length (minutes)	340	33.94	137	29.74
<i>Panel D: Workplace harassment</i>				
Verbal	357	0.06	145	0.06
Threats	357	0.02	145	0.03
Humiliation	357	0.06	145	0.05
Sexual	357	0.00	145	0.00
<i>Panel E: Living conditions</i>				
Sanitation as expected or better	357	0.98	142	0.94
Cleanliness as expected or better	357	0.98	142	0.96
Safety as expected or better	357	0.99	142	0.94
Locker for storage	357	0.85	142	0.94
Permission needed to leave	357	0.80	142	0.30
Has wifi	357	0.39	142	0.96

Notes: Survey data from the consulate study and the RCT. The consulate study surveyed Mexican H-2A visa applicants at the Monterrey consulate in 2024. Columns (I) and (II) report all consenting consulate study respondents in Panel A, and the 357 with prior H-2A experience in Panels B to E, describing their most recent previous trip. Columns (III) and (IV) draw on two RCT waves: Panel A is all baseline respondents, interviewed before migrating, which matches the timing of the consulate interview; Panels C to E are treated participants at the second endline who worked in the United States, describing the trip they had just taken. Age, marital status, children, and education are collected once at baseline. Migrant income is in USD. Non-zero values of the income are trimmed at 5th and 95th percentile. Finished HS is an indicator for completing high school or higher. Psychological distress is an indicator for a PHQ-4 score of 6 or more, moderate distress or above. The PHQ-4 questions are asked over the past two weeks and scored 0-3, giving a 0-12 scale on which higher values indicate more distress. Workplace harassment items are indicators equal to one if the respondent experienced that form of harassment at least once and zero otherwise. Sanitation, cleanliness, and safety are reported relative to what the respondent expected. The permission-needed row reports each survey's original indicator. The consulate question asked whether respondents needed permission or had to check in or out; the RCT question asked whether they needed permission.

Table A9: Migration status from administrative records

	Treatment (I)	Control (II)
<i>Panel A: Experimental population</i>		
Migrated through REDDES in 2023 and 2024	73	
Migrated through REDDES in 2023; lost 2024 contract	76	
Migrated through REDDES in 2023 only	13	
Migrated through REDDES in 2024 only	29	
Visa rejected by consulate	4	
Contract rejection, insufficient experience, failed drug test, process exit, or unavailability (pooled)	14	
Control group, no REDDES contract during 2023–24		140
Experimental population (N=349)	209	140
<i>Panel B: Excluded after randomization</i>		
Ineligible because of prior unauthorized migration	6	2
Did not complete documentation	9	8
Excluded applicants (N=25)	15	10
Initially randomized (N=374)	224	150

Notes: Panel A reports the 349-person experimental population from which all ITT and IV estimation samples are drawn. Panel B reports the 25 applicants excluded after randomization because they were ineligible due to prior unauthorized migration or did not complete documentation. REDDES administrative dispositions cover 2023 and 2024. The pooled row combines contract rejection, insufficient experience, a failed drug test, leaving the process, and unavailability. The control-group row includes the 140 experimental-population controls whom REDDES screened but did not offer contracts during this period. The four REDDES-migration rows imply 162 migrants in 2023, 102 in 2024, and 191 in either year.

Table A10: Consistency of self-reported migration against administrative records

	2023 (I)	2024 (II)	2024 (drop lost contract) (III)
Admin matches self-report	83.7	52.6	75.9
Admin mig, self-report no	4.31	5.74	9.02
Admin no-mig, self-report yes	0.48	30.1	3.76
Self-report missing	11.5	11.5	11.3
N	209	209	133

Notes: This table compares self-reported migration against administrative migration for the 209 treatment participants in the experimental population. Self-reported migration may be missing.

Table A11: Migration Status at EL2

	Treatment	Control
Not in US	34	99
in US	147	11
In US - REDDES	145	0
In US - other recruiter	1	10
In US - irregular	1	1
Survey not completed	28	30
N	209	140

Notes: The final row reports the full 349-person experimental population: 209 treatment and 140 control participants. This table reports their migration status at EL2. Status assignment combines participants' responses with administrative records. Participants are classified as not in the United States, in the United States through REDDES, in the United States through another recruiter, or in the United States through presumed irregular migration. REDDES migration is identified from contracting administrative data, while non-REDDES U.S. migrants are split by reported migration channel (H-2A through another recruiter versus non-H-2A, classified as presumed irregular). Participants who did not complete the EL2 survey are shown separately. The U.S. sub-categories are mutually exclusive and sum to the *total in U.S.* category.

Table A12: Food consumption

	N	Control Mean	Treatment Effects	
			ITT	IV
	(I)	(II)	(III)	(IV)
Expensive calorie index (0-42)	279	13.5	2.6*** (0.8) [2.2, 2.9]	3.2*** (1.0) [2.8, 3.6]
<i>Panel A: Num. days consumed</i>				
Tortillas	279	6.85	0.12* (0.07) [0.12, 0.15]	0.15* (0.09) [0.15, 0.18]
Bread	279	3.52	0.67** (0.27) [0.60, 0.77]	0.83** (0.34) [0.74, 0.95]
Potatoes	279	2.42	-0.32 (0.23) [-0.44, -0.27]	-0.40 (0.29) [-0.54, -0.33]
Fruit	279	3.65	0.24 (0.28) [0.15, 0.34]	0.30 (0.35) [0.19, 0.42]
Vegetables	279	4.15	-0.16 (0.27) [-0.24, -0.06]	-0.19 (0.33) [-0.30, -0.07]
Beef	279	1.79	0.50*** (0.18) [0.40, 0.56]	0.62*** (0.23) [0.50, 0.70]
Chicken	279	1.56	0.29* (0.16) [0.19, 0.34]	0.36* (0.20) [0.24, 0.42]
Eggs	279	3.13	0.07 (0.24) [-0.03, 0.14]	0.09 (0.29) [-0.03, 0.17]
Seafood	279	0.54	0.12 (0.12) [0.04, 0.13]	0.14 (0.15) [0.05, 0.17]
Beans	279	3.64	0.23 (0.28) [0.14, 0.32]	0.29 (0.35) [0.17, 0.40]
Dairy products	279	2.40	0.81*** (0.28) [0.72, 0.89]	1.00*** (0.35) [0.89, 1.10]

Notes: Survey data from the second endline (EL2). Number of days HH consumed food item in the past week. The expensive-calorie index is the sum of the number of days in the previous week (0–7 each) that the household consumed six relatively expensive foods — bread, fruit, beef, chicken, dairy, and fish — giving a 0–42 scale on which higher values indicate more frequent consumption of higher-cost foods. Column (III) reports intent-to-treat estimates; Column (IV) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A13: Itemized Expenditures

	N	Control Mean	Treatment Effects	
			ITT	IV
	(I)	(II)	(III)	(IV)
<i>Panel A: Frequent expenditures</i>				
Food at home	250	206.5	4.5 (13.8) [-7.9, 12.7]	5.7 (17.6) [-10.0, 16.2]
Transportation	254	27.0	-1.7 (3.9) [-2.0, -1.6]	-2.1 (4.8) [-2.5, -1.9]
Billed services	251	22.7	7.4*** (2.7) <u>[7.4, 7.5]</u>	9.4*** (3.5) <u>[9.3, 9.5]</u>
Alcohol/tobacco	275	0.53	0.75 (0.74) [-0.25, 0.79]	0.93 (0.91) [-0.30, 0.98]
<i>Panel B: Infrequent expenditures</i>				
Health	265	44.3	21.8 (14.2) [2.2, 25.4]	27.4 (17.9) [2.7, 31.8]
Education	265	66.7	9.4 (17.2) [0.3, 11.0]	11.7 (21.3) [0.4, 13.6]
Clothing	267	25.2	20.6*** (6.8) <u>[14.5, 22.8]</u>	25.7*** (8.6) <u>[18.2, 28.5]</u>
Entertainment	277	3.66	3.6 (3.0) [1.1, 3.9]	4.5 (3.7) [1.4, 4.8]
Food away from home	274	15.0	15.1*** (5.7) <u>[12.9, 15.5]</u>	18.8*** (7.1) <u>[16.0, 19.3]</u>
Vacations	279	16.6	-0.3 (13.0) [-5.5, 0.1]	-0.4 (16.1) [-6.8, 0.1]
Gifts/Christmas	259	47.4	22.8*** (7.5) <u>[22.7, 22.9]</u>	28.2*** (9.3) <u>[28.1, 28.4]</u>
Donations/charity	275	3.24	2.7 (1.8) [0.4, 2.9]	3.3 (2.2) [0.5, 3.6]

Notes: Survey data from the second endline (EL2). Frequent expenditures are measured in a one month window, infrequent in a six month window. Expenditures in USD. Non-zero values of expenditures trimmed at 5th and 95th percentile. Column (III) reports intent-to-treat estimates; Column (IV) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A14: Itemized Expenditures EL1

	Wave	N	Control Mean	Treatment Effects	
				ITT	IV
	(I)	(II)	(III)	(IV)	(V)
<i>Panel A: Frequent expenditures</i>					
Food at home	EL1	266	198.0	21.9* (12.1) [17.8, 25.0]	30.1* (16.7) [24.5, 34.4]
Transportation	EL1	279	31.2	-4.5 (4.6) [-7.9, -3.6]	-6.3 (6.4) [-11.0, -5.0]
Billed services	EL1	273	28.1	2.8 (2.7) [0.2, 4.5]	3.9 (3.8) [0.3, 6.2]
Alcohol/tobacco	EL1	295	1.11	-0.38 (0.65) [-0.95, -0.35]	-0.52 (0.90) [-1.32, -0.49]
<i>Panel B: Infrequent expenditures</i>					
Health	EL1	282	261.4	-7.8 (58.7) [-63.5, 6.0]	-10.9 (82.4) [-89.1, 8.4]
Education	EL1	280	286.7	10.5 (52.9) [-84.4, 37.0]	14.8 (74.1) [-118.3, 51.9]
Clothing	EL1	283	74.1	75.5*** (26.1) [52.6, 79.8]	104.2*** (36.2) [72.6, 110.2]
Entertainment	EL1	291	44.6	-11.3 (22.2) [-27.1, -9.7]	-15.7 (30.9) [-37.7, -13.5]
Food away from home	EL1	288	51.6	11.4 (14.1) [6.4, 12.2]	15.9 (19.6) [8.9, 17.0]
Vacations	EL1	295	8.65	-0.8 (7.8) [-7.1, -0.5]	-1.1 (10.9) [-9.8, -0.6]

Notes: Survey data from the first endline (EL1). Frequent expenditures are measured in a one month window, infrequent in a six month window. Expenditures in USD. Non-zero values of expenditures trimmed at 5th and 95th percentile. Column (IV) reports intent-to-treat estimates; Column (V) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A15: List of home improvements carried out

	Share of households (I)
Renovating kitchens, bathrooms, rooms	0.31
House painting	0.27
Additional rooms	0.27
Appliances	0.21
Facade	0.19
Fixing or installing pipes	0.19
Fixing or installing electricity	0.10
Other	0.10
Changing the floor	0.083
Security features	0.083
Additional bathrooms	0.062
Heating	0.042
N	48

Notes: Sample is households who report doing home improvements. Multiple responses allowed.

Table A16: Asset index components

	N	Control Mean	Treatment Effects	
			ITT	IV
	(I)	(II)	(III)	(IV)
Asset index	279	6.77	1.00*** (0.30) <u>[0.85, 1.13]</u>	1.24*** (0.38) <u>[1.05, 1.40]</u>
<i>Panel A: HH owns/has [...]?</i>				
a fridge	279	0.86	0.01 (0.04) <u>[0.01, 0.03]</u>	0.02 (0.05) <u>[0.01, 0.04]</u>
a washing machine	279	0.71	0.09* (0.05) <u>[0.08, 0.11]</u>	0.11* (0.07) <u>[0.10, 0.14]</u>
a microwave	279	0.34	-0.05 (0.06) <u>[-0.07, -0.04]</u>	-0.07 (0.07) <u>[-0.09, -0.05]</u>
internet	279	0.48	0.18*** (0.06) <u>[0.17, 0.19]</u>	0.22*** (0.07) <u>[0.21, 0.24]</u>
a landline	279	0.12	0.01 (0.04) <u>[-0.00, 0.02]</u>	0.02 (0.05) <u>[-0.01, 0.02]</u>
streaming service	279	0.04	0.08*** (0.03) <u>[0.06, 0.08]</u>	0.10*** (0.04) <u>[0.07, 0.10]</u>
TV service	279	0.20	0.10** (0.05) <u>[0.08, 0.11]</u>	0.12** (0.06) <u>[0.10, 0.13]</u>
a sink	279	0.44	0.06 (0.06) <u>[0.05, 0.08]</u>	0.08 (0.08) <u>[0.06, 0.09]</u>
a shower	279	0.55	0.13** (0.05) <u>[0.12, 0.15]</u>	0.16** (0.07) <u>[0.15, 0.19]</u>
<i>Panel B: Num. [...] owned</i>				
cars or trucks	279	0.42	0.19** (0.08) <u>[0.16, 0.21]</u>	0.24** (0.10) <u>[0.20, 0.26]</u>
motorbikes	278	0.36	0.14* (0.08) <u>[0.10, 0.15]</u>	0.17* (0.10) <u>[0.13, 0.18]</u>
cycles	278	0.47	-0.13 (0.11) <u>[-0.16, -0.12]</u>	-0.16 (0.13) <u>[-0.20, -0.15]</u>
TVs	279	1.15	0.09 (0.09) <u>[0.04, 0.11]</u>	0.11 (0.11) <u>[0.05, 0.14]</u>
computers	278	0.18	0.01 (0.06) <u>[-0.02, 0.01]</u>	0.01 (0.07) <u>[-0.02, 0.02]</u>
mobile phones	279	2.86	0.22 (0.16) <u>[0.15, 0.27]</u>	0.27 (0.20) <u>[0.18, 0.34]</u>
videogame consoles	279	0.12	-0.05 (0.06) <u>[-0.07, -0.04]</u>	-0.06 (0.08) <u>[-0.08, -0.05]</u>
tablets	278	0.04	0.13*** (0.04) <u>[0.10, 0.13]</u>	0.16*** (0.05) <u>[0.12, 0.17]</u>

Notes: Survey data from the second endline (EL2). The asset index is the sum of 17 indicators for whether the household owns each asset or has each service. For questions that record the number owned, the indicator equals one if the household owns at least one. The index ranges from 0 to 17. Missing components are treated as zero unless all 17 components are missing, in which case the index is missing. Column (III) reports intent-to-treat estimates; Column (IV) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A17: Fear index components

	Respondent	N	Control Mean	Treatment Effects	
				ITT	IV
	(I)	(II)	(III)	(IV)	(V)
Behavioral change index	HH mem.	260	1.56	0.78** (0.32) <u>[0.72, 0.81]</u>	0.97** (0.40) <u>[0.90, 1.00]</u>
<i>Panel A: Have you stopped the following out of fear or insecurity?</i>					
walk on streets	HH mem.	260	0.12	0.10** (0.05) <u>[0.09, 0.10]</u>	0.12** (0.06) <u>[0.12, 0.13]</u>
walk the streets at night	HH mem.	260	0.31	0.11* (0.06) <u>[0.10, 0.11]</u>	0.14* (0.08) <u>[0.13, 0.14]</u>
take public transport	HH mem.	260	0.20	0.07 (0.05) <u>[0.07, 0.08]</u>	0.09 (0.07) <u>[0.08, 0.10]</u>
use roads	HH mem.	260	0.20	0.09* (0.05) <u>[0.08, 0.10]</u>	0.11* (0.07) <u>[0.11, 0.12]</u>
go to bank/atm	HH mem.	260	0.17	0.15*** (0.05) <u>[0.14, 0.15]</u>	0.19*** (0.07) <u>[0.18, 0.19]</u>
go to the market	HH mem.	260	0.11	0.14*** (0.05) <u>[0.13, 0.14]</u>	0.17*** (0.06) <u>[0.16, 0.17]</u>
attend parties	HH mem.	260	0.21	0.03 (0.05) <u>[0.02, 0.03]</u>	0.04 (0.07) <u>[0.03, 0.04]</u>
interact with neighbors	HH mem.	260	0.13	0.02 (0.04) <u>[0.01, 0.02]</u>	0.03 (0.06) <u>[0.02, 0.03]</u>
interact with authorities	HH mem.	260	0.12	0.07 (0.04) <u>[0.06, 0.07]</u>	0.09 (0.06) <u>[0.08, 0.09]</u>

