

The Effects of Health Shock on Household Income Mobility: Evidence from China

Xiang Zhang

The University of Chicago

snzhang@uchicago.edu

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Motivation

- High income inequality in many countries
 - ▶ China's official statistics: less than 0.3 in 1980 to 0.465 in 2016
 - ▶ The United States: 0.45 in 2016
- Intra-generational Income Mobility can serve as an equalizer of long-term income inequality (Shorrocks [1978])
 - ▶ GINI coefficient is a static measure of income inequality
 - ▶ Two societies with identical GINI coefficient, the one with higher income mobility will have relatively small overall income inequality

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- How can a household maintain high income mobility, or specifically, high upward mobility?
- Perspective from health human capital
 - ▶ One central pillars of human capital (the other is education)
 - ▶ Poor stay poor due to bad health condition of household members (no hope of achieving “American Dream”)
 - ▶ Impoverished again due to health shock

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This Paper

- Present stylized facts on the relationship between health human capital and income mobility
- Estimate the effects of health shock on household income mobility

Data

- China Health and Nutrition Survey (CHNS)
 - ▶ From 1991 to 2011
 - ▶ Not a nationally representative data
 - ▶ Target sample: 4400 households
- China Family Panel Studies (CFPS)
 - ▶ A bi-annual survey starting from 2010
 - ▶ Nationally representative
 - ▶ Target sample: 16000 households

Theories behind Health Human Capital and Income Mobility

- General health human capital and income productivity theory
 - ▶ Becker [1962], Grossman [1972]
- Conceptual framework
 - ▶ Gertler and Gruber [2002], Dobkin et al. [2018]

Theories and Empirical Work on Measurement of Income Mobility

- Parametric estimation: Solon [1992], Chetty et al. [2014]
 - ▶ Inter(Intra)-generational income elasticity
 - ▶ Transition matrix
- Non-parametric estimation: Chetty et al. [2014, 2017], Bhattacharya and Mazumder [2011]

Potential Computational Methods in Analysis

- Sample selection:
 - ▶ K-NN
- Correlational study:
 - ▶ Generalized method of moments (GMM)
 - ▶ Non-parametric kernel density estimation
- Econometric analysis:
 - ▶ LASSO (least absolute shrinkage and selection operator)
 - ▶ Linear regression (DID and event study specification should be plausible)
 - ▶ Principal Component Analysis (PCA) and Factor Analysis