The impact of return migration on school–work tradeoff and labor outcomes of adolescents

Avinandan Chakraborty

University of New Mexico

AMERICAN ECONOMIC ASSOCIATION

Motivation

- Mexico-US corridor comprises one of the worlds largest flows of migrants.

- Trend reversed: Since 2007 more Mexicans are returning home than those migrating to the United States.

- **Research Question:** Does the temporary migration experiences of returnees affect the human capital and labor outcomes of adolescents? Specifically, I estimate the effect of a return migrant in the household from the United States on the school–work decisions and labor choices of adolescents in Mexico.

- Migrants during their stay abroad acquire new skills, accumulate human capital and savings.

- When they return with these accumulated human capital and $\uparrow$ probability of upward occupational mobility $\Rightarrow$ Relax income constraints in a HH and improve the human capital outcomes of children.
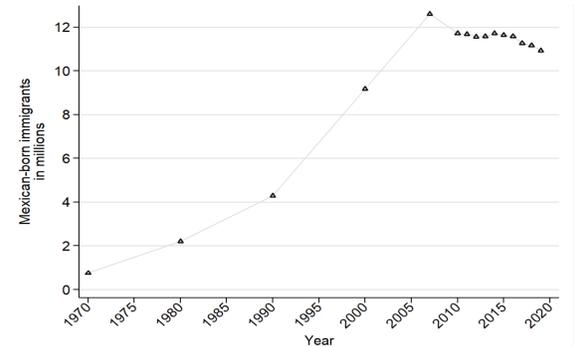

Figure 1: Mexican born immigrants in the U.S.

Data

- **Individual and Household:** 2010 Population and Housing Census of Mexico

- **Municipality:** National Institute for Federalism and Municipal Development (INAFED)

- Age Group: 12–19

- Non migrant Mexico born children

Independent Variable

"5 years ago, in what state of the republic or in which country did the person live?"

Household with a USA RM ($\boldsymbol{RM_{ihmr}}$)

= 1 if there is a RM in the HH (*Treatment group*)

= 0 if Non-Migrant HH (*Control group*)

Endogeneity of Return Migration

- Omitted variable bias

- Reverse Causality

Instrument

$$\text{Immigration Enforcement Exposure}_m = \sum_{s=0}^{51} \lambda_m^s * SPS^s, \quad \sum_{s=0}^{51} \lambda_m^s = 1, \quad (IEE_m) \in (0,1)$$

- Capture each Mexican municipality's exposure to U.S. State interior enforcement

- $\boldsymbol{SPS^s}$ synthesized policy score for each state in the US

- $\boldsymbol{\lambda_m^s}$ share of migrants from each municipality m in Mexico living across the U.S. states

- $\boldsymbol{IEE_m}$ closer to 1: High exposure of a Mexican municipality to U.S. immigration enforcement.
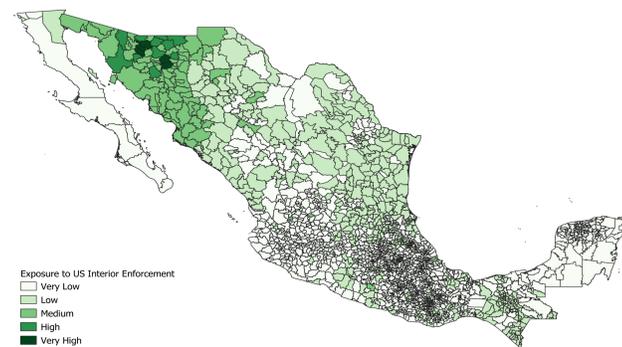

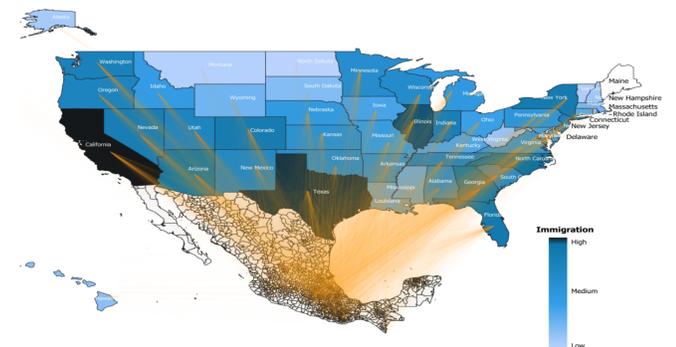**Figure 2:** Instrument value across Mexico municipalities

