

# The Costs and Benefits of Guest Worker Programs: Experimental Evidence from the UAE-India Corridor

Suresh Naidu, Yaw Nyarko, and Shing-Yi Wang

October 2024

# Guest Worker Programs

- ▶ Increasing migration from poor to rich countries has potentially large impacts on welfare and inequality, but it is politically controversial.
  - ▶ Resistance from natives, as well as controversy over treatment of migrants.
- ▶ Negative cross-country correlation between migrant rights and level of migration (Ruhs 2014)
- ▶ Non-democracies like Gulf countries implement huge guest worker programs (that have no pathways to permanent migration or citizenship)
  - ▶ 90% of the private workforce in the UAE are migrants
  - ▶ South Asia to Gulf countries is the second largest circular migration flow in the world
- ▶ Repugnant economic transaction (Clemens 2017)
  - ▶ Reports of exploitative conditions, false promises from labor intermediaries (Das et al. 2016)

# Media View on Guest Worker Programs

**Dubai workers for British firm beaten by police over strike**

Thousands of Qatar World Cup workers 'subjected to life-threatening heat'

**Qatar: Abuse of migrant workers remains widespread as World Cup stadium hosts first match**

"Working like robots", Tanzanian domestic workers raped and abused in Gulf

**'Slave labor': Migrants building Guggenheim, Louvre in UAE 'treated like battery hens'**

Migrant Workers are Still Dying on Qatari Construction Sites

**WHY ARE MIGRANT WORKERS' PASSPORTS STILL BEING HELD HOSTAGE IN THE UAE?**

Poverty, Poor Conditions Drive Gulf Migrant Workers to Suicide

Qatar 'prevents workers from taking annual leave'

**Abused Migrant Workers End Up in Prison After Trying to Flee**

Saudi court 'sentences foreign workers to flogging and jail' for unpaid wages unrest

UN gives Qatar a year to end forced labour of migrant workers

Migrant workers suffer 'appalling treatment' in Qatar World Cup stadiums, says Amnesty

30,000 Indian workers died in Gulf states between 2005-2015: Report

**HRW: Louvre Abu Dhabi 'tainted' by worker abuse**

Modern day slaves: How Indian migrant workers' rights are violated in the Gulf

Complaint filed against Qatar to UN for inhumane working conditions

**Indian migrant worker dies after leaving Qatar World Cup venue**

35 UGANDANS COMMITTED SUICIDE IN THE UAE THIS YEAR

**Domestic workers traded and sold via Twitter in Arab countries**

**Migrant workers fight back against extreme exploitation in Dubai**

## Opposing View

- ▶ Rational model suggests that workers make this choice only if it is expected to make them better off.
- ▶ “A guest worker program is the most effective contribution we can make to improving the lives of the world’s working poor.” (Rodrik 2007)
- ▶ “By welcoming migrant workers, the UAE and its neighbor Qatar do more than any other rich country to reduce global inequality. Through migration, Qatar’s per-person contribution to the reduction in global inequality is almost three times that which would be achieved by eliminating all inequality in the United States” (Posner and Weyl 2014)
  - ▶ Implicit in this view is that guest worker programs are demand-constrained, not supply-constrained.

## Research Question

What are the benefits and costs to migration via guest worker programs (visas allowing legal, temporary migration)?

- ▶ Look at earnings and employment outcomes
- ▶ Additionally, we account for costs to workers of obtaining jobs via labor intermediaries
- ▶ Effects on well-being and job amenities: potential that some of the earnings effects are compensating differentials

## What we do

- ▶ Partner with UAE Ministry of Labor (now the Ministry of Human Resources and Emiratisation) and two large construction firms
- ▶ Follow UAE recruiters around India to survey potential migrants before they receive a job offer.
- ▶ Randomize job offers among applicants who are screened in by the firms
- ▶ Collect four rounds of survey data (one baseline, two tracking surveys, one follow-up survey)
- ▶ Have data on work outcomes (including earnings), subjective well-being and work satisfaction, social networks and attitudes, as well as contracts with labor intermediaries

# Contribution

- ▶ Solve the fundamental selection problem in who migrates with a randomized experiment
- ▶ First experimental estimate of the *individual costs* of guest worker programs: intermediary fees, well-being, job amenities.
  - ▶ Necessary for accurate estimates of the returns to migration
  - ▶ Negative impacts on well-being and intermediary fees attenuate welfare gains to workers from guest worker programs.
  - ▶ Measure whether guest workers have accurate expectations before migration
- ▶ Document substantial non-compliance with treatment: almost half of treated group don't go.
  - ▶ Consistent with negative impacts on subjective well-being.
- ▶ Recover marginal treatment effects on net returns to guest worker program in generalized Roy model.
  - ▶ Never-takers not migrating because of low non-wage amenities.

