The tax & benefit system from a lifetime perspective

Barra Roantree
Key aim of tax & benefit system is redistribution

Net transfers from state by income decile: 2013-14 system

Notes: see Figure 9.1 in IFS Green Budget 2013, Chapter 9.
Source: Authors’ calculations using the IFS tax and benefit microsimulation model, TAXBEN, to apply the 2013–14 tax and benefit system to uprated data from the 2010 Living Costs and Food Survey.
... which significantly reduces income inequality

Notes: see Table 3.1 in ‘Redistribution from a Lifetime Perspective’. Both bars show cross-section
But this is just at a snapshot in time:
People see significant change in their circumstances over their lifetime

<table>
<thead>
<tr>
<th>State</th>
<th>Average at point in time</th>
<th>Ever over 18-waves</th>
</tr>
</thead>
<tbody>
<tr>
<td>In a couple</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has child aged 18 or under</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disabled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Table 2.2 from http://www.ifs.org.uk/publications/7130
Note: Authors’ calculations based on BHPS data. Includes all non-dependants aged 16+. The ‘average across waves’ column includes all waves and is weighted using cross-sectional weights. The ‘ever observed’ columns are calculated for individuals observed in all waves from wave 1 to the destination wave and weighted using longitudinal weights. The final two lines (earnings quintiles) only include individuals who are employed in all relevant waves.
But this is just at a snapshot in time:
People see significant change in their circumstances over their lifetime

<table>
<thead>
<tr>
<th>State</th>
<th>Average at point in time</th>
<th>Ever over 18-waves</th>
</tr>
</thead>
<tbody>
<tr>
<td>In a couple</td>
<td>64.4%</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>56.0%</td>
<td></td>
</tr>
<tr>
<td>Has child aged 18 or under</td>
<td>28.1%</td>
<td></td>
</tr>
<tr>
<td>Disabled</td>
<td>7.7%</td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>4.7%</td>
<td></td>
</tr>
</tbody>
</table>

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Note: Authors’ calculations based on BHPS data. Includes all non-dependants aged 16+. The ‘average across waves’ column includes all waves and is weighted using cross-sectional weights. The ‘ever observed’ columns are calculated for individuals observed in all waves from wave 1 to the destination wave and weighted using longitudinal weights. The final two lines (earnings quintiles) only include individuals who are employed in all relevant waves.
But this is just at a snapshot in time:
People see significant change in their circumstances over their lifetime

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<thead>
<tr>
<th>State</th>
<th>Average at point in time</th>
<th>Ever over 18-waves</th>
</tr>
</thead>
<tbody>
<tr>
<td>In a couple</td>
<td>64.4%</td>
<td>87.2%</td>
</tr>
<tr>
<td>Married</td>
<td>56.0%</td>
<td>80.7%</td>
</tr>
<tr>
<td>Has child aged 18 or under</td>
<td>28.1%</td>
<td>52.3%</td>
</tr>
<tr>
<td>Disabled</td>
<td>7.7%</td>
<td>26.8%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>4.7%</td>
<td>23.9%</td>
</tr>
</tbody>
</table>

Source: Table 2.2 from http://www.ifs.org.uk/publications/7130
Note: Authors’ calculations based on BHPS data. Includes all non-dependants aged 16+. The ‘average across waves’ column includes all waves and is weighted using cross-sectional weights. The ‘ever observed’ columns are calculated for individuals observed in all waves from wave 1 to the destination wave and weighted using longitudinal weights. The final two lines (earnings quintiles) only include individuals who are employed in all relevant waves.
But this is just at a snapshot in time:
Labour market activity and unemployment display strong age profiles.

Source: Figure 2.1 from http://www.ifs.org.uk/publications/7130
Note: Authors’ calculations based on pooled data from all 18 waves of the BHPS. Includes all non-dependants aged 16–70. Results are weighted using cross-sectional weights. Employment and unemployment calculated according to International Labour Organisation (ILO) definitions. Labour market activity defined as being employed or unemployed.
But this is just at a snapshot in time:
… as do earnings (especially for women)

Median gross earnings of employees by age & sex

Source: Figure 2.2 from http://www.ifs.org.uk/publications/7130
Note: Authors’ calculations based on pooled data from all 18 waves of the BHPS. Includes all employed non-dependants aged 16–70. Results are weighted using cross-sectional weights. Gross earnings are before taxes and benefits and are uprated to December 2012 prices.
All suggests should take lifetime perspective

- May change our assessment of:
  - Income inequality & the role of the tax and benefit system
  - The progressivity of historic and proposed tax and benefit reforms
  - How policy should be designed

- But data limitations mean most analysis of the tax & benefit system is based on information at a snapshot in time
  - Researchers at IFS simulated the lifetimes of the baby-boom cohort (1945-54) in order to address some of these questions
  - Used British Household Panel Survey (BHPS) used to model transitions between consecutive years and Living Costs and Food Survey (LCFS) used to adjust simulations to match cross-sectional distributions
  - Include most personal taxes and benefits, assuming full take-up; exclude benefits of public service spending

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From a lifetime perspective...
The tax & benefit system does less to reduce inequality between people

31% fall
From a lifetime perspective...
The tax & benefit system does less to reduce inequality between people

![Graph showing changes in Gini coefficient between cross-section and lifetime for gross and net income.]

- **Gross income**
  - **Cross-section**: Gini coefficient = 0.5, 31% fall
  - **Lifetime**: Gini coefficient = 0.3, 15% fall

- **Net income**
  - **Cross-section**: Gini coefficient = 0.5, 15% fall
  - **Lifetime**: Gini coefficient = 0.3, 15% fall

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From a lifetime perspective…
… as more of what it does is intrapersonal redistribution

Notes: see Figure 3.7 in ‘Redistribution from a Lifetime Perspective’
From a lifetime perspective…
… as more of what it does is intrapersonal redistribution

Notes: see Figure 3.7 in ‘Redistribution from a Lifetime Perspective’
How have 40 years of reforms affected inequality?

Notes: see Figure 4.1 in ‘Redistribution from a Lifetime Perspective’
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What were the distributional consequences of …

*The 4-year benefit freeze announced in the July 2015 Budget*

![Graph showing percentage change in net income across different income deciles.](image)

Notes: see Figure 4.4 in ‘Redistribution from a Lifetime Perspective’
What are the most cost-effective policies to reduce cross-sectional inequality directly?

Note: Income Support category includes means-tested Jobseekers Allowance and Employment Support Allowance
What are the most cost-effective policies to reduce lifetime inequality directly?

Note: Income Support category includes means-tested Jobseekers Allowance and Employment Support Allowance
Out-of-work benefits help snapshot poor most

Percentage change in net income

Net income decile

- Out-of-work benefits
- In-work benefits
- Personal Allowance

Notes: see Figure 5.3 in ‘Redistribution from a Lifetime Perspective’
... but in-work benefits help lifetime poor as much

Notes: see Figure 5.4 in ‘Redistribution from a Lifetime Perspective’
Higher-rate of income tax targets lifetime rich well

Notes: see Figure 5.5 in ‘Redistribution from a Lifetime Perspective’
What are the implications for the design of policy?

1. Policymakers need to be clear about their objectives: trying to alleviate short-run hardship or redistribute lifetime resources?

2. “Working” and “non-working” families is not a useful distinction

3. Policymakers looking to reduce inequality or transfer resources to the lifetime poor might favour doing so through in-work benefits

4. The potential exists to achieve what the current tax and benefit system does more efficiently
Redistribution from a lifetime perspective: historical and hypothetical reforms

Peter Levell, Barra Roantree and Jonathan Shaw