Understanding the Hispanic Mortality Paradox: Variation by Country of Origin

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Research question

"Hispanic Mortality Paradox"



The "Hispanic Mortality Paradox" has been documented in the United States for the largest immigrant groups

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To what extent does the Hispanic mortality paradox hold for a range of countries in Central and South America?

Past contributions have

- Focused on Mexico, Cuba, Puerto Rico, or aggregated countries in Central and South America
- Assessed health-related outcomes or used mortality indices

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Contribution

Provide precise estimates of a mortality advantage (years lived) of immigrants from over 20 countries in Central and South America

Data: Berkeley Unified Numident Mortality Database (BUNMD)

- Deaths from Numident Social Security Administration files
- Native born and 20 immigrant groups from South and Central America (≈7M)

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Methods

Important features of BUNMD

- Only deaths; no exposure
- ▶ 1988-2005 death window:
 - Double truncation of distribution of ages at death

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Methods

Important features of BUNMD

- Only deaths; no exposure
 - Cannot use survival analysis
- 1988-2005 death window:
 - Double truncation of distribution of ages at death
 - Cox-proportional hazards models or linear regression yield biased estimates

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Methods: truncated Gompertz model

$$h_i(x|\beta) = a_0 e^{b_0 x} e^{\beta Z_i}$$

- Estimate hazard ratios by birthplace
- Assume the distribution of deaths within a cohort follows a continuous Gompertz probability distribution
- Maximum Likelihood Estimation (MLE)
- Reference group: U.S.born non-Hispanic interstate movers

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Robustness checks: Ordinary least squares

Main results: substantial variation in mortality advantage



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Mortality (dis)advantages

Main results: substantial variation in mortality advantage



 Mortality advantages larger than from the main sending countries

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Main results: substantial variation in mortality advantage



 Why? Selective in-migration (selective return migration, cultural factors)

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Thank you

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