## Context: Labor Intermediaries

- ▶ Intermediaries contracted with before job search.
- ▶ Brokers find and bring workers (mainly from villages) to job interviews.
- ▶ Generally financed by loan from family, friends, or moneylenders.
- ▶ Labor intermediaries for international jobs are required to be licensed by the Indian government.
- ▶ However, enforcement of these regulations is unclear.
  - ▶ For example, the law in India caps the fees these intermediaries can charge workers at INR 10,000 but we find the average fee paid by workers to be INR 64,000 (about USD \$1000)



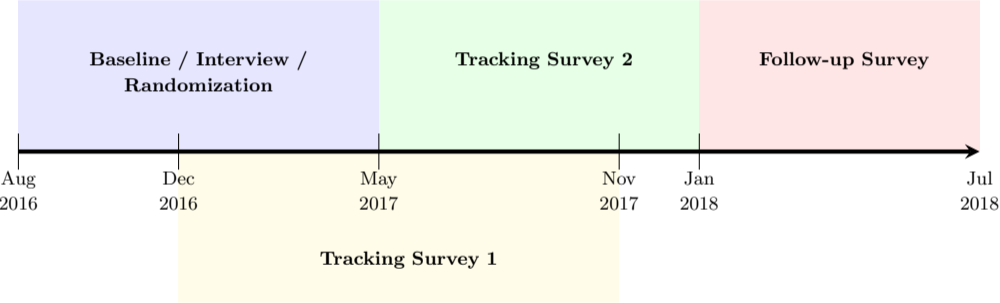
## Agent Contract Characteristics

	Mean	SD	N
<b>Panel A: Agent Services</b>			
Agent Use	1.00	0.00	1,223
Arranging for Travel	0.79	0.41	1,222
Paying for Travel	0.31	0.46	1,222
Helping with Logistics	0.85	0.35	1,219
Skills Training and Interview Prep	0.75	0.44	1,221
Applying for Passports	0.11	0.31	1,222
Applying for Visas	0.98	0.14	1,218
Paying for Visa Fees	0.38	0.48	1,129
Paying for Passport Fees	0.03	0.17	1,215
Access to Job Interviews	0.81	0.39	1,209
Help with Medical Screening	0.63	0.48	1,222
<b>Panel B: Agent Fees</b>			
Total Agent Fee	64,442.42	12,815.57	1,220
Agent Fee Paid Upfront	1,615.26	6,308.77	1,219
Agent Fee Paid Contingent	60,442.04	17,158.19	1,219

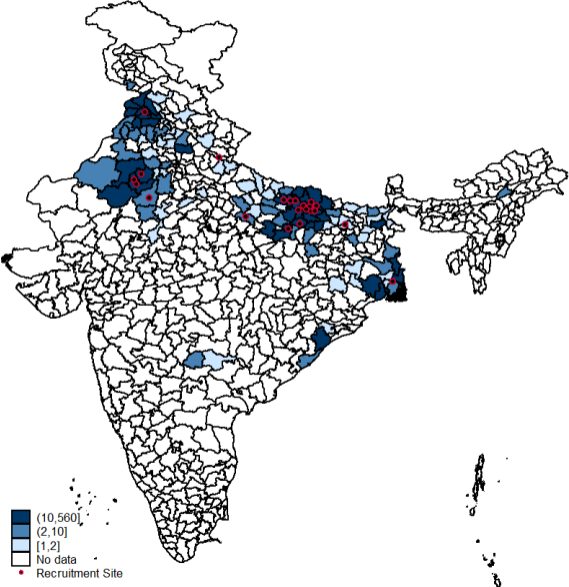
# Experiment Timeline

- ▶ Recruitment day
  - ▶ Workers show up at recruitment center in India in response to a job advertisement.
  - ▶ Jobs vary, but generally are: carpenter, mason, helper.
  - ▶ Our enumerators conduct a baseline survey.
  - ▶ Workers are tested on construction skills by representatives from a UAE firm.
- ▶ Within a day after the recruitment day
  - ▶ We receive a list from the firm on who passed the firm's selection process.
  - ▶ Among those who are above the firm's bar for an offer, we randomize offers 5/7 of workers to proceed with the visa and return the list to the firm.