Notes: Survey data from the second endline (EL2). The behavioral change index is an additive index of the outcomes listed under panel A, scored on a scale of 0-9. Column (IV) reports intent-to-treat estimates; Column (V) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A18: Victimization index components

	Respondent	N	Control Mean	Treatment Effects	
				ITT	IV
	(I)	(II)	(III)	(IV)	(V)
Victimization Index	HH mem.	260	0.22	0.08 (0.09) [0.05, 0.09]	0.10 (0.12) [0.06, 0.11]
<i>Panel A: Have you or a family member experienced the following?</i>					
assault on street	HH mem.	259	0.04	0.02 (0.03) [0.00, 0.02]	0.02 (0.03) [0.00, 0.02]
robbery at home	HH mem.	260	0.02	-0.00 (0.02) [-0.01, -0.00]	-0.01 (0.02) [-0.01, -0.01]
assault on road	HH mem.	257	0.03	0.02 (0.02) [0.02, 0.02]	0.02 (0.03) [0.02, 0.03]
physical assault	HH mem.	259	0.02	0.00 (0.02) [0.00, 0.00]	0.00 (0.02) [0.00, 0.00]
gunshot	HH mem.	260	0.01	0.00 (0.01) [-0.00, 0.00]	0.00 (0.01) [-0.00, 0.00]
extortion	HH mem.	259	0.03	0.04 (0.03) [0.02, 0.04]	0.04 (0.03) [0.02, 0.05]
fraud	HH mem.	257	0.04	0.00 (0.02) [-0.00, 0.00]	0.00 (0.03) [-0.00, 0.00]
theft of vehicle	HH mem.	259	0.03	0.00 (0.02) [-0.01, 0.00]	0.00 (0.03) [-0.01, 0.00]
robbery at atm	HH mem.	260	0.02	-0.01 (0.02) [-0.01, -0.01]	-0.01 (0.02) [-0.01, -0.01]
threats from gangs	HH mem.	259	0.02	0.02 (0.02) [0.01, 0.02]	0.03 (0.03) [0.01, 0.03]
<i>Panel B: Have you or your family member [...]?</i>					
paid bribes to police	HH mem.	260	0.02	0.02 (0.02) [0.01, 0.02]	0.02 (0.03) [0.02, 0.02]
paid bribes to other authorities	HH mem.	260	0.01	-0.00 (0.01) [-0.00, -0.00]	-0.00 (0.02) [-0.01, -0.00]

Notes: Survey data from the second endline (EL2). The Victimization index is an additive index of the outcomes listed under panels A and B, scored on a scale of 0-11. Column (IV) reports intent-to-treat estimates; Column (V) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A19: Machismo index components - Participant

	Wave	N	Control Mean	Treatment Effects	
				ITT	IV
	(I)	(II)	(III)	(IV)	(V)
Machismo index	EL2	249	0.87	0.30* (0.18) [0.23, 0.32]	0.37* (0.22) [0.28, 0.40]
<i>Panel A: Do you agree that [...]?</i>					
men are better political leaders	EL2	249	0.14	0.03 (0.05) [0.01, 0.03]	0.03 (0.06) [0.02, 0.04]
men are entitled to higher edu	EL2	249	0.08	0.02 (0.04) [0.00, 0.02]	0.02 (0.05) [0.00, 0.03]
men are entitled to jobs	EL2	249	0.13	0.01 (0.05) [-0.01, 0.01]	0.01 (0.06) [-0.01, 0.02]
wives should earn less	EL2	249	0.18	0.01 (0.05) [-0.01, 0.01]	0.01 (0.06) [-0.01, 0.01]
men should set rules for women	EL2	249	0.10	0.17*** (0.05) <u>[0.16, 0.18]</u>	0.21*** (0.06) <u>[0.20, 0.22]</u>
men are allowed to hit women	EL2	249	0.01	-0.01 (0.01) [-0.01, -0.01]	-0.01 (0.01) [-0.01, -0.01]
would not have a gay friend	EL2	249	0.21	0.08 (0.05) [0.06, 0.08]	0.09 (0.07) [0.08, 0.10]

Notes: Survey data from the second endline (EL2). The machismo index is an additive index of the outcomes listed under panel A, scored on a scale of 0-7. Column (IV) reports intent-to-treat estimates; Column (V) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A20: Machismo index components - HH member

	Wave	N	Control Mean	Treatment Effects	
				ITT	IV
	(I)	(II)	(III)	(IV)	(V)
<i>Panel A: Midline</i>					
Machismo index	ML	312	1.40	-0.13 (0.17) [-0.26, 0.13]	-0.18 (0.23) [-0.35, 0.18]
<i>Panel B: Do you agree that [...]?</i>					
men are better political leaders	ML	312	0.30	-0.08 (0.05) [-0.10, -0.01]	-0.11 (0.07) [-0.14, -0.02]
men are entitled to higher edu	ML	312	0.12	-0.02 (0.04) [-0.03, 0.05]	-0.02 (0.05) [-0.04, 0.06]
men are entitled to jobs	ML	312	0.20	-0.04 (0.05) [-0.06, 0.03]	-0.05 (0.06) [-0.08, 0.05]
wives should earn less	ML	312	0.39	-0.00 (0.06) [-0.04, 0.05]	-0.00 (0.08) [-0.05, 0.06]
men should set rules for women	ML	312	0.18	-0.06 (0.04) [-0.08, 0.01]	-0.08 (0.06) [-0.10, 0.01]
men are allowed to hit women	ML	312	0.01	-0.00 (0.01) [-0.00, 0.01]	-0.00 (0.01) [-0.00, 0.01]
would not have a gay friend	ML	312	0.20	0.06 (0.05) [0.04, <u>0.13</u>]	0.08 (0.07) [0.06, <u>0.18</u>]
<i>Panel C: Endline II</i>					
Machismo index	EL2	260	0.84	0.10 (0.14) [0.08, 0.11]	0.13 (0.17) [0.09, 0.14]
<i>Panel D: Do you agree that [...]?</i>					
men are better political leaders	EL2	260	0.09	0.00 (0.03) [-0.00, 0.00]	0.00 (0.04) [-0.01, 0.00]
men are entitled to higher edu	EL2	260	0.07	0.01 (0.03) [0.01, 0.01]	0.02 (0.04) [0.01, 0.02]
men are entitled to jobs	EL2	260	0.12	-0.02 (0.04) [-0.03, -0.02]	-0.02 (0.05) [-0.03, -0.02]
wives should earn less	EL2	260	0.25	0.04 (0.06) [0.03, 0.04]	0.05 (0.07) [0.04, 0.05]
men should set rules for women	EL2	260	0.16	-0.04 (0.04) [-0.05, -0.04]	-0.05 (0.06) [-0.06, -0.05]
men are allowed to hit women	EL2	260	0.01	0.01 (0.02) [0.01, 0.01]	0.02 (0.02) [0.02, 0.02]
would not have a gay friend	EL2	260	0.16	0.09* (0.05) [0.08, 0.09]	0.11* (0.06) [0.10, 0.12]

Notes: Survey data from the midline (ML) and second endline (EL2). The machismo index is an additive index of the outcomes listed under panels B and D, scored on a scale of 0-7. Column (IV) reports intent-to-treat estimates; Column (V) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A21: Household non-participant migration by participant migration timing

	Survey wave	
	Endline 1	Endline 2
<i>Treatment, by REDDES migration status:</i>		
First migrated in 2023	9.7%	8.8%
First migrated in 2024	12.0%	4.2%
Did not migrate via REDDES	0.0%	0.0%
Control	3.4%	1.8%

Notes: EL1 reports the share of households with at least one non-participant member who lived outside the home for more than one week and whose destination was outside Mexico between August 1, 2023 and the EL1 interview. EL2 reports the same outcome between January 1, 2024 and the EL2 interview. Treatment-assigned participants are grouped by the year they first migrated through our implementing partner, REDDES, using its administrative records. Shares are computed among households surveyed in each wave.

Table A22: 2024 H2A trip: Implied and reported hourly wages

	All (I)	OT (II)	No OT (III)
Implied hourly wage	18.1	16.9	18.5
Reported hourly wage	19.3	19.4	19.3
Calculated average hourly wage	19.81	21.25	19.25
N	130	35	95

Notes: The sample includes treatment-group participants who reported migrating to the US on an H-2A visa in 2024 and working in Washington or Oregon. Column (I), All, includes the full sample. Column (II), OT, includes workers whose reported usual weekly hours exceed the 2024 overtime threshold in the state where they worked: 40 hours in Washington and 55 hours in Oregon. Column (III), No OT, includes workers whose reported usual weekly hours are at or below the applicable threshold. Implied hourly wage equals usual weekly earnings divided by usual weekly hours. Reported hourly wage is the hourly rate reported directly by the worker. Calculated average hourly wage is the worker-specific AEWR benchmark, using the 2024 AEWR of USD 19.25 and valuing hours above the applicable threshold at 1.5 times the AEWR. Implied and reported hourly wages are trimmed at the 5th and 95th percentiles. Workers reporting 100 or more hours per week are excluded.

B Additional figures

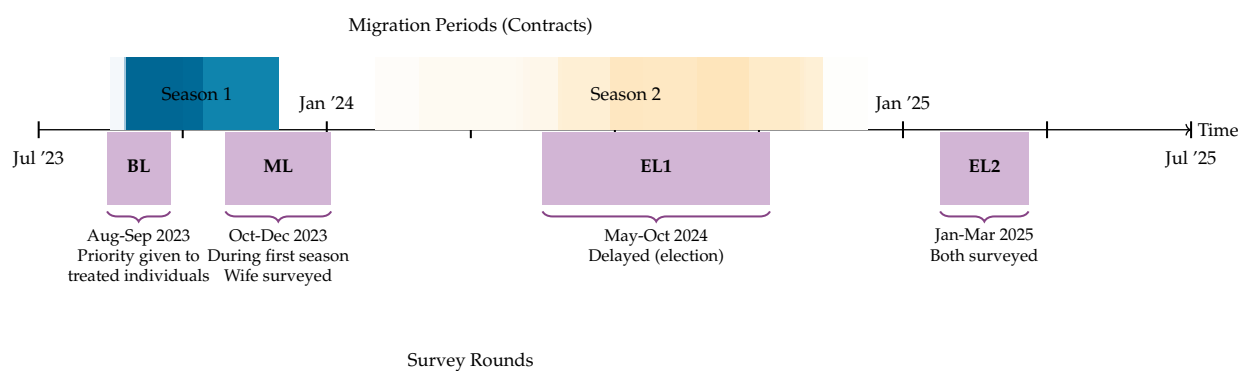
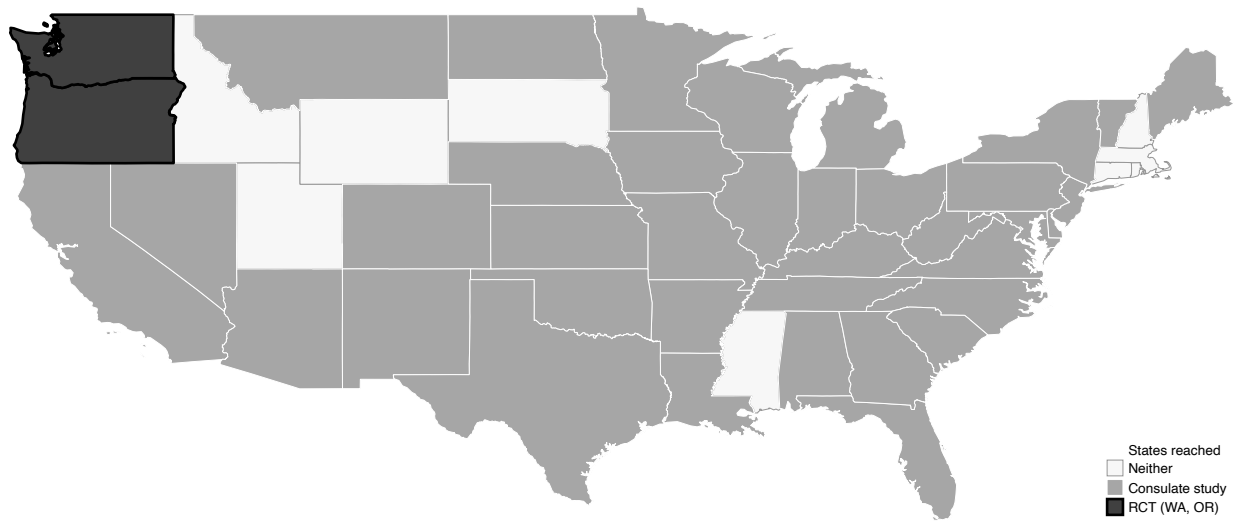


Figure A1: Timeline of migration periods and survey rounds

Figure A2: States coverage of the H-2A universe



Notes: The map shows the U.S. states each design reaches. *RCT* recruits go to either Washington or Oregon. The *consulate study* respondents reached 37 further states; Washington and Oregon included. *Neither* are the remaining 9 states. Together the 39 states the consulate study reaches hold 94.2% of the H-2A positions certified by the Department of Labor in FY2023, against 10.6% for the two RCT states. Alaska and Hawaii are excluded. *Sources.* U.S. Department of Labor, *H-2A Disclosure Data* (FY2023).

C Tables with PDS controls

In this section, we present tables estimated by PDS lasso allowing for controls.

