HIGH SKILLED IMMIGRANT RECRUITMENT AND THE GLOBAL ECONOMIC CRISIS:
THE EFFECTS OF IMMIGRATION POLICIES

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Introduction

• Demand for global labor talent

• Policy responses
Research Questions

Questions

• Is the current economic recession linked to tighter immigration restrictions?

• Why governments might continue to take in high skilled migrants even during economic downturns?
Attitudes toward Immigration

- The politics of immigration is not static:
  - Public debate shaped by economic climate (e.g. Freeman 1995; Hollifield 1992).

Economic Crises and Migration in Historical Perspective

- Three global economic crises:
  - The Great Depression
  - The 1973 oil crisis
  - Current global recession
Current Global Recession

- Governments’ policy responses have a skills bias.

*Immigration policies: low-skilled immigrants*
- Restrictions on new labor migrants
- Expulsion of existing workers, e.g. East, Southeast, Central Asian economies.
- Financial incentives to encourage the return of immigrants, e.g. Spain, Czech Republic, and Japan.
Immigration policies: high-skilled immigrants

- Active recruitment of high skilled migrants.

Adjustments during crisis

- Numerical limits have decreased and bars have been raised, e.g. Australia and Britain.

- Stricter labor market tests, e.g. Indonesia, United States.

- Admission channels remain generally open to this pool of migrants and some governments are taking pro-active steps to stay ahead, e.g. Canada and Japan.
Conceptual Model: Circulation of Global Talent

Place of Work: H A H A H A

Event: g e r e r e

→ time →

Circulation of a highly-skilled individual

H = home
A = abroad
g = graduation
e = emigration
r = return
\[ V(t) + R(t) \]

- \( V(t) \): High-skilled labor in domestic labor market
- \( R(t) \): \( \mu \) rate of emigration from domestic labor market
- \( X(t) \): High-skilled labor working abroad
- \( \rho \): \( \rho \) rate of return home

**Flows between the domestic labor market and labor working abroad**
The Model

Categorization of highly-educated people:
- \( V = \) have never left the country
- \( X = \) emigrated and work abroad
- \( R = \) returned after terminating their stay abroad

Changes in the three subpopulations over time:

\[
\frac{dV(t)}{dt} = -\mu \cdot V(t) \cdot X(t)
\]

\[
\frac{dR(t)}{dt} = \rho \cdot X(t)
\]

\[
\frac{dX(t)}{dt} = \mu \cdot V(t) \cdot X(t) - \rho \cdot X(t)
\]
Baseline Scenario:

- Time $t=0$
- $V(0) = 1,000,000$
- $X(0) = 5,000$
- $R(0) = 0$
- $\mu = 0.15$ per $1,000,000$ $V-X$ encounters per year
- $\rho = 0.1$ per year

$V$ = workers who never emigrated; $X$ = expatriates; $R$ = returnees
Simulations

Baseline Scenario

Ratio of knowledge workers in the domestic labor market \((V+R)\) and those abroad \((X)\)
Simulations

Policy Scenarios: an increase in the rate at which expatriates return home, $\rho$

Assuming an 20% increase: $\rho$ increases from $\rho=0.1$ to $\rho = 0.12$

Size of the pool of expatriates over time, baseline and scenario 1
Simulations

Policy Scenarios: an increase in the rate at which expatriates return home, $\rho$

In order to stop the brain drain immediately, the return rate needs to be increased to $\rho = 0.15$.

Comparison of $(V+R)/X$ for baseline and scenario 1.
Simulations

Policy Scenarios: changes due to a reduction of emigration

Suppose $\mu$ is decreased by 20%

Size of the pool of expatriates over time, baseline and scenario 2
Simulations

Policy Scenarios: changes due to a reduction of emigration

Comparison of (V+R)/X for baseline and scenario 2.
Simulations

Policy Scenarios: the attraction of global talent from abroad.

Assumption: new additions proportional to size of domestic pool of workers (i.e., \( V(t) + R(t) \)), with a proportionality factor of 0.003.

- Comparison to scenario 3* that assumes an annual injection of 0.005%.

Size of the pool of expatriates over time, baseline, scenarios 3 and 3*
Simulations

Policy Scenarios: the attraction of global talent from abroad.

Comparison of (V+R)/X for scenario 3 and scenario 3*
Conclusion and Discussion

• Anecdotal evidence suggests that impact of the economic crisis has a skills bias.

• A dynamic model to simulate policies and conditions aimed at attracting or retaining highly skilled workers, and/or on the in-situ growth of human capital.

Our models indicate:
• Policies geared towards reducing emigration are a more effective strategy to accumulating human capital than those aimed at attracting expatriates.

• Polices geared towards attracting high-skilled immigrants may be more cost-effective than training natives.
Directions for Future Research

• Allow for heterogeneity in the model and, for example, allow exit rates ($\mu$) to vary by age and exit rates ($\rho$) to vary by duration of stay abroad.

• Add more spells to the model such that returnees are at risk of re-emigrating.

• Extend the analysis by allowing for interdependencies that take into account, for example, whether policies that aim at attracting foreign high-skilled workers also have an effect on reducing $\mu$ and increasing $\rho$. 