# Survey Timeline



# Recruitment Locations and Worker District of Origin



# Estimating Equations

Estimate:

$$y_i^{\text{followup}} = \beta \text{Treat}_i + \delta_{FE} + \epsilon_i \quad (1)$$

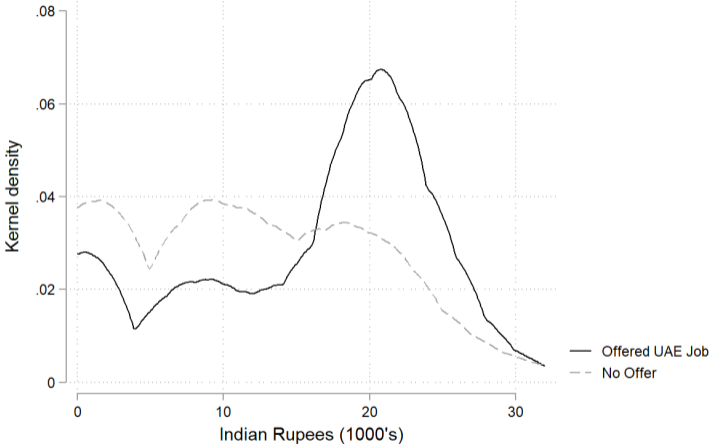
- ▶ Intent-to-treat analysis.
- ▶  $\text{Treat}_i$  corresponds to proceeding with a job offer from the construction firm at this recruitment center
  - ▶ Treated workers can choose not to take the offer.
  - ▶ Control workers can get offers from other UAE firms, or even the same UAE firm at different recruitment center.
- ▶ Two sets of controls:
  - ▶ Randomization group (firm  $\times$  date of recruitment)
  - ▶ Add enumerator FE + re-weight to handle attrition.
- ▶ Pre-registered experiment, but did not pre-specify regressions.

# Effects on Migration Outcomes (First Stage)

	Unweighted Rand Group FE	Weighted All Fe	N	Control Mean	Control Std.Dev.
In UAE	0.29*** (0.04)	0.24*** (0.04)	2,314	0.23	0.42
In UAE (Expanded)	0.23*** (0.03)	0.16*** (0.02)	3,557	0.25	0.43
Home District Resident	-0.20*** (0.05)	-0.15*** (0.04)	2,314	0.57	0.50
In UAE Experiment Firm (Expanded)	0.30*** (0.04)	0.22*** (0.03)	3,481	0.15	0.35
Construction Job	0.14*** (0.03)	0.13*** (0.03)	2,008	0.71	0.45

Notes: Each row represents a different outcome variable and each column corresponds to different specifications. The first column includes only randomization group fixed effects. The second column adds fixed effects for enumerator as well as re-weights for attrition. Each coefficient estimate of the impact of a job offer is from a separate regression, and standard errors clustered by randomization group are shown in parentheses.

# Effects on Monthly Earnings



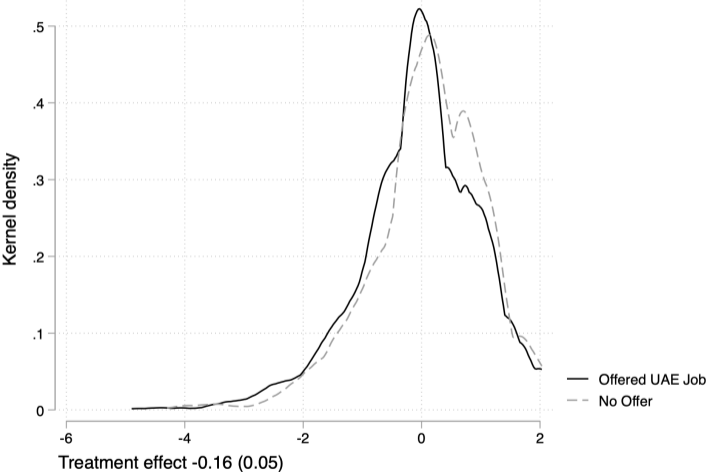
Treatment effect 3.68 (0.67)