Table A23: Migration Outcomes (PDS-Lasso controls)

	Respondent	N	Control Mean	Treatment Effects	
				ITT	IV
	(I)	(II)	(III)	(IV)	(V)
NGO contract 2023 or 2024?	Admin	349	0.00	0.92*** (0.02) <u>[0.92, 0.92]</u>	
Participant migrated abroad?	Both respondents	296	0.11	0.80*** (0.03) <u>[0.79, 0.84]</u>	
Number of weeks in US since Aug 1 2023	Participant	288	2.35	33.12*** (1.86) <u>[29.50, 35.48]</u>	40.69*** (2.16) <u>[36.24, 43.59]</u>
Number of weeks in US in 2024	Participant	288	2.35	22.33*** (1.48) <u>[19.79, 24.15]</u>	27.43*** (1.59) <u>[24.31, 29.66]</u>

Notes: Survey data from the second endline (EL2). Admin data from our partner, REDDES. The indicator for whether the participant migrated abroad is coded as 1 if either respondent indicated that the participant migrated abroad since August 2023. As a robustness check, we select controls from a fixed set of baseline covariates using post-double-selection Lasso (Belloni et al. 2014). We always include the randomization strata and use the default plug-in penalty. Missing values are set to zero, and missingness indicators enter the selection step. Column (IV) reports intent-to-treat estimates; Column (V) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. The bounds are estimated on the same specification as the point estimate they bracket, holding the selected controls fixed across both trimmed samples. * (0.10) ** (0.05) *** (0.01)

Table A24: Remittances and Income in 2024 (PDS-Lasso controls)

	N	Control Mean	Treatment Effects	
			ITT	IV
	(I)	(II)	(III)	(IV)
<i>Panel A: Participant income</i>				
Monthly income Sept. 2024	253	648.3	1706.6*** (119.5) [1595.5, 1901.8]	2056.4*** (106.8) [1922.5, 2291.6]
Total income US trip 2024	271	950.7	13806.0*** (938.6) [13385.6, 14163.4]	16599.7*** (1003.7) [16094.3, 17029.6]
Monthly income from US work	271	189.7	1973.3*** (129.9) [1917.7, 2026.1]	2372.6*** (126.4) [2305.8, 2436.1]
<i>Panel B: Remittances (Participant report)</i>				
Remittances US trip 2024	268	972.7	6474.2*** (730.1) [6437.1, 6890.9]	7995.0*** (805.1) [7949.2, 8509.6]
Money brought back US trip 2024	269	103.9	3234.2*** (439.6) [3234.1, 3235.0]	3948.1*** (545.3) [3947.9, 3949.0]
<i>Panel C: Remittances (HH mem. report)</i>				
Remittances 2024	218	520.1	3026.1*** (313.0) [2724.3, 3184.5]	3620.2*** (365.5) [3259.1, 3809.6]
Money brought back 2024	260	321.7	1631.8*** (222.9) [1507.4, 1670.2]	1977.2*** (263.6) [1826.4, 2023.8]
Non-participant yearly income 2024	221	3661.1	120.3 (403.1) [-59.5, 415.1]	144.7 (485.2) [-71.5, 499.1]

Notes: Survey data from the second endline (EL2). Income and remittances in USD. Non-zero values of income and remittances trimmed at 5th and 95th percentile. As a robustness check, we select controls from a fixed set of baseline covariates using post-double-selection Lasso (Belloni et al. 2014). We always include the randomization strata and use the default plug-in penalty. Missing values are set to zero, and missingness indicators enter the selection step. Column (III) reports intent-to-treat estimates; Column (IV) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. The bounds are estimated on the same specification as the point estimate they bracket, holding the selected controls fixed across both trimmed samples. * (0.10) ** (0.05) *** (0.01)

Table A25: Household Economic Outcomes (PDS-Lasso controls)

	N	Control Mean	Treatment Effects	
			ITT	IV
	(I)	(II)	(III)	(IV)
<i>Panel A: Poverty indices</i>				
Food Security index	279	2.47	0.30*** (0.09) [0.30, 0.32]	0.37*** (0.11) [0.36, 0.39]
Likelihood below poverty line	279	71.3	-6.5*** (2.1) [-7.0, -5.6]	-7.9*** (2.6) [-8.6, -6.8]
<i>Panel B: Expenditures</i>				
Frequent exp., 1 month	252	251.0	1.2 (16.2) [0.9, 1.5]	1.6 (20.5) [1.1, 1.9]
Expensive calorie index	279	13.5	2.6*** (0.7) [2.3, 2.8]	3.1*** (0.9) [2.8, 3.5]
Infrequent exp., 6 months	256	214.0	112.4*** (33.0) [75.8, 132.6]	136.0*** (40.0) [91.7, 160.4]
Exp. on home improvements	266	53.5	219.5*** (72.2) [215.3, 220.0]	265.7*** (88.4) [260.6, 266.2]
<i>Panel C: Assets and Finances</i>				
Asset index	279	6.77	1.00*** (0.26) [0.90, 1.11]	1.22*** (0.32) [1.09, 1.36]
Has savings?	278	0.42	0.09 (0.06) [0.08, 0.11]	0.12 (0.08) [0.10, 0.13]
Total savings	254	225.1	255.8*** (88.3) [253.3, 272.9]	311.4*** (107.1) [308.4, 332.2]
Savings buffer: Over 1 month	271	0.32	0.24*** (0.06) [0.24, 0.25]	0.30*** (0.07) [0.29, 0.30]
Has debt?	279	0.25	-0.10* (0.05) [-0.12, -0.09]	-0.12* (0.06) [-0.15, -0.11]
Total debt	274	238.4	-108.2 (88.2) [-161.5, -99.8]	-132.0 (107.4) [-197.2, -121.8]
<i>Panel D: Financial Inclusion</i>				
Has a bank account	279	0.39	0.17*** (0.06) [0.16, 0.19]	0.21*** (0.07) [0.19, 0.23]

Notes: Survey data from the second endline (EL2). Expenditures, savings, and debt in USD. Non-zero values of expenditures, savings, and debt trimmed at 5th and 95th percentile. The food security index is an additive index of survey questions for which a higher score indicates more food security. The expensive-calorie index sums the number of days in the previous week the household consumed six relatively expensive foods. The asset index is the sum of 17 indicators for whether the household owns each asset or has each service. For questions that record the number owned, the indicator equals one if the household owns at least one. The index ranges from 0 to 17. We calculate the PPI score for each household and use Mexico's 2018 reference numbers to estimate the likelihood of falling below the national poverty line. As a robustness check, we select controls from a fixed set of baseline covariates using post-double-selection Lasso (Belloni et al. 2014). We always include the randomization strata and use the default plug-in penalty. Missing values are set to zero, and missingness indicators enter the selection step. Column (III) reports intent-to-treat estimates; Column (IV) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. The bounds are estimated on the same specification as the point estimate they bracket, holding the selected controls fixed across both trimmed samples. * (0.10) ** (0.05) *** (0.01)

Table A26: Post-Migration Productive Capacity (PDS-Lasso controls)

	Respondent	N	Control Mean	Treatment Effects	
				ITT	IV
	(I)	(II)	(III)	(IV)	(V)
<i>Panel A: Business</i>					
HH has business?	HH mem.	274	0.12	0.04 (0.04) [0.02, 0.05]	0.05 (0.05) [0.03, 0.06]
Has agricultural business?	HH mem.	274	0.01	0.00 (0.01) [-0.00, 0.00]	0.00 (0.02) [-0.01, 0.00]
Has non-agricultural business?	HH mem.	274	0.11	0.04 (0.04) [0.02, 0.04]	0.05 (0.05) [0.02, 0.05]
Business Revenue	HH mem.	262	142.3	161.9 (112.3) [160.1, 184.8]	200.8 (139.8) [198.5, 229.1]
Business profits	HH mem.	258	-29.5	-880.7 (1012.4) [-884.6, -879.3]	-1075.0 (1235.0) [-1079.8, -1073.4]
Business costs	HH mem.	264	163.2	1045.7 (1035.4) [1045.5, 1049.0]	1268.9 (1255.7) [1268.5, 1272.8]
Has future investment plans	Participant	288	0.77	0.12** (0.05) [0.11, 0.17]	0.15** (0.06) [0.14, 0.20]
<i>Panel B: Farm assets</i>					
Has farm machines?	HH mem.	279	0.05	-0.01 (0.03) [-0.02, -0.01]	-0.01 (0.03) [-0.03, -0.01]
Number of farm machines	HH mem.	279	0.06	-0.02 (0.03) [-0.03, -0.02]	-0.02 (0.04) [-0.04, -0.02]
Has farm animals?	HH mem.	279	0.17	0.07 (0.05) [0.05, 0.08]	0.09 (0.06) [0.06, 0.09]
Number of farm animals	HH mem.	279	2.16	1.45 (0.89) [0.91, 1.55]	1.78 (1.08) [1.11, 1.91]
Has agricultural land?	HH mem.	279	0.17	-0.01 (0.05) [-0.02, -0.00]	-0.01 (0.06) [-0.03, -0.00]
Number of agricultural plots	HH mem.	275	0.29	0.15 (0.20) [0.02, 0.17]	0.18 (0.25) [0.02, 0.20]
<i>Panel C: Labor market outcomes</i>					
Participant Income Jan 2025	Participant	252	447.2	-43.3 (29.2) [-77.4, -11.7]	-52.9 (35.8) [-94.7, -14.3]
Total Income from Non-Participant Jan 2025	HH mem.	279	245.3	-29.2 (38.6) [-47.5, -23.5]	-35.8 (47.4) [-58.4, -28.9]
Migrant working hours per week	Participant	279	47.2	-9.0*** (2.4) [-11.9, -6.4]	-11.0*** (3.0) [-14.5, -7.8]
HH members' avg. weekly work hours	HH mem.	268	11.4	0.7 (1.5) [0.4, 1.6]	0.9 (1.8) [0.4, 1.9]

Notes: Survey data from the second endline (EL2). Income in USD. Non-zero values of income trimmed at 5th and 95th percentile. As a robustness check, we select controls from a fixed set of baseline covariates using post-double-selection Lasso (Belloni et al. 2014). We always include the randomization strata and use the default plug-in penalty. Missing values are set to zero, and missingness indicators enter the selection step. Column (IV) reports intent-to-treat estimates; Column (V) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. The bounds are estimated on the same specification as the point estimate they bracket, holding the selected controls fixed across both trimmed samples. * (0.10) ** (0.05) *** (0.01)

Table A27: Spillovers I: Wellbeing and Human Capital (PDS-Lasso controls)

	N	Control Mean	Treatment Effects	
			ITT	IV
	(I)	(II)	(III)	(IV)
<i>Panel A: Participant Mental Health (Higher score : More depressed/anxious)</i>				
PHQ score	249	1.51	-0.44 (0.34) [-0.55, -0.43]	-0.55 (0.41) [-0.68, -0.52]
GAD score	249	1.35	-0.47 (0.30) [-0.58, -0.46]	-0.58 (0.37) [-0.72, -0.57]
<i>Panel B: HH mem. Mental Health (Higher score : More depressed/anxious)</i>				
PHQ score	260	2.18	0.80* (0.43) [0.73, 0.83]	0.99* (0.53) [0.90, 1.03]
GAD score	260	2.04	0.27 (0.41) [0.20, 0.30]	0.34 (0.50) [0.24, 0.37]
<i>Panel C: Children</i>				
HH has working children	129	0.14	-0.05 (0.07) [-0.07, 0.06]	-0.06 (0.08) [-0.09, 0.07]
HH has paid working children	129	0.02	0.05 (0.04) [0.05, 0.07]	0.07 (0.05) [0.06, 0.08]
All children attending school (6-15)	129	0.93	-0.01 (0.05) [-0.07, 0.01]	-0.01 (0.06) [-0.09, 0.01]
All children attending school (15-18)	42	0.58	-0.08 (0.16) [-0.08, -0.07]	-0.11 (0.22) [-0.12, -0.10]

Notes: Survey data from the second endline (EL2). The PHQ index is scored on a 0-27 scale and the GAD index on a 0-21 scale, with higher values indicating more severe symptoms. We define children in the work variables as those aged 6-15. As a robustness check, we select controls from a fixed set of baseline covariates using post-double-selection Lasso (Belloni et al. 2014). We always include the randomization strata and use the default plug-in penalty. Missing values are set to zero, and missingness indicators enter the selection step. Column (III) reports intent-to-treat estimates; Column (IV) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. The bounds are estimated on the same specification as the point estimate they bracket, holding the selected controls fixed across both trimmed samples. * (0.10) ** (0.05) *** (0.01)

Table A28: Spillovers II: HH Relations and Engagement (PDS-Lasso controls)

	Respondent	N	Control Mean	Treatment Effects	
				ITT	IV
	(I)	(II)	(III)	(IV)	(V)
<i>Panel A: Security, victimization, and behavioral indices</i>					
Behavioral change index	HH mem.	260	1.56	0.83** (0.32) <u>[0.77, 0.86]</u>	1.03** (0.41) <u>[0.95, 1.06]</u>
Security index	HH mem.	259	3.57	-0.17 (0.30) [-0.18, -0.15]	-0.20 (0.37) [-0.22, -0.19]
Victimization index	HH mem.	260	0.22	0.08 (0.10) [0.05, 0.08]	0.10 (0.12) [0.06, 0.10]
<i>Panel B: Intra HH Dynamics</i>					
Female manages finances	HH mem.	265	0.24	0.01 (0.06) [0.01, 0.02]	0.02 (0.07) [0.01, 0.02]
Partner emotions index	Spouse	151	4.68	0.12 (0.14) <u>[-0.14, 0.17]</u>	0.15 (0.17) <u>[-0.18, 0.22]</u>
Machismo index	HH mem.	260	0.84	0.14 (0.14) [0.12, 0.15]	0.18 (0.17) [0.14, 0.19]
Machismo index	Participant	249	0.87	0.32* (0.18) [0.25, 0.35]	0.40* (0.22) [0.31, 0.43]
<i>Panel C: Politics and trust</i>					
Trust index	Participant	247	1.45	-0.26* (0.15) <u>[-0.30, -0.23]</u>	-0.32* (0.18) <u>[-0.37, -0.28]</u>
Trust US govt.?	Participant	249	0.33	0.11* (0.06) [0.10, 0.12]	0.13* (0.08) [0.12, 0.14]
Trust MX govt.?	Participant	249	0.28	0.05 (0.06) [0.04, 0.06]	0.06 (0.07) [0.05, 0.07]
Community engagement index	HH mem.	260	1.01	-0.17 (0.11) [-0.19, -0.16]	-0.21 (0.13) [-0.23, -0.20]
Efficacy index	Participant	247	2.97	0.15 (0.15) [0.11, 0.19]	0.19 (0.19) [0.13, 0.24]
Social Support index	HH mem.	260	3.00	-0.06 (0.20) [-0.08, -0.03]	-0.07 (0.25) [-0.09, -0.04]

Notes: Survey data from the second endline (EL2). The security and victimization indices are additive; higher values indicate worse outcomes. The Machismo index is coded so that higher values indicate more machismo; the other Intra-HH dynamics measures are coded so that higher values indicate better outcomes. As a robustness check, we select controls from a fixed set of baseline covariates using post-double-selection Lasso (Belloni et al. 2014). We always include the randomization strata and use the default plug-in penalty. Missing values are set to zero, and missingness indicators enter the selection step. Column (IV) reports intent-to-treat estimates; Column (V) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. The bounds are estimated on the same specification as the point estimate they bracket, holding the selected controls fixed across both trimmed samples. * (0.10) ** (0.05) *** (0.01)

Table A29: Household Migration (PDS-Lasso controls)

	N	Control Mean	Treatment Effects	
			ITT	IV
	(I)	(II)	(III)	(IV)
Any HH member migrated abroad	279	0.02	0.06** (0.02) [0.03, 0.06]	0.07** (0.03) [0.04, 0.07]
Any sibling migrated abroad	279	0.01	0.03 (0.02) [0.02, 0.03]	0.04 (0.02) [0.02, 0.04]
Any HH member migrated within Mexico	279	0.11	0.01 (0.04) [-0.02, 0.01]	0.01 (0.05) [-0.02, 0.01]

Notes: Survey data from the second endline (EL2). Admin data from our partner, REDDES. The indicator for whether the participant migrated abroad is coded as 1 if either respondent indicated that the participant migrated abroad since August 2023. As a robustness check, we select controls from a fixed set of baseline covariates using post-double-selection Lasso (Belloni et al. 2014). We always include the randomization strata and use the default plug-in penalty. Missing values are set to zero, and missingness indicators enter the selection step. Column (III) reports intent-to-treat estimates; Column (IV) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. The bounds are estimated on the same specification as the point estimate they bracket, holding the selected controls fixed across both trimmed samples. * (0.10) ** (0.05) *** (0.01)

Table A30: Working Conditions (PDS-Lasso controls)

	N	Control Mean	Treatment Effects	
			ITT	IV
	(I)	(II)	(III)	(IV)
<i>Panel A: Work in Sept. 2024</i>				
Avg. weekly work hours	279	52.8	-8.9*** (1.7) [-11.1, -6.8]	-11.0*** (2.0) [-13.7, -8.4]
Desired num. works hrs in Sept.	280	38.2	7.7*** (2.6) [5.8, 10.3]	9.4*** (3.1) [7.2, 12.7]
Excess hours worked over desired in Sept.	276	15.1	-17.3*** (2.9) [-20.8, -14.1]	-21.3*** (3.4) [-25.6, -17.4]
<i>Panel B: Workplace conditions</i>				
Paid late by employer?	288	0.14	-0.11*** (0.04) [-0.14, -0.10]	-0.13*** (0.05) [-0.17, -0.13]
Experienced verbal abuse?	288	0.02	0.04 (0.02) [-0.01, 0.04]	0.04 (0.03) [-0.01, 0.05]
Experienced humiliation?	288	0.04	-0.00 (0.03) [-0.03, -0.00]	-0.00 (0.03) [-0.04, -0.00]
Threatened?	288	0.00	0.03** (0.01) [0.01, 0.03]	0.03** (0.02) [0.01, 0.04]
Exposed to harmful chemicals?	288	0.41	-0.29*** (0.05) [-0.34, -0.27]	-0.35*** (0.06) [-0.42, -0.34]
<i>Panel C: Migration preferences</i>				
Pref. stay in MX vs move to US	288	0.85	-0.01 (0.04) [-0.02, 0.04]	-0.02 (0.05) [-0.03, 0.05]
Ideal H2A contract length, months	288	7.43	0.24 (0.25) [-0.01, 0.42]	0.29 (0.31) [-0.02, 0.51]

Notes: Survey data from the second endline (EL2). Excess hours worked over desired reports the difference between the average weekly work hours and the desired number of work hours during September 2024. As a robustness check, we select controls from a fixed set of baseline covariates using post-double-selection Lasso (Belloni et al. 2014). We always include the randomization strata and use the default plug-in penalty. Missing values are set to zero, and missingness indicators enter the selection step. Column (III) reports intent-to-treat estimates; Column (IV) reports IV estimates where the indicator for migrating abroad since August 2023 is instrumented by treatment assignment. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. The bounds are estimated on the same specification as the point estimate they bracket, holding the selected controls fixed across both trimmed samples. * (0.10) ** (0.05) *** (0.01)

D PAP tables

In this section, we present the tables we specified in the preanalysis plan.