Figure 3: Migration flow from Mexico to U.S. states

Model

First Stage: Logit

$$RM_{ihmr}^* = \tau_0 + \tau_1 ImmEnf_{mr} + \tau_2 X_{ihmr} + \tau_3 H_{hmr} + \tau_4 M_{mr} + \omega_r + \mu_{ihmr}$$

Second Stage: Multinomial Logit

$$P_{ihmr}^d = \frac{e^{V_{ihmr}^d}}{\sum_{n=1}^{4} e^{V_{ihmr}^n}}, \text{where} \quad d \quad \in \quad \{1,2,3,4\} \quad \text{and}$$

$$V_{ihmr}^d = \beta_0^d + \beta_1^d \boldsymbol{RM_{ihmr}} + \beta_2^d X_{ihmr} + \beta_3^d H_{hmr} + \beta_4^d M_{mr} + \beta_5^d \hat{\mu}_{ihmr} + \omega_r + v_{ihmr}$$

- Control Funtion Approach

- $X_{ihmr}, H_{hmr}, M_{mr}$- individual, household, municipality-level controls, respectively

Result

School–Work
- $\uparrow$ school attendance
- $\downarrow$ work
- $\downarrow$ both activities

Occupational Choice
- $\uparrow$ non-participation
- $\uparrow$ self-employment
- $\downarrow$ wage/salaried work

- Effect $\uparrow$ in magnitude for older adolescents

- $\uparrow$ effects at the lower ends of the wealth distribution (poorer HH)

- Greater decrease in the probability of working as day laborers among boys
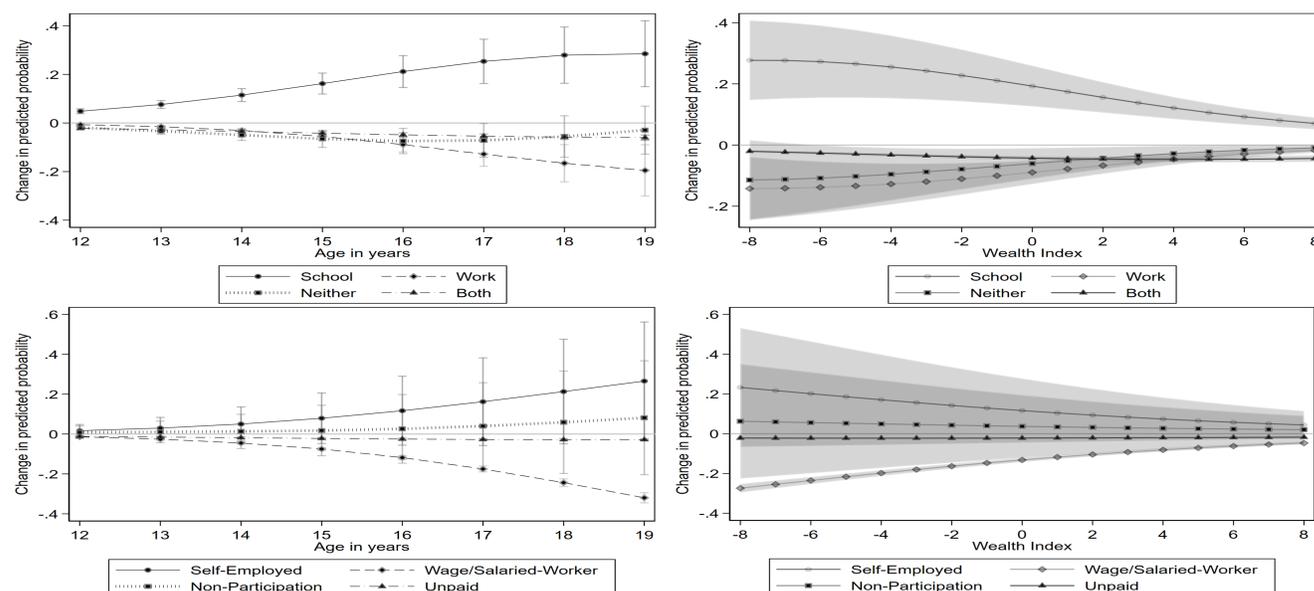
Heterogeneous Effect

Figure 4: Effect of a RM in the HH by Age

Figure 5: Effect of a RM in the HH by Wealth

Conclusion

- While policymakers in developing countries are concerned about the brain drain associated with migration of their workforce, return migrants, with their accumulated skills, savings, and human capital, can contribute to improved socio-economics outcomes in their home country.

- This paper builds on a novel and a limited body of literature on the link between return migration and human capital in the home country, thus, contributing to building evidence on brain gain.

- Policies aimed at assisting the reintegration of return migrants in local markets may substantially improve the education outcomes and can act as a channel to reduce child labor.