# Measuring Well-Being

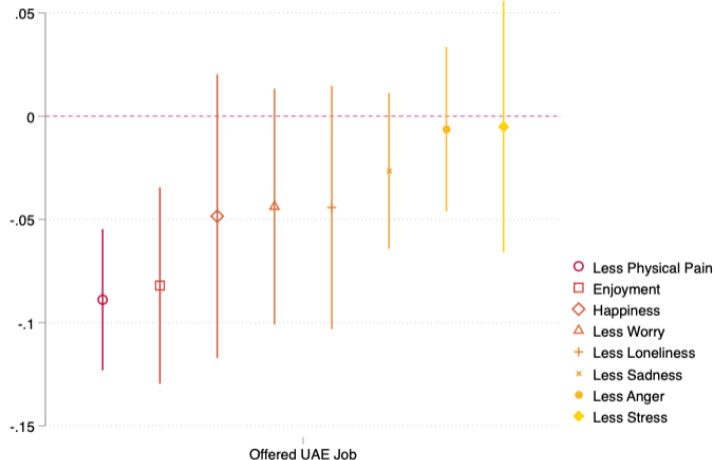
- ▶ Standard questions with 8 component measures, each on 3 point scale (Rarely, Sometimes, Often).
- ▶ How often did you experience the following feelings during the last month?
- ▶ Stress, Worry, Anger, Sadness, Pain, Loneliness, Enjoyment, Happiness.
- ▶ Index = standardized weighted index (i.e. mean 0 with standard deviation 1)



# Effects on Well-Being



# Components of Well-Being

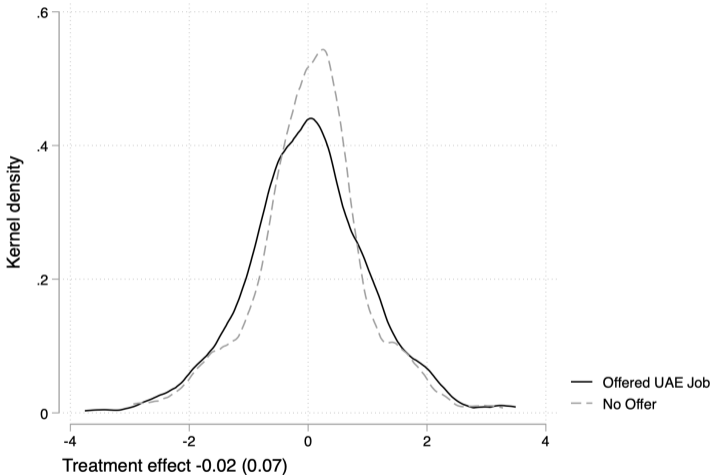


Notes: Each dot is the coefficient on being offered a UAE job in a regression with a separate outcome. The bands around the dot give the 90% confidence intervals.

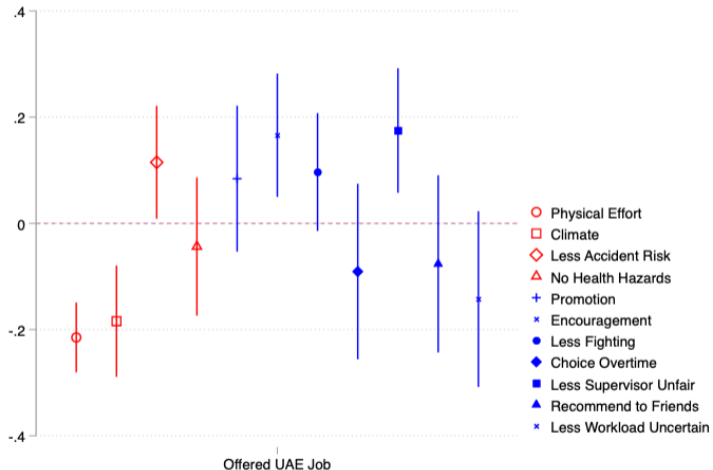
# Measuring Work Satisfaction

- ▶ 11 components, each on 5 point scale (Strongly Agree to Strongly Disagree).
- ▶ Climate at workplace, Risk of accident, Health hazards, Supervisor Encouragement, Control over overtime, Physical effort, Opportunity for Promotion, Fighting, Supervisor unfair, Recommend Job to friends, Workload uncertainty
- ▶ Index = standardized weighted index (i.e. mean 0 with standard deviation 1)

# Effects on Work Satisfaction



# Components of Work Satisfaction



Notes: Each dot is the coefficient on being offered a UAE job in a regression with a separate outcome. The bands around the dot give the 90% confidence intervals.