Table A31: Income and remittances

	Wave	Respondent	N	Control Mean	ITT	IV Endogenous Var.:		Heterogeneity by:			
						REDDES Contract (2023 or 2024)?	Migrated abroad?	Migration (High)		Violence (High)	
						(VI)	(VII)	ITT (VIII)	IV (IX)	ITT (X)	IV (XI)
(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)	(X)	(XI)	
<i>Panel A: Income in Sept. 2024</i>											
Monthly income Sept 2024	EL2	Participant	253	648.3	1676.9*** (114.8) [1566.6, 1862.4]	1780.2*** (114.3) [1663.1, 1977.1]	2034.1*** (108.3) [1900.3, 2259.1]	338.4 (232.1)	627.8*** (218.5)	-424.7* (236.7)	-171.1 (227.3)
<i>Panel B: Participant reported remittances</i>											
Remittances Aug/Sept/Oct 2024	EL2	Participant	268	360.9	3129.3*** (239.1) [3025.9, 3210.1]	3351.4*** (245.7) [3240.6, 3438.0]	3756.5*** (244.7) [3632.3, 3853.5]	794.1* (480.0)	1238.7** (489.6)	-1020.3** (477.1)	-622.1 (501.7)
Remittances US trip 2024	EL2	Participant	268	972.7	6231.6*** (687.7) [6195.3, 6624.8]	6718.5*** (728.3) [6679.4, 7142.4]	7733.0*** (770.1) [7688.0, 8221.0]	1286.6 (1380.5)	2460.2 (1530.5)	-1842.8 (1404.4)	-893.1 (1652.5)
Money brought back US trip 2024	EL2	Participant	269	103.9	3201.1*** (426.4) [3201.0, 3201.9]	3437.3*** (452.2) [3437.1, 3438.1]	3909.6*** (530.3) [3909.4, 3910.5]	597.7 (903.6)	1088.0 (1090.5)	-495.8 (868.4)	-7.4 (1115.1)
Remittances 2024	EL2	Participant	264	584.9	5139.6*** (434.6) [4760.8, 5346.6]	5519.5*** (452.4) [5112.8, 5741.8]	6364.7*** (482.1) [5895.7, 6621.0]	1474.3* (889.6)	2539.6*** (974.1)	-1592.4* (877.9)	-833.1 (1001.1)
Remittances outside HH 2024	EL2	Participant	242	38.7	238.5*** (56.7) [232.8, 268.3]	260.2*** (61.6) [254.0, 292.7]	295.7*** (68.4) [288.7, 332.7]	145.3 (111.9)	205.5 (135.1)	-92.0 (113.4)	-70.8 (139.5)
<i>Panel C: HH member reported remittances</i>											
Net remittances Aug/Sept/Oct 2024	EL2	HH mem.	258	184.7	1534.0*** (165.9) [1526.9, 1590.7]	1619.4*** (172.3) [1611.9, 1679.3]	1868.0*** (200.8) [1859.3, 1937.0]	65.8 (338.1)	288.1 (404.5)	-553.8* (327.7)	-424.5 (400.3)
<i>Panel D: Labor conditions</i>											
Fairly compensated?	EL2	Participant	288	0.67	0.23*** (0.05) [0.22, 0.28]	0.25*** (0.05) [0.24, 0.30]	0.28*** (0.06) [0.27, 0.35]	0.01 (0.10)	0.05 (0.12)	0.12 (0.10)	0.21* (0.12)

Notes: Remittances US trip 2024 is the total amount the participant reported sending to their household and to people outside their household during their US or Canada work trip between September and December 2024. Remittances 2024 is the total amount the participant reported sending to their household since January 1, 2024. Remittances outside HH 2024 records the amount sent to people outside the participant's household over the same annual period. Survey data from the Endline 2 wave. Column (V) reports intent-to-treat (ITT) estimates; Column (VI) reports IV estimates where the indicator for receiving a REDDES contract in 2023 or 2024 is instrumented by treatment assignment; Column (VII) reports IV estimates where the indicator for migrating abroad for work since 2023 is instrumented by treatment assignment. Columns (VIII) and (X) report ITT estimates from specifications that interact treatment assignment with indicators for high baseline municipal migration and violence, respectively. Columns (IX) and (XI) report the corresponding IV estimates. In each IV specification, migration abroad and its interaction with the relevant subgroup indicator are jointly instrumented by treatment assignment and treatment assignment interacted with that indicator. Each heterogeneity column reports the interaction coefficient, which is the difference between the estimates for the high and low subgroups. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets for the ITT and IV estimates. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A32: Migration - Heterogeneity

	Wave	Respondent	N	Control Mean	ITT	IV Endogenous Var.:		Heterogeneity by:			
						REDDES Contract (2023 or 2024)?	Migrated abroad?	Migration (High)		Violence (High)	
								ITT (VIII)	IV (IX)	ITT (X)	IV (XI)
	(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)	(X)	(XI)
<i>Panel A: Participant migration</i>											
NGO contract 2023 or 2024?		Admin	349	0.00	0.92*** (0.02) [0.92, 0.92]			-0.01 (0.04)		-0.01 (0.04)	
Participant migrated abroad?	EL2	Both respondents	296	0.11	0.80*** (0.03) [0.80, 0.84]			-0.07 (0.07)		-0.15** (0.07)	
Participant migrated abroad? Survey or Enum report	EL2	Both respondents	317	0.18	0.74*** (0.04) [0.74, 0.77]			-0.10 (0.07)		-0.12 (0.08)	
Number of weeks in US since Aug 1 2023	EL2	Participant	288	2.35	32.85*** (1.83) [29.33, 35.20]	35.01*** (1.83) [31.26, 37.51]	40.32*** (2.14) [36.00, 43.20]	6.05* (3.61)	12.61*** (4.19)	-0.89 (3.72)	6.61 (4.70)
Number of weeks in US in 2024	EL2	Participant	288	2.35	22.26*** (1.46) [19.74, 24.08]	23.73*** (1.48) [21.04, 25.66]	27.32*** (1.58) [24.23, 29.55]	3.11 (2.88)	7.35** (3.10)	-4.47 (2.92)	-0.41 (3.31)
<i>Panel B: Non participant migration</i>											
Any HH member migrated abroad	EL2	HH mem.	279	0.02	0.05** (0.02) [0.03, 0.06]	0.06** (0.02) [0.04, 0.06]	0.07** (0.03) [0.04, 0.07]	0.11** (0.05)	0.14** (0.06)	-0.02 (0.04)	-0.01 (0.05)
Any sibling migrated abroad	EL2	HH mem.	279	0.01	0.03 (0.02) [0.02, 0.03]	0.03 (0.02) [0.02, 0.03]	0.03 (0.02) [0.02, 0.03]	0.08** (0.03)	0.11*** (0.04)	0.01 (0.03)	0.01 (0.04)
Any HH member migrated within Mexico	EL2	HH mem.	279	0.11	0.01 (0.04) [-0.01, 0.02]	0.01 (0.04) [-0.01, 0.02]	0.02 (0.05) [-0.01, 0.02]	-0.01 (0.08)	-0.01 (0.10)	0.02 (0.08)	0.03 (0.10)

Notes: Survey data from the Endline 2 wave. Column (V) reports intent-to-treat (ITT) estimates; Column (VI) reports IV estimates where the indicator for receiving a REDDES contract in 2023 or 2024 is instrumented by treatment assignment; Column (VII) reports IV estimates where the indicator for migrating abroad for work since 2023 is instrumented by treatment assignment. Columns (VIII) and (X) report ITT estimates from specifications that interact treatment assignment with indicators for high baseline municipal migration and violence, respectively. Columns (IX) and (XI) report the corresponding IV estimates. In each IV specification, migration abroad and its interaction with the relevant subgroup indicator are jointly instrumented by treatment assignment and treatment assignment interacted with that indicator. Each heterogeneity column reports the interaction coefficient, which is the difference between the estimates for the high and low subgroups. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets for the ITT and IV estimates. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A33: Work and time-use

	Wave	Respondent	N	Control Mean	ITT	IV Endogenous Var.:		Heterogeneity by:			
						REDDES Contract (2023 or 2024)?	Migrated abroad?	Migration (High)	Violence (High)		
	(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	ITT (VIII)	IV (IX)	ITT (X)	IV (XI)
Panel A: HH work											
Participant working in Jan 2025?	EL2	Participant	288	0.96	-0.07** (0.03) [-0.08, -0.02]	-0.08** (0.03) [-0.09, -0.02]	-0.09** (0.04) [-0.10, -0.02]	0.05 (0.06)	0.05 (0.08)	-0.08 (0.06)	-0.12 (0.08)
Participant Income Jan 2025	EL2	Participant	252	447.2	-49.6* (28.7) [-84.7, -19.4]	-52.6* (30.4) [-89.9, -20.6]	-61.0* (35.3) [-104.1, -23.9]	121.9** (60.1)	138.5* (71.6)	-16.7 (58.7)	-34.0 (75.9)
HH Income Jan 2025	EL2	HH mem.	234	712.6	-70.1 (53.2) [-71.1, -68.4]	-74.2 (56.4) [-75.2, -72.4]	-85.6 (65.0) [-86.8, -83.5]	184.4* (110.3)	206.5 (130.9)	5.0 (107.6)	-11.3 (137.0)
Usual weekly HH income	EL2	HH mem.	243	135.4	-0.8 (10.2) [-3.5, 0.8]	-0.9 (10.9) [-3.8, 0.9]	-1.1 (12.9) [-4.4, 1.1]	24.0 (21.1)	29.8 (26.3)	-0.8 (20.6)	-1.3 (27.1)
Panel B: Num. hours spent on [...]											
Work	EL2	Participant	245	8.78	-1.32*** (0.26) [-1.46, -1.05]	-1.39*** (0.27) [-1.54, -1.10]	-1.64*** (0.33) [-1.81, -1.30]	-0.65 (0.52)	-1.07* (0.65)	-0.92* (0.52)	-1.56** (0.71)
Housework	EL2	Participant	248	2.13	0.40* (0.24) [0.35, 0.43]	0.42* (0.25) [0.36, 0.45]	0.49 (0.30) [0.43, 0.53]	-0.00 (0.50)	0.07 (0.60)	0.29 (0.49)	0.48 (0.63)
Free time	EL2	Participant	249	1.38	0.76** (0.29) [0.61, 0.80]	0.80** (0.31) [0.64, 0.84]	0.93** (0.36) [0.75, 0.99]	1.55*** (0.57)	2.02*** (0.71)	0.38 (0.59)	0.69 (0.76)
Takes care of children?	EL2	Participant	249	0.80	-0.07 (0.06) [-0.08, -0.06]	-0.08 (0.06) [-0.08, -0.06]	-0.09 (0.07) [-0.10, -0.07]	-0.01 (0.12)	-0.03 (0.14)	0.11 (0.11)	0.12 (0.14)
Takes care of children/adults?	ML	HH mem.	310	0.76	0.02 (0.05) [-0.05, 0.04]	0.02 (0.05) [-0.05, 0.04]	0.02 (0.07) [-0.06, 0.05]	-0.02 (0.10)	-0.03 (0.14)	0.12 (0.10)	0.15 (0.13)

Notes: Survey data from the Endline 2 wave. The time-use outcomes in Panel B are measured in hours for a typical day in the month before the Endline 2 survey. Column (V) reports intent-to-treat (ITT) estimates; Column (VI) reports IV estimates where the indicator for receiving a REDDES contract in 2023 or 2024 is instrumented by treatment assignment; Column (VII) reports IV estimates where the indicator for migrating abroad for work since 2023 is instrumented by treatment assignment. Columns (VIII) and (X) report ITT estimates from specifications that interact treatment assignment with indicators for high baseline municipal migration and violence, respectively. Columns (IX) and (XI) report the corresponding IV estimates. In each IV specification, migration abroad and its interaction with the relevant subgroup indicator are jointly instrumented by treatment assignment and treatment assignment interacted with that indicator. Each heterogeneity column reports the interaction coefficient, which is the difference between the estimates for the high and low subgroups. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets for the ITT and IV estimates. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A34: Food security

	Wave	Respondent	N	Control Mean	ITT	IV Endogenous Var.:		Heterogeneity by:			
						REDDDES Contract (2023 or 2024)?	Migrated abroad?	Migration (High)		Violence (High)	
						(VI)	(VII)	ITT (VIII)	IV (IX)	ITT (X)	IV (XI)
Food Security index (additive)	EL2	HH mem.	279	2.47	0.29*** (0.09) [0.29, 0.32]	0.31*** (0.10) [0.30, 0.33]	0.36*** (0.11) [0.35, 0.39]	-0.11 (0.19)	-0.09 (0.22)	0.09 (0.19)	0.18 (0.23)
Food Security index (PCA)	EL2	HH mem.	279	-0.38	0.63*** (0.19) [0.62, 0.67]	0.67*** (0.20) [0.66, 0.70]	0.78*** (0.23) [0.77, 0.82]	-0.32 (0.38)	-0.31 (0.46)	0.36 (0.38)	0.59 (0.49)
Expensive calorie index (additive)	EL2	HH mem.	279	13.5	2.6*** (0.8) [2.2, 2.9]	2.8*** (0.8) [2.4, 3.1]	3.2*** (1.0) [2.8, 3.6]	-0.3 (1.6)	-0.0 (1.9)	-0.9 (1.6)	-0.5 (2.0)
Expensive calorie index (PCA)	EL2	HH mem.	279	-0.33	0.56*** (0.18) [0.46, 0.62]	0.60*** (0.19) [0.49, 0.66]	0.70*** (0.22) [0.57, 0.77]	0.15 (0.36)	0.26 (0.44)	-0.29 (0.36)	-0.25 (0.46)
<i>Panel A: Num. days consumed</i>											
Bread	EL2	HH mem.	279	3.52	0.67** (0.27) [0.60, 0.77]	0.71** (0.29) [0.63, 0.81]	0.83** (0.34) [0.74, 0.95]	-0.33 (0.55)	-0.32 (0.67)	-0.49 (0.55)	-0.48 (0.70)
Fruit	EL2	HH mem.	279	3.65	0.24 (0.28) [0.15, 0.34]	0.25 (0.30) [0.16, 0.36]	0.30 (0.35) [0.19, 0.42]	-0.94* (0.57)	-1.12 (0.70)	0.61 (0.57)	0.83 (0.73)
Red meat	EL2	HH mem.	279	1.79	0.50*** (0.18) [0.40, 0.56]	0.53*** (0.19) [0.42, 0.60]	0.62*** (0.23) [0.50, 0.70]	0.59 (0.37)	0.78* (0.45)	-0.62* (0.37)	-0.67 (0.47)
Chicken	EL2	HH mem.	279	1.56	0.29* (0.16) [0.19, 0.34]	0.31* (0.17) [0.20, 0.36]	0.36* (0.20) [0.24, 0.42]	0.05 (0.34)	0.10 (0.41)	-0.31 (0.33)	-0.33 (0.43)
Dairy products	EL2	HH mem.	279	2.40	0.81*** (0.28) [0.72, 0.89]	0.86*** (0.30) [0.76, 0.94]	1.00*** (0.35) [0.89, 1.10]	-0.13 (0.55)	-0.06 (0.69)	0.08 (0.57)	0.27 (0.74)
Seafood	EL2	HH mem.	279	0.54	0.12 (0.12) [0.04, 0.13]	0.12 (0.13) [0.04, 0.14]	0.14 (0.15) [0.05, 0.17]	0.48* (0.28)	0.59* (0.33)	-0.12 (0.26)	-0.13 (0.33)

