Mobility of Top Incomes in Germany

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Outline

• context
• data, income concept
• top income share reduction
• mobility in terms of ranks
• conclusion
Context

- Top Income Shares: repeated cross sections
- Income mobility: offsetting effect
- The more mobile a society in terms of income ranks, the more equal it is, given the annual income distribution
Questions

(1) **Share reduction**: How do top income shares in average incomes over several years differ from annual top income shares?

(2) **Rank change**: How mobile are tax units in terms of ranks/ fractile changes?
Data & income concept

- Panel microdata on German income tax returns 2001 – 2006
  - detailed information on income sources
  - stratified, balanced 5% sample of all tax filers (singles or married couples) who filed in all years
    - weighted: 18 mio tax units
    - unweighted: 900,000 tax units
  - mandatory filing: self-employed, capital or business income over certain thresholds
  - not mandatory, but at high incomes increasingly preferable: wage earners, pensioners
  - 85% of all high income tax units (>150,000€) included

- Gross income before all deductions and allowances, after transfers
  - including employee’s SSC
  - excluding / including taxable capital gains
(1) Income share reduction

• length of period:
  – annual income
  – 3-year average income
  – 6-year average income

• compare:
  – top income shares using average income
  – counterfactual share without reranking
Income shares for different time periods
(2) Rank / quantile group changes

• persistence in quantile group after
  – one year
  – three years

• mobility indicator used for long run comparisons
Probability to stay in fractile

after 1 year

after 3 years

Mannheim, 16.05.2014
Mobility of Top Incomes in Germany
Do low probabilities to stay reflect social mobility?

• top groups are more mobile in terms of fractile drop-outs than lower fractile groups

• But: these are tiny groups of people

  – high turnover of members is more likely in smaller groups
Complementary measures to capture rank changes

• probability to stay with equal group sizes
  – e.g. deciles of the top 0.1%
  – probabilities to stay are higher at the top

• re-entries in fractile groups
  – many drop-outs reenter the top quantile groups in the following years

• rank volatility (ir-std)
  – rank volatility decreases towards the top
## Probabilities to stay: equal group sizes

<table>
<thead>
<tr>
<th>deciles of quantile groups&lt;sup&gt;a&lt;/sup&gt;</th>
<th>top income quantile groups</th>
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### Size of decile

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<th>size of decile</th>
<th>N min&lt;sup&gt;c&lt;/sup&gt;</th>
<th>N max&lt;sup&gt;c&lt;/sup&gt;</th>
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<sup>a</sup> See notes for details on the calculation of the probabilities.

<sup>c</sup> Size of decile is calculated as the total number of observations.

<sup>d</sup> Sumwgt is the sum of weights used in the calculations.
Reentries

<table>
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<th>quantile group&lt;sup&gt;c&lt;/sup&gt;</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>N&lt;sup&gt;a&lt;/sup&gt;</th>
<th>sumwgt&lt;sup&gt;b&lt;/sup&gt;</th>
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Distribution of rank changes
(individual standard deviation of annual ranks)
Summary

• income share reduction
  – moderate in size (about 5% for top 1)
  – stable over time

• rank mobility
  – persistence comparable to Canada and France
  – top is mobile in terms of quantile groups’ turnover
  – top is not mobile in terms of absolute rank changes
Thank you

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