Changing Fortunes: income mobility and poverty dynamics in Britain

Professor Stephen Jenkins  
Department of Social Policy & CASE, LSE

Professor John Hills  
Director, Centre for the Analysis of Social Exclusion, LSE

Professor Simon Burgess  
Director, Centre for Market and Public Organisation, University of Bristol

Professor Mike Brewer  
MiSoC, ISER, University of Essex

Suggested hashtag for Twitter users: #lsejenkins
CHANGING FORTUNES
INCOME MOBILITY AND POVERTY DYNAMICS IN BRITAIN

STEPHEN P. JENKINS
What’s in the book?

Introduction
1. Introduction: longitudinal perspectives on the income distribution

Part I. Measurement and data
2. Income over time: measurement issues
3. Sources of longitudinal data on income: household panel surveys in context
4. The British Household Panel Survey and its income data

Part II. Income mobility
5. Income mobility and how it has changed over time
6. Transitory variation and volatility in income
7. Spaghetti unravelled: a model-based description of differences in income-age trajectories

Part III. Poverty dynamics
8. Poverty dynamics and how they have changed over time
9. Routes into and out of poverty and the role of trigger events
10. The length of time spent poor: estimates from hazard regression models
11. Modelling low income transitions: estimates from a Markov model

Envoi
12. Summary and conclusions
Why care about income mobility and poverty dynamics?

1. They influence our assessments of the fairness of current inequality and poverty
   - Arguably, we are more tolerant of greater inequality and poverty, the more that all have a chance of getting to the top, or of not being stuck at the bottom

2. Individual income growth is of direct concern
   - Are those at the bottom gaining?

3. Income instability is indicative of income risk

4. Instrumental: e.g. better descriptions of poverty experience; understanding of processes of exit and entry; policy
How much movement is between income groups is there from one year to the next?

- Divide the population in each year into 20 equal-sized groups from poorest (top row of picture) to richest (bottom row of picture): each row contains 5%
- People are colour-coded accorded to their position in the base-year income distribution:
  - Blue: poorest twentieth
  - Red: richest twentieth
Poor ~ bottom 3–4 groups
How much movement? Some reference points:

- Base year:

  (a) perfect immobility
  (b) perfect mobility

  Mobility means changing income group: track change by looking at how origin groups (colours) change rows in the pictures

  Final year

  (c) perfect mobility

  [rank reversal]

  [origin independence]
Income mobility over a one year interval

• Substantial amount of mobility, but mostly short distance

Annual poverty exit rate for those poor in 1991 = c. 35%
Annual poverty entry rate for those non-poor in 1991 = c. 8%
Income mobility between 1991 and a later year

- More mobility from origin group as time proceeds
- But, even after 15 years, an association with origins remains, suggestive of persistent differences in people’s longer-term (smoothed) incomes
No trend over time in the extent to which income mobility reduces longer-term inequality

- Movement or persistence? The more that people are stuck in the same place in the income distribution year on year, the more similar will be the inequality of their longitudinally-smoothed income and the inequality of the incomes in each of the years taken separately (averaged)
- If inequality is measured using the Gini coefficient, and incomes are smoothed over a six-year window, inequality of smoothed income is about 15% smaller than inequality of average income (25% smaller with the Theil inequality index). And there’s been no trend over time:
No significant trend in year-on-year income mobility according to other commonly-used indices

Standard error for correlation ≈ 1 percentage point
Income growth for those at the bottom?

• Change in income (£ p.w.) against position in the base-year income distribution:

Three-year averaged incomes, local polynomial regression smoother, bandwidth 0.05
No significant trend in income instability (transitory variance of net household income)

- Estimated using Gottschalk & Moffitt (1994, 2009) method; age-adjusted (based on residuals from regression of log income on quartic in age); estimate of ‘permanent income’ based on 7-year rolling window; ‘Year’ refers to middle year of observation window; same results if estimate for subsamples with better-measured incomes
- Similar trend for employment earnings of prime-aged men
Percentage experiencing a large income fall between one year and the next: no trend

- Cf. rising trend in USA since 1970s

Percentage with income fall of 25% or more

Percentage with income fall of 50% or more
‘The Poor’ is not a group with fixed membership; poverty is experienced by a large minority over time

For poverty line = 60% median income (standard HBAI and EU definition):

- Rise in ‘never poor’ rate (% with 0 years poor of 4): 65% to 70%
  - Proportion experiencing poverty at least once in 4-year period (35% to 30%) is nearly double the proportion poor in a given year over this period (on average)
- Decline in persistent poverty rate (% with 3+ of 4): 15% to 10%
Proportion touched by poverty over a 4-year period has declined

Percentage poor at least once in 4-year period

<table>
<thead>
<tr>
<th>Person’s family type</th>
<th>Early 1990s</th>
<th>Mid-2000s</th>
</tr>
</thead>
<tbody>
<tr>
<td>All persons</td>
<td>35</td>
<td>30</td>
</tr>
<tr>
<td>Dependent children</td>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td>Couple-with-kids families</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>Single-with-kids families</td>
<td>75</td>
<td>60</td>
</tr>
<tr>
<td>Single pensioner</td>
<td>70</td>
<td>55</td>
</tr>
</tbody>
</table>

- And, correspondingly, there has been a decline in the persistent poverty rates for these groups
- Proportion poor 7–9 times in 9 year period has declined for all persons and for dependent children
Factors associated with income change: labour earnings changes are important but not the whole story

- The ‘rubber band’ model …
- … and when the band breaks:

‘Trigger events’ associated with poverty transitions (column %)

<table>
<thead>
<tr>
<th>Main event</th>
<th>Poverty exits (income increase)</th>
<th>Poverty entries (income decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head’s labour earnings</td>
<td>31</td>
<td>30</td>
</tr>
<tr>
<td>Spouse or other labour earnings</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>Non-labour income</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Demographic event</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>New entrant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

- Breakdowns for population subgroups in the book, also with pre-/post-1997 comparisons
Longer-term income trajectories differ by education level, sex, and birth cohort

Charts show ‘average’ within-group trajectories; vertical axes use logarithmic scale
Derived from statistical model using up to 16 years BHPS data per person
Take-home points

• There’s a lot of income mobility year-on-year, but mostly short distance
• There is turnover among the poor; a significant minority experience poverty over a period of a few years
• Has income mobility changed from the early-1900s and the mid-2000s? Answer depends on which mobility concept you use (individual income growth versus others)
• Poverty persistence declined from late 1990s
• Labour’s ‘welfare to work’ and ‘make work pay’ policies are the smoking guns, but state of the economy is important too
• We don’t know yet the impacts on income mobility and poverty dynamics of the ‘Great Recession’ and the Coalition government’s proposals for benefit reform, etc. …