Notes: Survey data from the Endline 2 wave. Column (V) reports intent-to-treat (ITT) estimates; Column (VI) reports IV estimates where the indicator for receiving a REDDES contract in 2023 or 2024 is instrumented by treatment assignment; Column (VII) reports IV estimates where the indicator for migrating abroad for work since 2023 is instrumented by treatment assignment. Columns (VIII) and (X) report ITT estimates from specifications that interact treatment assignment with indicators for high baseline municipal migration and violence, respectively. Columns (IX) and (XI) report the corresponding IV estimates. In each IV specification, migration abroad and its interaction with the relevant subgroup indicator are jointly instrumented by treatment assignment and treatment assignment interacted with that indicator. Each heterogeneity column reports the interaction coefficient, which is the difference between the estimates for the high and low subgroups. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets for the ITT and IV estimates. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A35: Finances

	Wave	Respondent	N	Control Mean	ITT	IV Endogenous Var.:		Heterogeneity by:			
						REDDES Contract (2023 or 2024)?	Migrated abroad?	Migration (High)		Violence (High)	
						(VI)	(VII)	ITT (VIII)	IV (IX)	ITT (X)	IV (XI)
Could not cover expenses, last 3 months	EL2	HH mem.	279	0.21	-0.11** (0.05) [-0.13, -0.11]	-0.12** (0.05) [-0.14, -0.12]	-0.14** (0.06) [-0.17, -0.14]	-0.11 (0.09)	-0.15 (0.11)	-0.07 (0.09)	-0.11 (0.12)
Has formal banking acc.?	EL2	Participant	249	0.51	0.17*** (0.06) [0.17, 0.19]	0.18*** (0.07) [0.18, 0.20]	0.21*** (0.08) [0.21, 0.23]	-0.16 (0.13)	-0.16 (0.15)	-0.04 (0.13)	-0.00 (0.16)
Total savings	EL2	HH mem.	254	225.1	258.5*** (88.5) [255.9, 274.5]	275.5*** (94.0) [272.7, 292.6]	317.8*** (108.4) [314.6, 337.5]	154.1 (172.2)	213.6 (210.6)	85.4 (181.8)	139.2 (228.4)
Total debt	EL2	HH mem.	274	238.4	-107.5 (84.4) [-159.3, -99.4]	-113.5 (89.1) [-168.0, -104.9]	-132.2 (103.5) [-195.9, -122.2]	-52.2 (160.0)	-80.6 (198.8)	254.3 (168.9)	299.2 (211.7)

Notes: Survey data from the Endline 2 wave. Column (V) reports intent-to-treat (ITT) estimates; Column (VI) reports IV estimates where the indicator for receiving a REDDES contract in 2023 or 2024 is instrumented by treatment assignment; Column (VII) reports IV estimates where the indicator for migrating abroad for work since 2023 is instrumented by treatment assignment. Columns (VIII) and (X) report ITT estimates from specifications that interact treatment assignment with indicators for high baseline municipal migration and violence, respectively. Columns (IX) and (XI) report the corresponding IV estimates. In each IV specification, migration abroad and its interaction with the relevant subgroup indicator are jointly instrumented by treatment assignment and treatment assignment interacted with that indicator. Each heterogeneity column reports the interaction coefficient, which is the difference between the estimates for the high and low subgroups. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets for the ITT and IV estimates. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A36: Productive assets

	Wave	Respondent	N	Control Mean	ITT	IV Endogenous Var.:		Heterogeneity by:			
						REDDES Contract (2023 or 2024)?	Migrated abroad?	Migration (High)		Violence (High)	
								ITT	IV	ITT	IV
	(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)	(X)	(XI)
Panel A: Durable assets											
Asset index (additive)	EL2	HH mem.	279	6.77	1.00*** (0.30) [0.85, 1.13]	1.06*** (0.32) [0.90, 1.20]	1.24*** (0.38) [1.05, 1.40]	0.07 (0.62)	0.21 (0.75)	0.02 (0.60)	0.24 (0.75)
Asset index (PCA)	EL2	HH mem.	275	-0.34	0.55** (0.21) [0.54, 0.57]	0.58** (0.23) [0.57, 0.60]	0.68** (0.26) [0.66, 0.70]	-0.13 (0.43)	-0.09 (0.53)	0.06 (0.42)	0.20 (0.52)
Panel B: Ag. assets											
Owns farmland?	EL2	HH mem.	279	0.17	-0.00 (0.05) [-0.01, 0.00]	-0.00 (0.05) [-0.01, 0.01]	-0.00 (0.06) [-0.02, 0.01]	0.18** (0.09)	0.22** (0.11)	0.12 (0.09)	0.15 (0.11)
Num. farm plots	EL2	HH mem.	275	0.29	0.17 (0.19) [0.03, 0.18]	0.18 (0.21) [0.03, 0.19]	0.21 (0.24) [0.04, 0.23]	-0.05 (0.44)	-0.04 (0.53)	0.43 (0.41)	0.57 (0.56)
Irrigated land, hectares	EL2	HH mem.	266	0.10	-0.01 (0.05) [-0.08, -0.00]	-0.01 (0.06) [-0.09, -0.00]	-0.01 (0.07) [-0.10, -0.00]	0.08 (0.10)	0.10 (0.13)	0.02 (0.10)	0.02 (0.12)
Value of ag. assets	EL2	HH mem.	239	1205.1	-322.1 (454.7) [-359.4, -125.5]	-341.6 (481.9) [-381.2, -133.1]	-400.1 (562.8) [-446.4, -155.9]	705.9 (892.1)	822.7 (1108.6)	1426.5 (897.0)	1730.3 (1126.5)
Num. farm machines	EL2	HH mem.	279	0.06	-0.03 (0.03) [-0.04, -0.03]	-0.03 (0.03) [-0.04, -0.03]	-0.04 (0.04) [-0.05, -0.03]	0.06 (0.06)	0.08 (0.08)	0.05 (0.06)	0.05 (0.07)
Num. farm animals	EL2	HH mem.	279	2.16	1.40 (0.86) [0.88, 1.51]	1.48 (0.91) [0.93, 1.59]	1.73 (1.06) [1.08, 1.86]	0.88 (1.82)	1.25 (2.18)	4.97*** (1.77)	6.58*** (2.32)
Panel C: Businesses											
Num. businesses	EL2	HH mem.	274	0.12	0.04 (0.05) [0.01, 0.05]	0.05 (0.05) [0.01, 0.05]	0.06 (0.06) [0.01, 0.06]	0.04 (0.09)	0.05 (0.11)	-0.03 (0.09)	-0.03 (0.11)
Panel D: Home quality & improvements											
Walls have coating/plaster?	EL2	HH mem.	279	0.85	0.00 (0.04) [-0.00, 0.02]	0.00 (0.05) [-0.00, 0.02]	0.00 (0.05) [-0.01, 0.03]	-0.04 (0.09)	-0.04 (0.11)	0.02 (0.09)	0.02 (0.12)
PPI score	EL2	HH mem.	279	30.1	4.9*** (1.5) [4.1, 5.3]	5.2*** (1.6) [4.3, 5.6]	6.0*** (1.9) [5.1, 6.6]	2.9 (3.0)	4.1 (3.7)	0.2 (3.1)	1.3 (4.0)
Exp. on home improvements	EL2	HH mem.	266	53.5	208.8*** (67.2) [204.7, 209.2]	219.1*** (70.3) [214.8, 219.6]	254.0*** (82.8) [249.0, 254.5]	-160.4 (148.1)	-159.1 (176.1)	27.7 (134.0)	75.5 (167.8)

Notes: Survey data from the Endline 2 wave. We trim nonzero irrigated land at the 5th and 95th percentiles using the pooled distribution across baseline and the two household endlines. We trim nonzero agricultural asset values at the 5th and 95th percentiles within each wave. The asset index is the sum of 17 indicators for whether the household owns each asset or has each service. For questions that record the number owned, the indicator equals one if the household owns at least one. The index ranges from 0 to 17. Missing components are treated as zero unless all 17 components are missing, in which case the index is missing. Column (V) reports intent-to-treat (ITT) estimates; Column (VI) reports IV estimates where the indicator for receiving a REDDES contract in 2023 or 2024 is instrumented by treatment assignment; Column (VII) reports IV estimates where the indicator for migrating abroad for work since 2023 is instrumented by treatment assignment. Columns (VIII) and (X) report ITT estimates from specifications that interact treatment assignment with indicators for high baseline municipal migration and violence, respectively. Columns (IX) and (XI) report the corresponding IV estimates. In each IV specification, migration abroad and its interaction with the relevant subgroup indicator are jointly instrumented by treatment assignment and treatment assignment interacted with that indicator. Each heterogeneity column reports the interaction coefficient, which is the difference between the estimates for the high and low subgroups. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets for the ITT and IV estimates. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A37: Adult health

	Wave	Respondent	N	Control Mean	ITT	IV Endogenous Var.:		Heterogeneity by:			
						REDDES Contract (2023 or 2024)?	Migrated abroad?	Migration (High)		Violence (High)	
								ITT (VIII)	IV (IX)	ITT (X)	IV (XI)
	(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)				
Panel A: Physical health											
Subscribed to IMSS-Bienestar?	EL2	Participant	232	0.32	-0.06 (0.06) [-0.07, -0.04]	-0.06 (0.06) [-0.07, -0.05]	-0.08 (0.08) [-0.09, -0.05]	0.00 (0.12)	-0.01 (0.15)	0.01 (0.12)	-0.01 (0.17)
Access to healthcare institutions?	EL2	Participant	249	0.52	0.08 (0.07) [0.07, 0.09]	0.08 (0.07) [0.07, 0.09]	0.09 (0.08) [0.08, 0.11]	0.20 (0.13)	0.26 (0.16)	0.04 (0.13)	0.08 (0.17)
Blood sample for diabetes?	EL2	Participant	249	0.23	0.23*** (0.06) [0.22, 0.24]	0.24*** (0.06) [0.23, 0.25]	0.28*** (0.08) [0.27, 0.29]	0.17 (0.12)	0.25 (0.15)	0.11 (0.12)	0.20 (0.16)
Medical weight measurement?	EL2	Participant	249	0.56	0.07 (0.06) [0.06, 0.08]	0.07 (0.07) [0.06, 0.09]	0.08 (0.08) [0.08, 0.10]	0.03 (0.13)	0.05 (0.16)	-0.10 (0.13)	-0.11 (0.17)
Panel B: Mental health											
PHQ score	EL2	Participant	249	1.51	-0.44 (0.37) [-0.56, -0.41]	-0.46 (0.38) [-0.59, -0.44]	-0.54 (0.45) [-0.69, -0.51]	0.60 (0.82)	0.63 (0.95)	0.04 (0.71)	-0.06 (0.88)
GAD score	EL2	Participant	249	1.35	-0.46 (0.37) [-0.57, -0.44]	-0.48 (0.39) [-0.59, -0.46]	-0.56 (0.45) [-0.70, -0.54]	0.34 (0.75)	0.32 (0.90)	-0.56 (0.77)	-0.83 (1.02)
PHQ score	EL2	HH mem.	260	2.18	0.90** (0.42) [0.81, 0.94]	0.95** (0.45) [0.86, 0.99]	1.12** (0.53) [1.01, 1.16]	-1.66** (0.83)	-1.89* (1.05)	0.68 (0.87)	1.07 (1.15)
GAD score	EL2	HH mem.	260	2.04	0.47 (0.41) [0.36, 0.50]	0.49 (0.43) [0.38, 0.52]	0.58 (0.51) [0.45, 0.62]	0.17 (0.80)	0.28 (1.00)	-0.70 (0.84)	-0.79 (1.10)

Notes: Survey data from the Endline 2 wave. Column (V) reports intent-to-treat (ITT) estimates; Column (VI) reports IV estimates where the indicator for receiving a REDDES contract in 2023 or 2024 is instrumented by treatment assignment; Column (VII) reports IV estimates where the indicator for migrating abroad for work since 2023 is instrumented by treatment assignment. Columns (VIII) and (X) report ITT estimates from specifications that interact treatment assignment with indicators for high baseline municipal migration and violence, respectively. Columns (IX) and (XI) report the corresponding IV estimates. In each IV specification, migration abroad and its interaction with the relevant subgroup indicator are jointly instrumented by treatment assignment and treatment assignment interacted with that indicator. Each heterogeneity column reports the interaction coefficient, which is the difference between the estimates for the high and low subgroups. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets for the ITT and IV estimates. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A38: Heterogeneity on Children Outcomes

