

Notes on Mobility

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Methods

1. Regression-based approach: Intergenerational Mobility elasticity (IGE)

How are they related?

People claim that the rank-rank slope is closely related to the intergenerational correlation (IGC) in log income. **I AM NOT SURE ABOUT THIS APPROXIMATION**

$$IGE = IGC \cdot \frac{\sigma_{y_1}}{\sigma_{y_0}}$$

where $\sigma_{y_1}, \sigma_{y_0}$ are the variance (or inequality) of the income distribution for the child and parental generations, respectively.

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 - ▶ “directional” rank mobility

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- ▶ Can be used for group comparison with respect to the **national distribution**.

Alternative approaches

IV 1. exclusion restriction (father's education) may fail to hold. But it can serve as an upper bound (since it may have an independent, positive effect). Using NLSY, Mazumder finds that father's education has no effect on child's earnings once family income is averaged over 3 or 4 years (a similar result is also found in Corcoran et al. 1992).

2. It may bias downward if someone uses sons under age 40 and fathers over age 40. As Haider and Solon (2004) show that in the presence of nonclassical measurement error, the probability limit of IGE using IV is

$$\lambda_1/\lambda_0 \cdot \beta$$

λ_1, λ_0 are the non-classical measurement error coefficient for child and father, respectively. Haider and Solon show that $\lambda < 1$ for those under age 40 and $\lambda > 1$ for those above age 40.

Measurements

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3. longer time average of income (up to 16 years): around .6 Mazumder (2005a)

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Data

The age at which father's earnings measured. The errors may vary with age. If the variance of the transitory component of earnings changes considerably over the course of the life cycle, then short-term averages of earnings taken at a time when earnings are noisy may lead to further bias.