

working paper

2402

Demographic Transitions
Across Time and Space

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February 2024

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Demographic Transitions Across Time and Space

Abstract

The demographic transition -the move from a high fertility/high mortality regime into a low fertility/low mortality regime- is one of the most fundamental transformations that countries undertake. To study demographic transitions across time and space, we compile a data set of birth and death rates for 186 countries spanning more than 250 years. We document that (i) a demographic transition has been completed or is ongoing in nearly every country; (ii) the speed of transition has increased over time; and (iii) having more neighbors that have started the transition is associated with a higher probability of a country beginning its own transition. To account for these observations, we build a quantitative model in which parents choose child quantity and educational quality. Countries differ in geographic location, and improved production and medical technologies diffuse outward from Great Britain, the technological leader. Our framework replicates well the timing and increasing speed of transitions. It also produces a strong correlation between the speeds of fertility transition and increases in schooling similar to the one in the data.

JEL Codes: J13, N3, O11, O33, O40.

Keywords: Demographic transition, skill-biased technological change, diffusion.

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Acknowledgement

We would like to thank for their comments seminar participants at Arizona State University, Brown University, CEPR Macro Group Workshop (2020), EIEF (Rome), Statistical Institute-Delhi, NBER SI 2019, NBER Growth Meetings (2018), and U. of Mannheim. Florian Fiaux, Claudio Luccioletti, and Yongkun Yin provided excellent research assistance. The companion web page for the paper with our database is <https://sites.google.com/view/demographic-transitions>.