	Wave	Respondent	N	Control Mean	ITT	IV Endogenous Var.:		Heterogeneity by:			
						REDDES Contract (2023 or 2024)?	Migrated abroad?	Migration (High)		Violence (High)	
								ITT (VIII)	IV (IX)	ITT (X)	IV (XI)
	(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)				
Panel A: Child Work											
HH has child worker?	EL2	HH mem.	279	0.13	-0.02 (0.04) [-0.04, -0.02]	-0.02 (0.04) [-0.04, -0.02]	-0.03 (0.05) [-0.05, -0.02]	-0.11 (0.08)	-0.13 (0.10)	-0.07 (0.08)	-0.09 (0.10)
Child work income	EL1	HH mem.	288	3.77	-1.2 (1.6) [-3.3, -0.9]	-1.2 (1.7) [-3.6, -1.0]	-1.6 (2.2) [-4.5, -1.2]	-5.1 (3.4)	-6.9 (4.6)	-0.5 (3.2)	-0.7 (4.4)
At least one child working?	EL2	HH mem.	129	0.14	-0.04 (0.07) [-0.07, 0.06]	-0.04 (0.07) [-0.07, 0.07]	-0.05 (0.08) [-0.08, 0.08]	0.07 (0.13)	0.07 (0.16)	-0.11 (0.14)	-0.13 (0.16)
Panel B: HH Demographics											
HH size	EL2	HH mem.	279	4.54	-0.30 (0.20) [-0.39, -0.20]	-0.31 (0.21) [-0.41, -0.21]	-0.36 (0.25) [-0.48, -0.25]	-0.14 (0.41)	-0.21 (0.51)	-0.21 (0.40)	-0.33 (0.51)
Num. children	EL2	HH mem.	279	0.72	-0.10 (0.10) [-0.16, -0.09]	-0.11 (0.11) [-0.17, -0.09]	-0.13 (0.13) [-0.20, -0.11]	0.03 (0.21)	0.02 (0.25)	0.17 (0.20)	0.20 (0.26)
Num. boys	EL2	HH mem.	279	0.40	-0.13* (0.07) [-0.16, -0.12]	-0.14* (0.07) [-0.17, -0.13]	-0.16* (0.09) [-0.20, -0.15]	0.00 (0.14)	-0.01 (0.17)	0.03 (0.14)	0.01 (0.18)
Num. girls	EL2	HH mem.	279	0.32	0.02 (0.07) [-0.02, 0.03]	0.03 (0.08) [-0.02, 0.04]	0.03 (0.09) [-0.02, 0.04]	0.03 (0.15)	0.03 (0.18)	0.14 (0.14)	0.18 (0.18)
Child sick in past 6 months?	EL2	HH mem.	279	0.01	-0.01 (0.01) [-0.01, -0.01]	-0.01 (0.01) [-0.01, -0.01]	-0.01 (0.01) [-0.01, -0.01]	-0.02 (0.02)	-0.02 (0.02)	0.02 (0.02)	0.02 (0.02)
Panel C: Schooling											
Num. children attending school	EL2	HH mem.	129	1.29	0.03 (0.11) [-0.05, 0.16]	0.03 (0.11) [-0.05, 0.16]	0.04 (0.13) [-0.06, 0.19]	0.29 (0.22)	0.35 (0.26)	0.25 (0.22)	0.30 (0.27)
Num. girls attending school	EL2	HH mem.	74	1.14	-0.04 (0.09) [-0.06, -0.03]	-0.04 (0.10) [-0.06, -0.03]	-0.05 (0.12) [-0.07, -0.03]	0.22 (0.18)	0.27 (0.23)	0.43** (0.18)	0.52** (0.22)
Num. boys attending school	EL2	HH mem.	75	1.15	-0.20** (0.10) [-0.27, -0.10]	-0.21** (0.10) [-0.28, -0.11]	-0.24** (0.12) [-0.33, -0.13]	0.15 (0.21)	0.12 (0.24)	-0.04 (0.20)	-0.05 (0.24)
At least one child attending school?	EL2	HH mem.	129	0.96	-0.02 (0.04) [-0.04, -0.01]	-0.02 (0.04) [-0.05, -0.01]	-0.02 (0.05) [-0.05, -0.01]	-0.06 (0.08)	-0.08 (0.10)	0.02 (0.08)	0.03 (0.09)
At least one girl attending school?	EL2	HH mem.	74	1.00	-0.04 (0.03) [-0.04, -0.03]	-0.04 (0.03) [-0.05, -0.03]	-0.05 (0.04) [-0.05, -0.04]	-0.07 (0.05)	-0.09 (0.07)	-0.01 (0.07)	-0.01 (0.08)
At least one boy attending school?	EL2	HH mem.	75	0.94	-0.03 (0.06) [-0.07, -0.02]	-0.03 (0.06) [-0.08, -0.02]	-0.04 (0.07) [-0.09, -0.02]	0.07 (0.13)	0.07 (0.14)	0.02 (0.11)	0.03 (0.14)
All children attending school?	EL2	HH mem.	129	0.93	-0.00 (0.05) [-0.07, 0.01]	-0.00 (0.05) [-0.07, 0.01]	-0.00 (0.06) [-0.08, 0.01]	-0.07 (0.10)	-0.09 (0.12)	0.00 (0.09)	0.00 (0.11)
All girls attending school?	EL2	HH mem.	74	0.97	-0.02 (0.06) [-0.03, -0.02]	-0.03 (0.06) [-0.03, -0.02]	-0.03 (0.07) [-0.03, -0.02]	-0.04 (0.10)	-0.05 (0.12)	-0.04 (0.10)	-0.05 (0.13)
All boys attending school?	EL2	HH mem.	75	0.91	-0.00 (0.06) [-0.05, 0.02]	-0.00 (0.07) [-0.06, 0.02]	-0.00 (0.08) [-0.07, 0.02]	0.01 (0.14)	0.01 (0.15)	-0.03 (0.12)	-0.03 (0.15)
Share of children attending school	EL2	HH mem.	129	0.95	-0.01 (0.04) [-0.05, 0.00]	-0.01 (0.04) [-0.05, 0.00]	-0.01 (0.05) [-0.06, 0.01]	-0.06 (0.09)	-0.07 (0.10)	0.01 (0.08)	0.01 (0.10)
Share of girls attending school	EL2	HH mem.	74	0.98	-0.03 (0.04) [-0.03, -0.02]	-0.03 (0.04) [-0.03, -0.02]	-0.04 (0.05) [-0.04, -0.02]	-0.05 (0.07)	-0.06 (0.08)	-0.03 (0.08)	-0.04 (0.10)
Share of boys attending school	EL2	HH mem.	75	0.93	-0.02 (0.06) [-0.06, -0.00]	-0.02 (0.06) [-0.07, -0.00]	-0.02 (0.07) [-0.08, -0.00]	0.04 (0.13)	0.04 (0.14)	-0.00 (0.12)	-0.00 (0.14)

Notes: Panel C uses the EL2 household roster. We identify children using ages at baseline. Survey data from the Endline 2 wave. Column (V) reports intent-to-treat (ITT) estimates; Column (VI) reports IV estimates where the indicator for receiving a REDDES contract in 2023 or 2024 is instrumented by treatment assignment; Column (VII) reports IV estimates where the indicator for migrating abroad for work since 2023 is instrumented by treatment assignment. Columns (VIII) and (X) report ITT estimates from specifications that interact treatment assignment with indicators for high baseline municipal migration and violence, respectively. Columns (IX) and (XI) report the corresponding IV estimates. In each IV specification, migration abroad and its interaction with the relevant subgroup indicator are jointly instrumented by treatment assignment and treatment assignment interacted with that indicator. Each heterogeneity column reports the interaction coefficient, which is the difference between the estimates for the high and low subgroups. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets for the ITT and IV estimates. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A39: Children (all ages)

	Wave	Respondent	N	Control Mean	ITT	IV Endogenous Var.:		Heterogeneity by:			
						REDDES Contract (2023 or 2024)?	Migrated abroad?	Migration (High)	Violence (High)		
	(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	ITT (VIII)	IV (IX)	ITT (X)	IV (XI)
HH has child worker?	EL2	HH mem.	279	0.13	-0.02 (0.04) [-0.04, -0.02]	-0.02 (0.04) [-0.04, -0.02]	-0.03 (0.05) [-0.05, -0.02]	-0.11 (0.08)	-0.13 (0.10)	-0.07 (0.08)	-0.09 (0.10)
Child work income	EL1	HH mem.	288	3.77	-1.2 (1.6) [-3.3, -0.9]	-1.2 (1.7) [-3.6, -1.0]	-1.6 (2.2) [-4.5, -1.2]	-5.1 (3.4)	-6.9 (4.6)	-0.5 (3.2)	-0.7 (4.4)
Child sick in past 6 months?	EL2	HH mem.	279	0.01	-0.01 (0.01) [-0.01, -0.01]	-0.01 (0.01) [-0.01, -0.01]	-0.01 (0.01) [-0.01, -0.01]	-0.02 (0.02)	-0.02 (0.02)	0.02 (0.02)	0.02 (0.02)
At least one child attending school?	EL2	HH mem.	153	0.97	-0.06 (0.04) [-0.09, -0.06]	-0.07 (0.04) [-0.09, -0.06]	-0.08 (0.05) [-0.11, -0.07]	-0.02 (0.08)	-0.03 (0.10)	0.01 (0.08)	0.01 (0.10)
At least one girl attending school?	EL2	HH mem.	95	0.95	-0.09* (0.06) [-0.09, -0.09]	-0.09* (0.06) [-0.10, -0.09]	-0.11* (0.07) [-0.11, -0.11]	0.07 (0.11)	0.08 (0.14)	0.02 (0.12)	0.02 (0.15)
At least one boy attending school?	EL2	HH mem.	97	0.96	-0.00 (0.04) [-0.03, 0.02]	0.00 (0.05) [-0.03, 0.02]	0.00 (0.05) [-0.04, 0.02]	0.08 (0.09)	0.10 (0.11)	0.05 (0.09)	0.06 (0.12)
All children attending school?	EL2	HH mem.	153	0.85	-0.07 (0.06) [-0.16, -0.03]	-0.07 (0.06) [-0.17, -0.04]	-0.08 (0.07) [-0.20, -0.04]	0.02 (0.12)	0.01 (0.15)	-0.00 (0.12)	-0.00 (0.15)
All girls attending school?	EL2	HH mem.	95	0.87	-0.08 (0.08) [-0.08, -0.07]	-0.08 (0.08) [-0.08, -0.08]	-0.09 (0.09) [-0.10, -0.09]	0.10 (0.14)	0.12 (0.18)	0.04 (0.15)	0.05 (0.19)
All boys attending school?	EL2	HH mem.	97	0.87	0.03 (0.07) [-0.09, 0.07]	0.03 (0.07) [-0.10, 0.08]	0.03 (0.09) [-0.11, 0.09]	0.14 (0.14)	0.18 (0.17)	-0.05 (0.13)	-0.06 (0.17)
Share of children attending school	EL2	HH mem.	153	0.92	-0.06 (0.04) [-0.11, -0.04]	-0.06 (0.04) [-0.12, -0.04]	-0.07 (0.05) [-0.14, -0.05]	0.01 (0.09)	0.00 (0.11)	0.01 (0.09)	0.01 (0.11)
Share of girls attending school	EL2	HH mem.	95	0.91	-0.08 (0.06) [-0.08, -0.08]	-0.08 (0.06) [-0.08, -0.08]	-0.10 (0.07) [-0.10, -0.10]	0.09 (0.12)	0.11 (0.15)	0.02 (0.12)	0.02 (0.15)
Share of boys attending school	EL2	HH mem.	97	0.91	0.01 (0.05) [-0.06, 0.05]	0.01 (0.05) [-0.06, 0.05]	0.02 (0.06) [-0.08, 0.06]	0.11 (0.10)	0.14 (0.13)	0.00 (0.10)	0.00 (0.13)
HH size	EL2	HH mem.	279	4.54	-0.30 (0.20) [-0.39, -0.20]	-0.31 (0.21) [-0.41, -0.21]	-0.36 (0.25) [-0.48, -0.25]	-0.14 (0.41)	-0.21 (0.51)	-0.21 (0.40)	-0.33 (0.51)
Num. children	EL2	HH mem.	215	1.90	-0.16 (0.13) [-0.23, -0.06]	-0.17 (0.14) [-0.24, -0.06]	-0.20 (0.15) [-0.27, -0.07]	-0.27 (0.26)	-0.33 (0.31)	-0.25 (0.26)	-0.30 (0.31)
Num. boys	EL2	HH mem.	215	1.01	-0.18* (0.10) [-0.25, -0.09]	-0.19* (0.11) [-0.26, -0.10]	-0.21* (0.13) [-0.30, -0.11]	-0.30 (0.21)	-0.37 (0.25)	-0.25 (0.21)	-0.30 (0.25)
Num. girls	EL2	HH mem.	215	0.89	0.01 (0.12) [-0.05, 0.11]	0.01 (0.12) [-0.05, 0.12]	0.02 (0.14) [-0.06, 0.13]	0.03 (0.23)	0.03 (0.27)	-0.00 (0.23)	-0.00 (0.27)
Num. children attending school	EL2	HH mem.	153	1.40	-0.02 (0.12) [-0.13, 0.13]	-0.02 (0.12) [-0.14, 0.14]	-0.02 (0.15) [-0.16, 0.17]	0.46** (0.23)	0.56* (0.29)	0.03 (0.24)	0.04 (0.29)
Num. girls attending school	EL2	HH mem.	95	1.11	-0.05 (0.12) [-0.05, -0.04]	-0.05 (0.12) [-0.05, -0.04]	-0.06 (0.14) [-0.06, -0.05]	0.29 (0.23)	0.36 (0.29)	0.41* (0.23)	0.51* (0.29)
Num. boys attending school	EL2	HH mem.	97	1.13	-0.10 (0.10) [-0.18, 0.02]	-0.11 (0.11) [-0.20, 0.02]	-0.13 (0.13) [-0.24, 0.03]	0.23 (0.20)	0.27 (0.25)	-0.11 (0.21)	-0.14 (0.26)
At least one child working?	EL2	HH mem.	215	0.16	-0.02 (0.05) [-0.03, 0.03]	-0.02 (0.05) [-0.03, 0.03]	-0.02 (0.06) [-0.04, 0.04]	-0.14 (0.10)	-0.17 (0.12)	-0.10 (0.10)	-0.12 (0.12)

Notes: Panel C uses the EL2 household roster. We identify children using ages at baseline. Survey data from the Endline 2 wave. Column (V) reports intent-to-treat (ITT) estimates; Column (VI) reports IV estimates where the indicator for receiving a REDDES contract in 2023 or 2024 is instrumented by treatment assignment; Column (VII) reports IV estimates where the indicator for migrating abroad for work since 2023 is instrumented by treatment assignment. Columns (VIII) and (X) report ITT estimates from specifications that interact treatment assignment with indicators for high baseline municipal migration and violence, respectively. Columns (IX) and (XI) report the corresponding IV estimates. In each IV specification, migration abroad and its interaction with the relevant subgroup indicator are jointly instrumented by treatment assignment and treatment assignment interacted with that indicator. Each heterogeneity column reports the interaction coefficient, which is the difference between the estimates for the high and low subgroups. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets for the ITT and IV estimates. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A40: Legislatives preferences

	N	Control Mean	ITT	Heterogeneity by:	
				Migration (High)	Violence (High)
	(I)	(II)	(III)	(IV)	(V)
Would travel on H2A	288	1.00			
Would migrate if had to pay housing	288	0.86	-0.10** (0.05) [-0.12, -0.04]	0.07 (0.09)	0.04 (0.09)
Interest in applying for GC through H2A	288	0.92	-0.03 (0.04) [-0.04, 0.03]	0.11 (0.07)	0.05 (0.07)
Pref. mult. emplyrs vs single emplyr - Free housing in both	288	0.53	0.03 (0.06) [-0.01, 0.07]	0.05 (0.12)	-0.08 (0.12)
Pref mult vs single emplyr - free housing for single emplyr only	287	0.10	-0.01 (0.04) [-0.06, -0.00]	0.05 (0.08)	0.09 (0.07)

Notes: Survey data from the Endline 2 collected from participants. Column (III) reports intent-to-treat (ITT) estimates; Columns (IV) and (V) report the ITT estimates of the interaction between treatment assignment and an indicator for being from a high-migration and a high-violence municipality at baseline, respectively. Outcomes labeled to report only a mean leave the estimate columns blank. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets for the ITT and IV estimates. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A41: Intra-HH dynamics and other opinions

	Wave	Respondent	N	Control Mean	ITT	IV Endogenous Var.:		Heterogeneity by:			
						REDDES Contract (2023 or 2024)?	Migrated abroad?	Migration (High)		Violence (High)	
								ITT (VIII)	IV (IX)	ITT (X)	IV (XI)
	(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)				
<i>Panel A: Intra HH dynamics</i>											
Machismo index (additive)	EL2	HH mem.	260	0.84	0.10 (0.14) [0.08, 0.11]	0.11 (0.14) [0.08, 0.12]	0.13 (0.17) [0.09, 0.14]	-0.14 (0.28)	-0.15 (0.34)	-0.10 (0.28)	-0.10 (0.36)
Machismo index (additive)	EL2	Participant	249	0.87	0.30* (0.18) [0.23, 0.32]	0.32* (0.19) [0.24, 0.34]	0.37* (0.22) [0.28, 0.40]	0.05 (0.36)	0.12 (0.44)	0.29 (0.36)	0.45 (0.46)
Machismo index (PCA)	EL2	HH mem.	260	-0.08	0.12 (0.16) [0.08, 0.13]	0.12 (0.17) [0.09, 0.14]	0.15 (0.20) [0.11, 0.16]	-0.11 (0.32)	-0.12 (0.39)	0.10 (0.32)	0.15 (0.41)
Machismo index (PCA)	EL2	Participant	249	-0.17	0.24 (0.21) [0.15, 0.26]	0.25 (0.22) [0.16, 0.27]	0.29 (0.25) [0.19, 0.32]	-0.05 (0.41)	-0.01 (0.50)	0.26 (0.41)	0.40 (0.52)
Partner emotions index (additive)	EL2	Spouse	151	4.68	0.11 (0.13) [-0.14, 0.15]	0.11 (0.14) [-0.15, 0.16]	0.13 (0.16) [-0.18, 0.19]	-0.09 (0.24)	-0.10 (0.30)	-0.01 (0.27)	-0.00 (0.34)
Partner emotions index (PCA)	EL2	Spouse	151	-0.10	0.23 (0.26) [-0.26, 0.32]	0.24 (0.28) [-0.27, 0.34]	0.28 (0.33) [-0.32, 0.39]	-0.10 (0.49)	-0.10 (0.62)	0.05 (0.56)	0.08 (0.70)
Partner freedom (additive)	EL2	HH mem.	260	6.80	0.14 (0.35) [0.12, 0.20]	0.15 (0.37) [0.13, 0.21]	0.18 (0.44) [0.15, 0.25]	1.79*** (0.69)	2.21** (0.88)	1.20* (0.71)	1.55* (0.92)
Partner freedom index (PCA)	EL2	HH mem.	260	-0.12	0.09 (0.29) [0.07, 0.14]	0.10 (0.30) [0.08, 0.15]	0.11 (0.36) [0.09, 0.18]	1.45*** (0.56)	1.80** (0.71)	0.93 (0.57)	1.20 (0.74)
<i>Panel B: Opinions, trust & social networks</i>											
Efficacy index (additive)	EL2	Participant	247	2.97	0.14 (0.15) [0.10, 0.18]	0.15 (0.16) [0.10, 0.19]	0.18 (0.18) [0.12, 0.22]	-0.41 (0.29)	-0.46 (0.36)	0.31 (0.30)	0.44 (0.38)
Efficacy index (PCA)	EL2	Participant	247	-0.04	0.09 (0.17) [0.04, 0.15]	0.10 (0.18) [0.04, 0.16]	0.12 (0.21) [0.05, 0.19]	0.12 (0.35)	0.16 (0.42)	-0.13 (0.34)	-0.14 (0.44)
Social support index (additive)	EL2	HH mem.	260	3.00	-0.08 (0.20) [-0.10, -0.06]	-0.08 (0.21) [-0.11, -0.06]	-0.10 (0.25) [-0.13, -0.07]	0.20 (0.40)	0.23 (0.49)	0.38 (0.40)	0.46 (0.52)
Social support index (PCA)	EL2	HH mem.	260	0.06	-0.09 (0.20) [-0.11, -0.06]	-0.09 (0.21) [-0.11, -0.07]	-0.11 (0.25) [-0.13, -0.08]	0.20 (0.40)	0.23 (0.49)	0.37 (0.40)	0.45 (0.52)
Trust US govt.?	EL2	Participant	249	0.33	0.13** (0.06) [0.11, 0.13]	0.13** (0.07) [0.12, 0.14]	0.15** (0.08) [0.14, 0.17]	-0.05 (0.13)	-0.04 (0.15)	-0.11 (0.13)	-0.10 (0.16)
Trust public servants?	EL2	Participant	249	0.08	-0.01 (0.03) [-0.02, -0.01]	-0.01 (0.04) [-0.02, -0.01]	-0.01 (0.04) [-0.03, -0.01]	0.10 (0.07)	0.11 (0.09)	-0.10 (0.07)	-0.13 (0.09)

