Discussion of Khanna & Morales (2024): H-1B and Indian IT: Brain Gain vs Drain

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Main Result: Brain Gain > Brain Drain

- How does high skilled migration affect *both* sending and receiving countries?
- Traditional concern: brain drain, migration bad for origin countries
- But this misses endogenous schooling choice
  - Chance of H-1B induces Indians to acquire CS skills
  - When cap binds, skilled workers stay in India, generate spillovers to Indian IT
  - Net effect: +45.6% Indian CS workforce
- Evidence of same brain gain for Filipino nurses (Abarcar and Theoharides, 2024)
- Welfare: US +0.04%, India +0.08%
  - Distributional consequences (-$3.9% US CS workers)

Main contribution of paper: cleanly establishing brain gain mechanism

- Main empirical work: link between H1B caps and Indian enrollment
- Compelling, and nice use of data
- However, welfare effects are driven by the GE parameters

Discussion points

1. Direct vs. indirect effects
2. How should scarce visas be allocated?
3. US Presidential Proclamation

Direct vs. indirect effects

Direct vs. indirect effects

- Main contribution of paper is Indian side
- But policy debate on the US side
- Direct effects
  - Firm-level: does H-1B crowd out local workers?
  - Mixed evidence firm lottery winners vs. losers
    - Crowds out: Doran et al. (2022) (no impact patents, firm profits inc.)
    - Small crowd in: Mahajan et al. (2024) (firms increase survival)
    - One challenge: identification usually from smaller firms that have variation from lottery
    - Also different from comparing H-1B firms to non-H1B firms
- Indirect effects
  - H-1B workers increase patents overall (Peri et al., 2015)
  - In model: H-1B contribute to stock of CS workers, CS spillovers

What parameters drive economy-wide spillovers?

- How complementary are IT and non-IT workers λ
- How substitutable are foreign and local IT workers ν
- In India: elasticity into studying CS due to chance of migration
- **Innovation spillovers from IT workers** β: Very important parameter
  - India: positive spillovers from increase in IT workers
  - US: migrants lead to increase in stock, reduction in US workers decreases it
  - Missing productivity spillovers into non-IT from IT workers
    - IT sector only (relative effect). Do we want to get levels right for agg. gains?
    - Partially captured because IT is an intermediate input into all goods
  - Estimate $\beta = 0.228$ from US patent data

Sensitivity of estimates to productivity spillover from IT workers

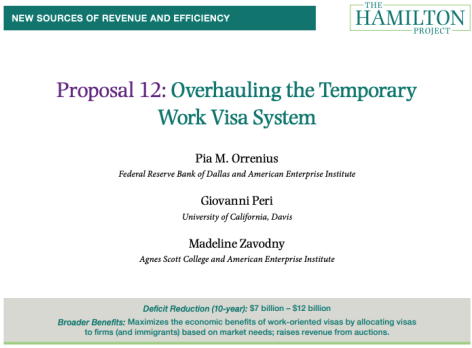
Table 8: Varying the Elasticity of Endogenous Technological Spillovers

	Baseline	No spillovers	US spillover=0.23, India spillover=0	Spillover = 0.1 in both countries	US spillover=0.23, India spillover=0.1
IT production					
US IT output	1.06%	0.90%	1.33%	0.97%	1.21%
India IT output	25.02%	14.88%	14.81%	19.08%	19.04%
Welfare					
Welfare of US natives	0.043%	0.033%	0.044%	0.037%	0.044%
Welfare in India	0.066%	-0.064%	-0.064%	-0.010%	-0.011%
Total (with migrants)	0.147%	0.102%	0.110%	0.121%	0.125%

- Whether policy good or bad for India depends on this spillover
- Logic - do unused IT workers generate large enough gains for the rest of the economy?
- Estimated only on US data
- Are we undercounting what displaced US workers do in the US?

How should visas be allocated?

Lottery system: unlikely to maximize efficiency


NEW SOURCES OF REVENUE AND EFFICIENCY

THE HAMILTON PROJECT

Proposal 12: Overhauling the Temporary Work Visa System

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Deficit Reduction (10-year): $7 billion – $12 billion

Broader Benefits: Maximizes the economic benefits of work-oriented visas by allocating visas to firms (and immigrants) based on market needs; raises revenue from auctions.

Orrenius et al. (2013)

- Lottery is not efficiency-maximizing unless no heterogeneity
- Market-based proposals: auctions for visas
- Would account for private benefits
  - Firms wouldn't internalize externalities

Current policy proposals

PRESIDENTIAL ACTIONS

RESTRICTION ON ENTRY OF CERTAIN NONIMMIGRANT WORKERS

Proclamations | September 19, 2025

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

The H-1B nonimmigrant visa program was created to bring temporary workers into the United States to perform additive, high-skilled functions, but it has been deliberately exploited to replace, rather than supplement, American workers with lower-paid, lower-skilled labor. The large-scale replacement of American workers through systemic abuse of the program has undermined both our economic and national security. Some employers, using practices now widely adopted by entire sectors, have abused the H-1B statute and its regulations to artificially suppress wages, resulting in a disadvantageous labor market for American citizens, while at the same time making it more difficult to attract and retain the highest skilled subset of temporary workers, with the largest impact seen in critical science, technology, engineering, and math (STEM) fields.

Arguments made in Presidential Proclamation

- H-1B replaces, not supplements, US workers
- 36% wage discount vs. traditional hires
- Foreign STEM workers doubled; jobs grew 44%
- CS grads: 6%+ unemployment (2x art history)
- Firms hire H-1Bs while laying off thousands

Policy changes

- $100k fee per H-1B
- Proposed weighted lottery based on wages

Trump's H-1B Claims: Right and Wrong

Model supports:

- Local US workers exit CS (-3.9%)
- CS wages fall
- Local CS workers lose

Model contradicts:

- Overall US welfare positive
- Non-CS workers gain
- Not zero-sum

- Visas scarce - would fees improve allocation?

The $100K Fee

- Are economic gains large enough to support fee?
  - US worker gains $13k per H1B migrant
  - Indian workers gain $55k per H1B migrant (including migrants)
  - If these gains are per year then annual gain $70k, x 3 years = $210k
- Depending on incidence, would change incentives
- Could change selection of migrants
  - Improve efficiency
  - Larger spillovers for US, but lowers spillovers for India due to negative selection
- Likely binding constraint still cap, not fee
- Obvious counterfactual to add to paper

Concluding thoughts

Important to study migration effects on both demand and supply side

- US policy leads to indirect effects in origin countries
- Can stimulate local industry, affect trade
- Economy-wide effects driven by spillover externalities
  - Usual policy: subsidize to remove externality
  - India: subsidy happens indirectly through US policy
  - US: risk of losing spillover gains
- Dynamic policy environment makes paper v. relevant

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