## Effects on Financial Outcomes

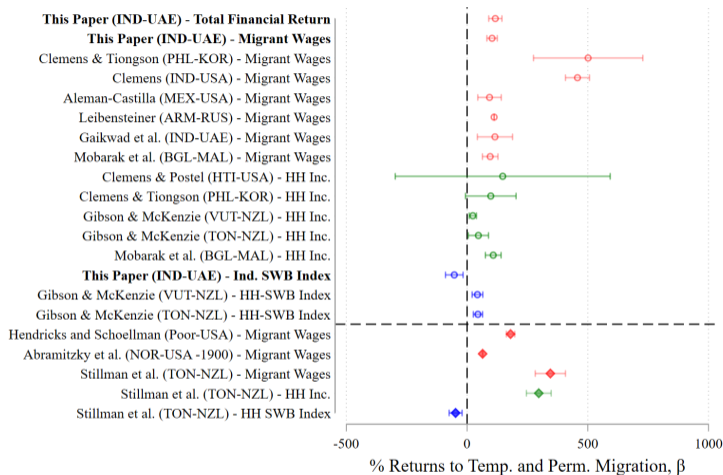
	Unweighted Rand Group FE	Weighted All Fe	N	Control Mean	Control Std.Dev.
Net Assets	-74.30 (78.22)	-79.48 (78.06)	2,316	943.75	1,383.85
Debt	6.39* (3.25)	5.10 (3.68)	2,322	33.17	75.43
Remittances Last Month	4.02*** (1.42)	4.03*** (1.38)	2,356	7.64	20.26
Agent Fee Paid	14.37*** (2.42)	12.45*** (2.28)	2,303	28.73	32.04

Notes: Each row represents a different outcome variable and each column corresponds to different specifications. The first column includes only randomization group fixed effects. The second column adds fixed effects for enumerator as well as re-weights for attrition. Each coefficient estimate of the impact of a job offer is from a separate regression, and standard errors clustered by randomization group are shown in parentheses.

## Effects on Compensation Net of Agent Fees

- ▶ Total Compensation - (Contingent Fee/ Average Expected Stay)
- ▶ Average expected stay in the UAE is 32.66 months
- ▶ Average contingent fee 60,442 INR or 1,850 INR per month (9% of earnings in the UAE)
- ▶ Reduces impact of the job offer on total compensation by about 9.6%
- ▶ Overall, about 9-10% of the surplus from migration goes to intermediaries and most goes to migrants and their households

# Comparison with Migration Literature



Notes: The figure shows returns for migrant earnings (red), household income (green), and subjective well-being (blue). The hollow dots above the line show effects from temporary migration, while the diamonds below the dotted line show them for permanent migration. Labels show origin-destination using World Bank country codes. 95% confidence intervals.

- ▶ Similar return but the UAE-India income gap (10x) is larger than other contexts.



## Total Effects on Welfare

- ▶ Put together non-pecuniary and financial effects of guest work via utility function over well-being and money.
- ▶ Calibrate the utility function weight on “subjective well-being”.
  - ▶ Match extrapolated marginal treatment effects on well-being from effects on never-takers.
- ▶ Guest worker welfare effects much smaller than earnings effects alone:
  - ▶ 30% increase in welfare from increased earnings alone falls to 10% when well-being effects included.

# Conclusion

- ▶ High pecuniary returns to guest worker migration but...
- ▶ Substantial costs: agent fees (despite laws), fall in well-being (consistent with low take-up)
  - ▶ Driven by physical demands of the job and harsh climate conditions
- ▶ However, in contrast to popular media representation, we do not find evidence of high debt or worker misperceptions.
- ▶ Potential that the gains outlast short-run drop in well-being, or transferred to other household members.
- ▶ Guest-worker migration *supply-constrained*:
  - ▶ The wage rate paid and the amount of migration is too low
  - ▶ Improving labor standards could *increase* the level of migration.