Notes: The additive Machismo index ranges from 0 to 7, and the PCA index is the first principal component of the same seven items; higher values on both measures indicate more machismo. The Partner freedom measures are based on nine questions asking whether a woman should need her husband's permission to work for pay, go shopping, visit family or friends, buy something for herself or change her personal appearance, participate in a community or political activity, become friends with someone, vote for a party or candidate, attend a neighborhood meeting, or attend a community assembly. Each item equals one when the respondent disagrees that permission should be required and zero when the respondent agrees. The additive index ranges from 0 to 9, and the PCA index is the first principal component of the same nine items; higher values on both measures indicate greater support for a woman's freedom to undertake these activities. The Partner freedom questions were administered to all in-person household respondents. The Partner emotions questions refer to the respondent's own partner and were administered exclusively to the participant's female spouse or partner. Survey data from the Endline 2 wave. Column (V) reports intent-to-treat (ITT) estimates; Column (VI) reports IV estimates where the indicator for receiving a REDDES contract in 2023 or 2024 is instrumented by treatment assignment; Column (VII) reports IV estimates where the indicator for migrating abroad for work since 2023 is instrumented by treatment assignment. Columns (VIII) and (X) report ITT estimates from specifications that interact treatment assignment with indicators for high baseline municipal migration and violence, respectively. Columns (IX) and (XI) report the corresponding IV estimates. In each IV specification, migration abroad and its interaction with the relevant subgroup indicator are jointly instrumented by treatment assignment and treatment assignment interacted with that indicator. Each heterogeneity column reports the interaction coefficient, which is the difference between the estimates for the high and low subgroups. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets for the ITT and IV estimates. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

Table A42: Security

	Wave	Respondent	N	Control Mean	ITT	IV Endogenous Var.:		Heterogeneity by:			
						REDDES Contract (2023 or 2024)?	Migrated abroad?	Migration (High)		Violence (High)	
						(VI)	(VII)	ITT (VIII)	IV (IX)	ITT (X)	IV (XI)
Security index (additive)	EL2	HH mem.	259	3.57	-0.26 (0.29) [-0.28, -0.25]	-0.28 (0.31) [-0.29, -0.26]	-0.33 (0.36) [-0.35, -0.31]	0.17 (0.58)	0.17 (0.72)	0.69 (0.58)	0.82 (0.75)
Security index (PCA)	EL2	HH mem.	229	0.19	-0.26 (0.26) [-0.63, 0.04]	-0.28 (0.28) [-0.66, 0.04]	-0.33 (0.33) [-0.79, 0.05]	0.18 (0.52)	0.17 (0.66)	0.51 (0.52)	0.59 (0.68)
Behavioral change index (additive)	EL2	HH mem.	260	1.56	0.78** (0.32) [0.72, 0.81]	0.83** (0.34) [0.76, 0.85]	0.97** (0.40) [0.90, 1.00]	-0.80 (0.63)	-0.86 (0.79)	-0.23 (0.65)	-0.11 (0.86)
Behavioral change index (PCA)	EL2	HH mem.	260	-0.38	0.63** (0.26) [0.58, 0.65]	0.66** (0.27) [0.61, 0.68]	0.78** (0.33) [0.72, 0.80]	-0.64 (0.50)	-0.69 (0.64)	-0.16 (0.52)	-0.06 (0.70)
Victimization index (additive)	EL2	HH mem.	260	0.22	0.08 (0.09) [0.05, 0.09]	0.09 (0.10) [0.05, 0.09]	0.10 (0.12) [0.06, 0.11]	0.14 (0.18)	0.18 (0.23)	-0.36* (0.19)	-0.44* (0.24)
Victimization index (PCA)	EL2	HH mem.	253	-0.08	0.09 (0.19) [-0.01, 0.10]	0.09 (0.20) [-0.01, 0.10]	0.11 (0.24) [-0.01, 0.12]	0.37 (0.35)	0.47 (0.45)	-0.69* (0.38)	-0.85* (0.48)

Notes: Survey data from the Endline 2 wave. Column (V) reports intent-to-treat (ITT) estimates; Column (VI) reports IV estimates where the indicator for receiving a REDDES contract in 2023 or 2024 is instrumented by treatment assignment; Column (VII) reports IV estimates where the indicator for migrating abroad for work since 2023 is instrumented by treatment assignment. Columns (VIII) and (X) report ITT estimates from specifications that interact treatment assignment with indicators for high baseline municipal migration and violence, respectively. Columns (IX) and (XI) report the corresponding IV estimates. In each IV specification, migration abroad and its interaction with the relevant subgroup indicator are jointly instrumented by treatment assignment and treatment assignment interacted with that indicator. Each heterogeneity column reports the interaction coefficient, which is the difference between the estimates for the high and low subgroups. All specifications include strata fixed effects and cluster SEs at the individual level. SEs are reported in parentheses. Strata-preserving Lee-style attrition intervals are reported in brackets for the ITT and IV estimates. Response is defined outcome by outcome, the pooled trimming fraction is applied within randomization strata using fractional cutoff weights, and IV intervals use one untrimmed first stage. Underlining denotes a plug-in endpoint p-value below 0.05. * (0.10) ** (0.05) *** (0.01)

E Sample recruitment and data collection

This section discusses the sample recruitment and randomization, survey design, data collection, and data cleaning and analysis protocols.

E.1 Sample recruitment and randomization

The study sample included 374 households located across 8 states in Mexico. We worked with an established recruiter in Mexico, REDDES, that recruits workers to work on farms in Washington and Oregon on H2-A visas. The primary participant was recruited through a recruitment drive organized by REDDES in May 2023. After the recruitment drive we randomized 60% of the participants to treatment and 40% to control.²⁸ Once the NGO had been provided the randomization list they assigned contracts within the list based on operational needs. Control group members were assigned contracts after all treatment group had been offered. Therefore, the RCT identifies the effect of migrants who migrate earlier compared to migrants who migrate later – the timing of the contract was randomized, and not whether one receives the contract or not.

Randomization strata for the randomization conducted for both the May 2023 recruitment event were:

- Strata 1: geographic. It was not feasible to stratify by state because of sample size. We created four groups of similar states to ensure geographical stratification:
 1. Oaxaca
 2. Michoacan and Guerrero
 3. Tlaxcala
 4. Estado de Mexico + Morelia + Hidalgo + Puebla
- Strata 2: above/below median homicide rate, based on INEGI statistics.

²⁸The higher assignment to treatment was due to preferences of the recruiter. Initially, a second recruitment event was planned and the recruiter wanted to give preference to people in the first recruitment event. The second recruitment wave was ultimately dropped from the study because exogenous weather events in January 2025 reduced the number of new contracts issued.

- Strata 3: above/below median migration rate, based on INEGI statistics.

E.2 Survey design

The survey instruments were developed in-house. To construct the survey the team researched similar surveys deployed in Mexico, leaning heavily on surveys deployed by INEGI, Mexico's statistical agency. Once the survey was developed, the team piloted the survey in the field, received feedback from enumerators, and then ran enumerator training.

E.3 Data collection

The surveys were administered by a survey company with extensive experience in collecting survey data in Mexico. Migrants who attended the recruitment event in May had to submit addresses and phone numbers to REDDES, our partner recruiting company. This information provided to the recruiter was used to locate their households. Generally, the respondent was called beforehand to schedule a time and place for the survey team to visit the respondents. In a few cases where the research team knew the address of the household but could not schedule a time to meet with the respondents, households were visited without notice. Data collection took place using the mobile app of SurveyCTO. Enumerators uploaded the data to the secure surveyCTO at the end of each day. The research team downloaded the data and ran daily checks on data quality.

The survey data was collected using the SurveyCTO platform. Surveys were collected in 4 rounds: Baseline (August 2023), Midline (October 2023), Endline 1 (May 2024), Endline 2 (Jan 2025). The baseline survey was administered to the migrant. The midline survey was administered to a member of the household, preferably a woman above the age of 17. In the Endline surveys, the survey team interviewed both the migrant and a member of the household. Our preference was to interview respondents in their home location. However, this was not always possible. The team conducted phone interviews in such cases.

E.4 Data analysis

The survey was downloaded from the project's SurveyCTO server using *pysurveycto*, a python wrapper for the SurveyCTO API. All data with PII was stored in Stanford's MedBox system, a secure server hosted by Stanford's School of Medicine. Once the data was downloaded, we downloaded a cleaning .do file from SurveyCTO to label variables and values in STATA in the dataset. Finally the data was deidentified by dropping all names, relationships, numbers, addresses and geocoordinates from the data.

The deidentified datasets across survey rounds were appended, resulting in a data with $374 \times 6 = 2,244$ rows. Each survey is identified by a key assigned to the participant for randomization purposes (*rand_key*) and a variable that identifies the survey (*survey*). If the respondent did not complete the survey in a given round, they are still present in the dataset and can be identified using an indicator for complete survey (*complete_survey*). After merging in data on whether a respondent received a contract, this working dataset was saved in Dropbox as *R1_finalData.dta* to allow the broader team to access the data. Any variables with names and labels that exceeded STATA's character limit were renamed and relabelled. The resulting data file, *R1_finalData_Clean.dta*, was saved to the project's Dropbox directory as well.

Outcomes defined in the PAP were coded using the survey data. We employed the following data cleaning procedures:

- Trimming: for all numerical values, such as earnings from labor income and business income:
 - We will aggregate numerical values to a common unit. For example, if someone reports several jobs, we will compute their monthly income across all jobs.
 - The final analysis variable will be trimmed at the 5% and 95% level.
- Indices
 - Externally-validated indices e.g., PHQ-9 depression index: we will follow the index to compute the value of the index

- Internally-constructed indices e.g., victimization index: we will construct two versions of the index: (a) a simple sum of the values, as described in the table, and (b) the first principal component of the index.
- Exchange rates: To standardize currency values across survey waves, we assigned fixed exchange rates for Mexican Peso (MXN) and Canadian Dollar (CAD) to US Dollar (USD).
 - Baseline: We used the spot rate from September 11, 2023. The MXN/USD rate was set to 17.2 and the CAD/USD rate was set to 1.35.
 - Midline: We used the spot rate from December 6, 2024. The MXN/USD rate was set to 17.45 and CAD/USD rate was set to 1.37.
 - Endline I: Due to the extended duration of the survey, exchange rates were determined by averaging the spot rates from two key dates. The resulting MXN/USD rate was 18.54, calculated as the average of the reference period rate (17.51 on Nov 1, 2023) and the survey period rate (19.56 on Aug 5, 2024). The CAD/USD rate was set at 1.38 for this same period.
 - Endline II: The spot rates we used were 20.28, and 1.43 for the MXN/USD a CAD/USD rates respectively.

E.5 Lee bounds construction

We construct the ITT and IV bounds separately. The ITT bounds target participants whose outcomes would be observed under either assignment, while the IV bounds target the subset of these participants whose migration decision changes with treatment assignment. Let Z_i denote treatment assignment and let $R_i(z)$ indicate that the outcome would be observed under assignment z .

ITT bounds. For each outcome, we estimate the response rate in each assignment arm. Let r_h and r_ℓ denote the higher and lower response rates. Under monotone selection, assignment moves response in the same direction for every participant. Respondents in the lower-response arm are

therefore observed under either assignment, while the higher-response arm also includes participants whose outcomes are observed only under that assignment. We estimate the share of respondents in the higher-response arm who belong to this latter group as

$$\lambda = 1 - \frac{r_\ell}{r_h} = \frac{r_h - r_\ell}{r_h}. \quad (4)$$

We remove the fraction λ from each tail of the outcome distribution in the higher-response arm and re-estimate equation 1. When treatment has the higher response rate, removing the upper tail gives the lower bound and removing the lower tail gives the upper bound. When control has the higher response rate, the ordering reverses. These bounds target the effect of assignment among participants whose outcomes would be observed under either assignment,

$$\beta_{ITT}^{AO} = E[Y_i(1) - Y_i(0) \mid R_i(1) = R_i(0) = 1]. \quad (5)$$

IV bounds. The trimmed ITT coefficients do not directly bound the effect of migration because the first stage may differ across response principal strata. Let $D_i(z)$ denote migration status under assignment z . We impose the standard IV assumptions and two additional sample-selection restrictions: assignment affects both the outcome and response only through migration, and migration can only weakly increase response among compliers. The IV bounds therefore target

$$\beta_{IV}^{AO} = E[Y_i(1) - Y_i(0) \mid D_i(1) > D_i(0), R_i(1) = R_i(0) = 1], \quad (6)$$

the effect of migration for compliers whose outcomes would be observed whether or not they migrated. This population differs from the full population of compliers in equation 2.

Following ?, define $p_{dr|z} = \Pr(D_i = d, R_i = r \mid Z_i = z)$, $q_{1|z} = \Pr(R_i = 1 \mid Z_i = z)$, and $\bar{Y}^{zdr} = E[Y_i \mid Z_i = z, D_i = d, R_i = r]$. The share of always-observed compliers is

$$\pi_c = p_{01|0} - p_{01|1}, \quad (7)$$

while $\pi_m = q_{1|1} - q_{1|0}$ is the share of compliers observed only when they migrate and $\pi_a = p_{11|0}$ is the share of observed always-takers. The untreated outcome mean for always-observed compliers is point identified

as

$$\mu_{0,c} = \frac{p_{01|0}\bar{Y}^{001} - p_{01|1}\bar{Y}^{101}}{\pi_c}. \quad (8)$$

Let $\alpha_c = \pi_c/p_{11|1}$, $\alpha_m = \pi_m/p_{11|1}$, and let $m_{111}(a, b)$ denote the mean between quantiles a and b of the outcome distribution among respondents with $Z_i = D_i = R_i = 1$. The lower and upper bounds on the treated outcome mean for always-observed compliers are

$$\mu_{1,c}^L = \max \left\{ m_{111}(0, \alpha_c), \frac{(\pi_c + \pi_a)m_{111}(0, 1 - \alpha_m) - \pi_a\bar{Y}^{011}}{\pi_c} \right\}, \quad (9)$$

$$\mu_{1,c}^U = \min \left\{ m_{111}(1 - \alpha_c, 1), \frac{(\pi_c + \pi_a)m_{111}(\alpha_m, 1) - \pi_a\bar{Y}^{011}}{\pi_c} \right\}. \quad (10)$$

The IV identified set is therefore

$$\beta_{IV}^{AO} \in [\mu_{1,c}^L - \mu_{0,c}, \mu_{1,c}^U - \mu_{0,c}]. \quad (11)$$

This construction uses the outcome distribution among respondents who were assigned to treatment and migrated, together with the observed shares of each compliance and response group, to bound the effect of migration for always-observed compliers.

