NTA by SES (NTASES, N project)

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Outline

• What is NTA by SES?
• How to measure?
• What are the major challenges?
• See some results
SES?

- Gender + time use
- Income/consumption level
- (Parents’) education
- Urban vs. rural (+ time use?)
- Region
- Formal vs. informal sector
- Extended household vs. nuclear household
- Ethnicity/race/immigrants
- Marital status
NTA and SES

- **What:** Disaggregate NTA by household or individual characteristics

- **Why:** SES is an important analitical dimension in many countries
  - SES is highly associated with many other social, economic and demographic variables
  - Large heterogeneity in public and private flows within age groups
  - Intergenerational transmission of inequality

- **How:** Estimate NTA by SES
How to do it?

Step 1. Just construct NTA
a) And allocate values based on individual characteristics (if you can)
b) And allocate values based on household characteristics (if you can)

E.g. 1) gender
E.g. 2) household head education, rural vs. urban
E.g. 3) income, consumption
Annual consumption by education of household head (Chile, 2007)
Chile, 2004: Annual private consumption by age and quintile

Average annual private consumption by the poorest is less than 1/10th that consumed by the richest.
Household characteristics? (disaggregation of data)

1) Total household income (labor earnings, self-employment income, business revenue, asset income, transfer income)

2) Per capita household income

3) Equivalence-scale-based per capita household income/consumption

4) Per capita or total household consumption
Macro control problem

• If you cannot assign individual or household characteristics, then you need separate macro control by SES

e.g., tax profiles and government asset allocation—can still assign based on micro survey data share
Data issues

• Constructing NTA requires individual or household micro-survey data sets

• A good survey data set has the properties of:
  – Extent: It has the variables of interest at a certain level of detail
  – Reliability: The variables are measured without error
  – Validity: The data set is representative
Reliability: Measurement error

- Non response rate by SES (representative)
- Response error
  - Respondents do not know what is required
  - Incentive to understate/overstate
  - Recall bias: Related to period of survey
  - Coding error: Using wrong/different reporting units
- Reporting error: Heaping or outliers
- Discrepancy between aggregate value and individual value
Brazil: What funds consumption?
Among elderly of any SES and children of low SES = public transfers

Source: Turra & Queiroz
Labor income profiles by residence and per capita household income (China, 2009)

Source: Shen and Lee (2014)
Labor income profiles by formal vs. informal sector (India, 2004–05)

Figure 3: Age profile of per capita labour income by formal and informal sectors, India, 2004-05

Source: Narayana (2014)
Public education profiles by residence and per capita household income (China, 2009)

Source: Shen and Lee (2014)
Public health profiles by residence and per capita household income (China, 2009)

Source: Shen and Lee (2014)
Pension benefit profiles by residence and per capita hh income (China, 2009)

Source: Shen and Lee (2014)