

# Online Appendix

## “Migration on the Rise, a Paradigm in Decline: The Last Half-Century of Global Mobility”

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### A1 Additional sources for the evidence in the main text

The strict page limits for the main text required any extensive citation of the relevant literature to be moved to this Appendix. This section provides further citations of the crucial evidence base.

- Global migrant prevalence from [IOM \(2022\)](#).
- Evidence that greater flows of goods and capital between countries have caused more migration between them, in [Campaniello \(2014\)](#); [Bang and MacDermott \(2019\)](#). Evidence that specialized exchange continues to require in-person interaction, in [Clemens \(2013\)](#).
- Evidence that emigration from poor countries has typically coincided with the arrival of sustained economic growth, in [Hatton and Williamson \(1998\)](#); [Williamson \(2006, 2015\)](#); [Clemens \(2020\)](#).
- Evidence that the relative absence of African migrants in rich countries is a sign of Africa’s relative poverty, not its relative wealth, in [Hatton and Williamson \(2011\)](#); [Hanson and McIntosh \(2016\)](#).
- [Hatton and Williamson \(2005, 179\)](#) attribute the new 1920s immigration restrictions across the New World to politically-powerful organized labor fearing competition from immigrants with decreasingly specialized skill.
- Evidence that Mexicans faced limited policy barriers to US immigration before 1930, in [Kosack and Ward \(2014\)](#); [Lee et al. \(2020\)](#).
- Evidence that the half-century of closure that preceded 1970 caused *lower* native incomes, in [Tabellini \(2019\)](#); [Sequeira et al. \(2019\)](#); [Abramitzky et al. \(2022\)](#).
- On the lack of evidence that remittances cause short-run growth, see [Clemens and McKenzie \(2018\)](#). For additional evidence of the effect of remittances on long-run human capital investment, see [Dinkelman and Mariotti \(2016\)](#).
- Evidence that immigration barriers before 1970 worked poorly to induce positive selection: Chinese exclusion in the U.S. 1882–1965, explicitly designed to encourage positive selection, reduced the average skill level of Chinese immigrants—because it deterred talented workers sensitive to denigration; see [Chen \(2015\)](#).
- Additional evidence of the effect of migrants on trade flows in [Markusen \(1983\)](#); [Rauch \(1999\)](#); [Aleksynska and Peri \(2014\)](#); [Bahar and Rapoport \(2018\)](#).
- Additional evidence of the effect of migrants on capital flows in [Javorcik et al. \(2011\)](#); [Gollin and Lange \(2013\)](#); [Hernandez \(2014\)](#); [Burchardi et al. \(2018\)](#); [Mayda et al. \(2019\)](#).
- Additional evidence that little of the trend in U.S. income inequality can be explained by immigrant wage competition, in [Goldin et al. \(2007\)](#).
- Evidence that average real incomes did not substantially diverge between U.S. and Mexico from the 1970s to the 2010s: The ratio of average real income per capita at purchasing-power parity was 3.3 in both 1976 and 2016 ([Bolt et al., 2018](#)).

## A2 Rise in global migration prevalence since 1910

Between 1910 and 2022, the number of people living outside their country of birth or nationality rose from around 36 million to 281 million (Ferenczi (1937, 28), an increase of 7.8 times; IOM 2022, 40) that is, from 2.0% to 3.6% of all people (using the 1910 world population estimate of 1.77bn from Klein Goldewijk et al. 2011). This change does not account for the rising number of countries, from 97 counted by Ferenczi in 1910 to 193 United Nations member states in 2022; but even the sharp rise to 166 countries by 1930 was accompanied with a *fall* to 29 million global migrants. Since 1930, the largest bias from country creation arose from the partition of the Soviet Union and South Asia, which overnight created (respectively) about 30 million and 8 million additional people living outside their (former) country of birth UNDESA (2004, vii, 23). Even adjusting for these biases, a conservative estimate is that the number of international migrants rose by a factor of more than six between 1910 and 2022.

## A3 The changing prevalence and composition of U.S. immigrants since 1850

From Gibson and Jung (2006) and Ruggles et al. (2021, ACS 2010 5yr & 2019 1yr); U.S. population from Haines and Sutch (2003) 1850–2000 and from U.S. Census Bureau 2010–2019. ‘Core Europe’ is all of the British Isles, Germany, France (with Monaco), Benelux, and Switzerland (with Lichtenstein). ‘Canada’ includes negligible number from Bermuda, Greenland, and Miquelon.

## A4 Decomposition of the rise of emigration prevalence to rich countries since 1970

Native emigration prevalence is the fraction of people born in each country who reside in a high-income country (as defined by the World Bank) that is not their country of birth. Panel (a) shows a cross-section of 154 countries in 1970 in a local-linear regression with bandwidth 0.8 natural log points and Epanechnikov kernel, 95% confidence interval in gray. A linear regression with the data in Figure 2 panel (a) yields slope 0.0120 (robust s.e. 0.002774) and constant term  $-0.07729$  (robust s.e. 0.02165). Panel (b) uses that regression to predict emigration prevalence from each origin using actual economic growth at the origin, summing across all origins to yield a global stock of predicted emigrants in rich countries, and compares it to the true stock in each year. Data from Clemens (2020).

## A5 Decomposition of Mexico-U.S. migration 1900–2019

Predicted migrants due to “age and literacy push” in year  $t$  are  $\hat{m}_t = \sum_a \sum_\ell \bar{\phi}_{a,\ell}^{1930} n_{a,\ell}^t$  where  $n_{a,\ell}^t$  is the number of Mexican-born residing in either Mexico or the United States in year  $t$  with age  $a \in \{10-14, 15-19, 20-24, \dots, 80-84, 85+\}$  and literacy  $\ell \in \{0, 1\}$ , and  $\bar{\phi}_{a,\ell}^{1930}$  is the fraction of each age-by-literacy group that was residing in the United States in 1930. Predicted migrants due to “age push” are  $\hat{m}_t = \sum_a \bar{\phi}_a^{1930} n_a^t$ . Data on Mexican-born in Mexico from INEGI *Estadísticas Históricas de México 2014* (1930–2010), *Censo de Población y Vivienda 2020*, and MPC (2020) (literacy by age group 1930–1950 estimated by literacy rate among corresponding age cohort in 1960); U.S. data from Ruggles et al. (2021). ‘Literacy’ in U.S. census post-1930 defined as in the Mexican census: attainment of *any* primary schooling.

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