F External datasets

This section gives information on sources for external data used in the analysis in the paper.

F.1 Localidad database

The data available at time of randomization was geographical data about localidades, Mexico’s finest administrative unit. Randomization checks using these data are presented in Appendix Table A2. We construct this localidad-level database by drawing on four primary sources.

Census and geographic data (INEGI). Population, household counts, and the working-age male population (ages 18–60) come from the 2020 Census. INEGI also provides the main economic activity and top three products for each localidad, along with geographic coordinates (latitude and longitude).²⁹ We use INEGI’s migrant questionnaire to measure migration over the preceding 5 years: total migrants, migrants to the United States, migrants to other destinations, return migrants, median age of migrants, median year of return, and average migration duration. The migrant questionnaire is administered to the expanded census sample, so we construct these seven variables at the municipality level and assign each localidad the value of its municipality.

Crime and violence data (INEGI and DGIS). Homicide counts at the localidad level are available annually from 2015 through 2020, and we construct a five-year average over 2016–2020. We count a death as a homicide when the recorded cause falls in ICD-10 codes X85 to Y09, and we assign it to the localidad where the death occurred.³⁰ Injury assaults for 2019 and 2020 come from the Dirección General de Información en Salud (DGIS), coded on the same ICD-10 range and assigned to the localidad where the assault occurred.³¹ We also incorporate a binary indicator from the survey com-

²⁹Census microdata were downloaded from <https://www.inegi.org.mx/programas/ccpv/2020> on September, 2022. We use the expanded questionnaire sample.

³⁰Mortality microdata were downloaded from <https://www.inegi.org.mx/programas/mortalidad/> on 10/4/2022. The 2019 cause-of-death catalogue is incomplete, so we apply the 2015 catalogue to that year.

³¹Downloaded from http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da_lesiones_gobmx.html on 10/5/2022.

pany OPINA, which flags localidades deemed too dangerous for enumerator access.³²

Deprivation indices (CONEVAL). CONEVAL provides 11 deprivation indicators at the localidad level: illiteracy rate, school non-attendance among children aged 6–14, incomplete elementary education among adults over 15, lack of health care access, and dwelling characteristics including dirt floors, no toilet, no public water, no sewer, no electricity, no washing machine, and no refrigerator. CONEVAL aggregates these into a normalized PCA index and a categorical social deprivation index using the Dalenius-Hodges method. We compute both with CONEVAL’s own published program, applied to the INEGI ITER 2020 file.³³

Transport connectivity (own calculation and external sources). Distance to the nearest paved road is calculated from each localidad centroid to the closest motorway or primary-through-tertiary road in OpenStreetMap, using data from Geofabrik.³⁴ Distance to the nearest airport with a direct flight to Tijuana is calculated using airports geocoded via the Google Maps API; flight frequency data for July 2022 come from FlightConnections.com.³⁵

F.2 Department of Labor data on universe of H-2A contracts

Data on the universe of H-2A contracts is from the DoL Disclosure Data covering 2008-2024 and reported in Appendix Table A1.³⁶ Data correspond to a fiscal year (October 1 - September 30).

³²Provided directly by OPINA in August 2022 and not publicly distributed.

³³Downloaded from https://www.coneval.org.mx/Medicion/IRS/Paginas/Indice_Rezago_Social_2020.aspx on 10/7/2022. Municipality-level annexes covering 2000–2020 were downloaded from https://www.coneval.org.mx/Medicion/IRS/Paginas/Indice_de_Rezago_Social_2020_anexos.aspx on 2/20/2023.

³⁴Downloaded from <http://download.geofabrik.de/north-america/mexico-latest-free.shp.zip>, corresponding to the OpenStreetMap snapshot of 10/10/2022 and distributed under the Open Database License 1.0. We treat the motorway, trunk, primary, secondary, and tertiary classes, together with their link variants, as paved roads.

³⁵Airport names were taken from <https://airportsbase.org/Mexico/all/airports/page3> and geocoded through the Google Maps Geocoding API. Flight counts were collected from <https://www.flightconnections.com/flights-to-tijuana-tij> in July 2022.

³⁶Accessed via <https://www.dol.gov/agencies/eta/foreign-labor/performance> and downloaded on 11/24/2025. The H-2A files sit under Disclosure Data, in the Historical Case Disclosure Data section.

F.3 Nationally-representative Mexican data

We benchmark the RCT sample against five nationally representative surveys, reported in Appendix Table A6: the National Survey of Household Income and Expenditure (ENIGH, 2022), the National Survey of Self-Reported Well-Being (ENBIARE, 2021), the National Survey of Victimization and Perception of Public Safety (ENVIPE, 2023), wave 7 of the World Values Survey (2018), and the Latin American Public Opinion Project (LAPOP, 2023).³⁷

Where possible, each survey is reported for three groups of increasing similarity to our sample: all Mexican states, the eight states our participants come from (Guerrero, Hidalgo, Estado de México, Michoacán de Ocampo, Morelos, Oaxaca, Puebla, and Tlaxcala), and the three states that supply most of the sample (Michoacán de Ocampo, Oaxaca, and Tlaxcala). The two ENIGH panels restrict the comparison to agricultural households, the closest available proxy for the population REDDES recruits from. ENBIARE, ENVIPE, the World Values Survey, and LAPOP carry no agricultural indicator, so those panels compare against all households and the benchmark is correspondingly looser.

F.3.1 Comparison to survey of H-2A migrants in Monterrey, Mexico

All H-2A applicants must complete their consular processing in person, making the consulate a focal point where all migrants are observable regardless of recruiter, employer, or destination. We partnered with El Colegio de la Frontera Norte (COLEF) to send a team of surveyors to a hotspot near the US consulate in Monterrey in two waves during the 2024 season, from June 18th to July 30th and from September 20th to October 24th. Enumerators approached applicants waiting for their visa appointments and conducted the survey on the spot. We approached over 1,358 people, and 563 consented to the survey.³⁸ This is not a probabilistic sample. Given

³⁷The three INEGI surveys were accessed via <https://en.www.inegi.org.mx/programas/>. ENIGH, at <https://en.www.inegi.org.mx/programas/enigh/nc/2022/>, and ENVIPE were downloaded on 2/25/2025; ENBIARE, at <https://en.www.inegi.org.mx/programas/enbiare/2021/>, was downloaded on 3/18/2025. The World Values Survey was accessed via <https://www.worldvaluessurvey.org/WVSContents.jsp> and downloaded on 3/18/2025. LAPOP was accessed via <https://www.vanderbilt.edu/lapop/raw-data.php> and downloaded on 3/21/2025.

³⁸Unfortunately, we didn't log refusals during the first two and a half weeks of fieldwork. The denominator in wave 1 is therefore 957, which includes all 258 people who consented throughout the wave but

the informal nature of recruiting around the consulate, we used an opportunistic approach to recruit respondents.

Two key characteristics of our RCT sample are that all migrants are first-timers and exclusively traveled to Oregon and Washington. In the Monterrey study, 63% of respondents had previously migrated with an H-2A visa, and named 39 different intended destination states. Florida alone accounts for 25% of the respondents, followed by North Carolina (12.8%) and Michigan (9.2%), while Washington and Oregon together account for only 2.5% of the sample.³⁹ Appendix Table A7 and Appendix Figure A2 report the geographic coverage of both samples with respect to the universe of H-2A positions certified by the Department of Labor in FY2023. Appendix Table A8 compares the Consulate and RCT samples across demographics and working and living conditions for repeat migrants.

only the 699 refusals logged after the first two and a half weeks. Thus, the consent rates are not comparable across waves. The consent rate was 27% in wave 1 (258 of 957) and 76% in wave 2 (305 of 401).

³⁹Note that our consulate study undersamples workers traveling to western states, likely because they would have gone through the consulate in Tijuana and not Monterrey.

G Ethical appendix

We acknowledge that randomizing access to an opportunity as consequential as legal work in the United States raises serious ethical considerations, which we weighed in designing the experiment. This appendix reports them in the structured ethics-appendix format proposed by [Asiedu et al. \(2021\)](#).

G.1 Policy Equipoise and Scarcity

Is there policy equipoise? That is, is there uncertainty regarding participants' net benefits from each arm of the study relative to the other arms and to the best possible policy to which participants could have access? If not, ethical randomization requires two conditions related to scarcity: (1) Was there scarcity, i.e., did the inclusion of multiple arms change the expected aggregate value of the programs delivered? (2) Do all ex-ante identifiable participants have equal moral or legal claims to the scarce programs?

There is little doubt that migrating with an H-2A visa to work in the United States improves a family's economic situation. However, we note that the broader impacts of migrating are not clear, so there is potential equipoise on the net benefit of migration. The project may then satisfy policy equipoise: the treatment arm is likely, but not clearly, better for participants than the control arm. However, even without policy equipoise, randomization is nonetheless ethical because both scarcity conditions are met.

First, the study did not change the aggregate value of the programs delivered. The number of H-2A contracts is set by the demand of US farms, not by the research team, and REDDES fills them from a standing pool of recruits it screens months in advance, since contracts often arrive on short notice. Randomizing the order of the waitlist did not reduce how many workers migrated; it determined only who was prioritized as contracts became available, and every eligible participant in our sample was eventually offered a visa (workers assigned to control began migrating in the third season). Second, all ex-ante identifiable participants had equal claims to the scarce visas. Participants were similar—most were agricultural workers in rural areas of central and southern Mexico, with little

variation in income—and, to our knowledge, there was no a priori basis for treating any subgroup as more in need or as holding a stronger moral or legal claim to migrate first.

G.2 Role of Researchers with Respect to Implementation

Are researchers “active” researchers, i.e., did the researchers have direct decision-making power over whether and how to implement the program? If YES, what was the disclosure to participants and informed consent process for participation in the program? Providing IRB approval details may be sufficient but further clarification of any important issues should be discussed here. If NO, i.e., implementation was separate, explain the separation.

Our role was primarily that of evaluators rather than implementers. REDDES, the NGO in Mexico that carried out the recruitment, screening, and migration processes, was doing this work before our study and continued to do so after it ended. The number of H-2A contracts was set by the demand of US farms for H-2A workers and was not affected by the experiment, so the total number of people migrating each year stayed the same. Our role was simply to randomly order which particular people got visas earlier relative to later, replacing a former ad-hoc method of allocating visas. The informed-consent process and IRB approval are described under Potential Harms from Data Collection.

G.3 Potential Harms to Participants or Non-Participants from the Interventions or Policies

Does the intervention, policy or product being studied pose potential harm to participants or non-participants? Related, are participants or likely affected non-participants particularly vulnerable? Also related, are participants’ access to future services or policies changed because of participation in the study? If yes to any of the above, what is being done to mitigate such risks?

Participation in the research did not change participants’ access to future services, and, beyond the privacy incidents reported in Section G.9, did not expose them to harm. The randomization of the waitlist did change the timing of migration: control-group migrants were delayed by approximately two seasons. Under the recruiter’s previous allocation method, however, some workers would also have been delayed by two seasons; the

experiment only replaced a discretionary ordering with a lottery, which is ex-ante fair across participants. The intervention itself—migration—did carry effects relevant to this question. Most notably, we measure a decline in the mental health of migrants' wives and negative effects on some components of working conditions abroad. We have shared these findings with our implementing partners so they can incorporate them into recruitment, pre-departure, and support programming.

G.4 Potential Harms to Research Participants or Research Staff from Data Collection or Research Protocols

Are data collection and/or research procedures adherent to privacy, confidentiality, risk-management, and informed consent protocols with regard to human subjects? Are they respectful of community norms, e.g., community consent not merely individual consent, when appropriate? Are there potential harms to research staff from conducting the data collection that are beyond “normal” risks?

Data collection and research procedures adhered to privacy, confidentiality, risk-management and informed consent. The study was approved by Stanford IRB (protocol number: IRB-59508). Individuals were informed about the research study during the recruitment event and told that participation was optional; individual informed consent was obtained before each survey.

The survey data was collected using the SurveyCTO platform. The survey was downloaded from the project's SurveyCTO server using *pysurveycto*, a python wrapper for the SurveyCTO API. All data with PII was stored in Stanford's MedBox system, a secure server hosted by Stanford's School of Medicine.

We encountered three privacy incidents related to enumerator access of participant data over the course of the study. These incidents were reported to Stanford IRB and the Stanford Privacy Office; the incidents themselves are described under Other Ethics Issues. All research participants were contacted after each incident to inform them of the incident.

There were security concerns for field staff, especially in certain parts of the country. We worked with a team of enumerators with extensive field experience in Mexico. To mitigate security concerns we screened out municipalities with more than 50 homicides per 100,000 people and addi-

tionally reviewed the list of planned survey locations with enumerators to allow enumerators to provide feedback on areas that were insecure. Despite these precautions, in two cases enumerators ran into armed groups. There was no injury to enumerators but subsequent in-person data collection stopped completely in those areas.

G.5 Financial and Reputational Conflicts of Interest

Do any of the researchers have financial conflicts of interest with regard to the results of the research? Do any of the researchers have potential reputational conflicts of interest?

No researcher has a financial conflict of interest with regard to the results. None of the authors holds a financial stake in the outcome of the evaluation. The researchers do not have reputational conflicts of interest.

G.6 Intellectual Freedom

Were there any contractual limitations on the ability of the researchers to report the results of the study? If so, what were those restrictions, and who were they from?

No. Neither implementing partner—REDDES (the recruiter) nor the employer cooperative—had any contractual right to review, restrict, or veto the results or their publication.

G.7 Feedback to Participants or Communities

Is there a plan for providing feedback on research results to participants or communities? If yes, what is the plan? If not, why not?

We engaged actively with stakeholders throughout the project. We have worked closely with our implementing partners, REDDES and wafla, and have presented findings at numerous conferences with academic, policy, and advocacy stakeholders. Feedback to the participating workers and their families runs primarily through REDDES and wafla, which holds the direct relationship with them.

G.8 Foreseeable Misuse of Research Results

Is there a foreseeable and plausible risk that the results of the research will be misused and/or deliberately misinterpreted by interested parties to the detriment of other interested parties? If yes, please explain any efforts to mitigate such risk.

Migration is a heavily debated policy issue, which creates a foreseeable risk that our findings could be cited selectively. A reader favoring the expansion of legal migration could emphasize the large income gains while setting aside the social costs we document—the decline in spouses’ mental health, changes in household dynamics, and adverse working conditions for some workers—and a reader opposed could do the reverse. Our mitigation is to report the benefits and the costs prominently and together, so that no single result can be detached from the full picture, and to engage with stakeholders across the range of policy positions when we share the findings. We have also disseminated the research findings to a broad set of academic, policy, and advocacy stakeholders to share the results.

G.9 Other Ethics Issues to Discuss

Are there any other issues to discuss?

Three privacy incidents occurred over the course of the project. We reported all three to the Stanford Institutional Review Board and the Stanford University Privacy Office. Survey responses are held on a secure Stanford server and were not affected. We traced two of the incidents to a single enumerator who worked on the project; we could not trace the source of the third. In each case, we contacted all participants and their listed contacts to explain that legitimate communication about recruitment or visas comes only from the research team and its official partners. Once we had identified the enumerator responsible, we ended our engagement with the data collection firm and moved subsequent fieldwork to a different firm.