Human Capital Diffusion Through International Migration: Evidence and Policy Implications for Origin Countries

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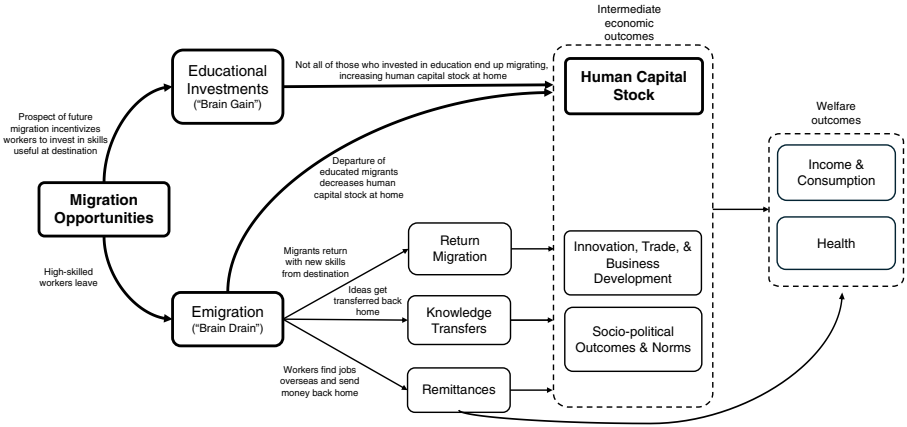
Does migration lead to loss of human capital in origin countries?

- International migration rates are high globally
  - Particularly for skilled workers
- Academics and policy makers often argue international migration results in substantial loss of human capital in origin country
  - "Brain drain"
  - Deemed particularly concerning for health workers
- But, observing out-migration does not necessarily imply net loss in human capital in origin country
  - Migration opportunities can also create human capital at home
  - Challenging to estimate causally

Human capital can diffuse through migration



Batista et al., 2025

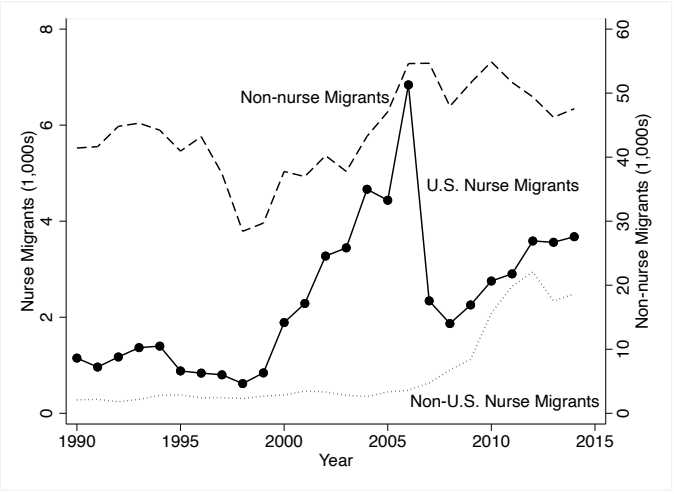
Today:

Focus on case study where migration leads to human capital diffusion in origin country:

- Incentives to invest in human capital due to migration opportunities (Abarcar and Theoharides, 2024)

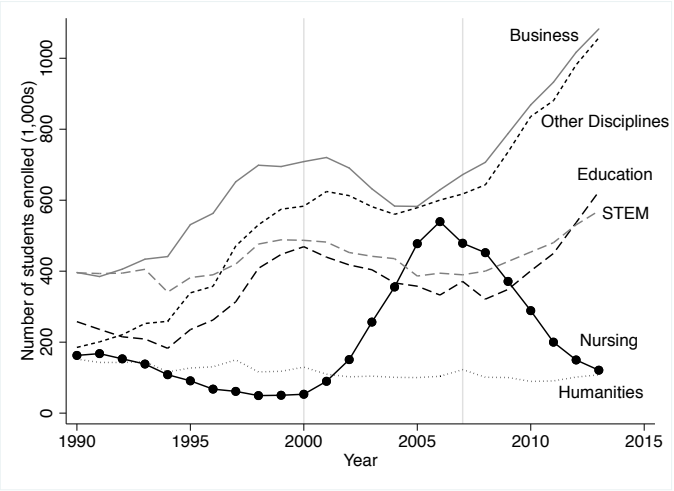
For more detail on other channels and discussion of many excellent papers on these topics, see Batista, Han, Haushofer, Khanna, McKenzie, Mobarak, Theoharides, and Yang (2025) for a review

Globally, Filipinos are largest group of foreign-born nurses



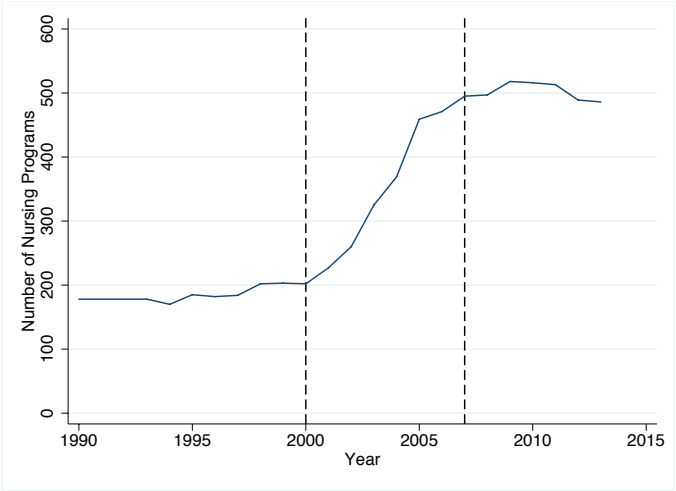
- Many countries encourage migration of healthcare professionals as potential development strategy
- Opportunities for Filipinos to migrate to U.S. determined by visa policy
- Our research uses policy shocks from changes in U.S. visa policy combined with geographic migrant networks to examine effects on origin-country human capital

Human capital increased in the Philippines



- Visa expansion led to 247% increase in nursing graduates
- For each additional nurse migrant, 9 more pass licensure exam
- Enrollment effects driven by switches from other fields
- Overall increase in college graduates

Increases possible due to greater supply of nursing programs



- Increase in programs, mostly driven by private institutions
- Increase almost entirely from existing institutions adding programs, rather than new institutions
- Enrollment effects concentrated in provinces with larger share of private institutions without nursing programs

Directions for future empirical work and policy

- Brain gain and brain circulation are not just theoretical possibilities, but also empirically relevant
- Outcomes may differ in poorer countries
  - Fewer opportunities for skill acquisition
  - Supply-side response may differ
  - Much of literature to date focuses on a few large middle-income countries (Philippines, India, Mexico)
- What are effective policies for origin region?
  - Need to consider GE effects on all relevant labor markets, externalities on health and well-being
  - Do countries invest in the wrong type of skill?
    - Heterogeneity may exist based on type of skill departing
  - Do origin countries capitalize on "brain gain"?

Migration is an important diffuser of human capital

- Shapes human capital of labor force and general population
  - Effects persist in the long-run (Khanna, Murathanoglu, Theoharides, and Yang, 2025)
- Facilitates transmission of ideas (eg. Barbai et al, 2017; Godlonton and Theoharides, 2024)
- More work is needed considering GE effects and whether such effects are welfare enhancing
- Rather than documenting origin-country responses to migration shocks, future work should involve partnerships with policymakers to actively identify policies that will enhance benefits and reduce costs of skill worker migration
  - Eg. Diaspora engagement policies, global skills partnerships