Child poverty transitions: early findings report

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Background

The Child Poverty Unit (CPU) commissioned NatCen to undertake secondary analysis of the Understanding Society dataset to explore child poverty transitions. The main aim of the project is to identify which employment and household characteristics increase the risk of a child entering poverty. It is expected that the final report will be published in the autumn of 2014.

This note sets out some early findings from that project and the methodology used. It presents findings on:

- Child poverty transitions;
- Child poverty entry and exit rates;
- Child poverty entry rates by sub-group of child.
Methodology

The data and measures

Understanding Society

Understanding Society (USoc) is a household panel study, repeated annually with a panel of 40,000 households from across all four countries of the UK. Responses are collected over a two-year period through face-to-face interviews, and questions cover a broad range of areas, including income, work, family composition, health and education. The first wave of the survey was carried out in 2009-10, with data from the third wave (2011-12) being made available in October 2013. USoc incorporates and expands the British Household Panel Survey, which ran for 18 years from 1991 to 2008. More details on USoc can be found at the following link: https://www.understandingsociety.ac.uk/

Measuring child poverty

The Child Poverty Act includes a set of four indicators of child poverty. The most commonly used, including in this research, defines the poverty line at 60 per cent of contemporary median disposable equivalised household income before housing costs. Equivalisation takes into account family size and composition; reflecting the common sense notion that a family of several people needs a higher income than a single person in order for both households to enjoy a comparable standard of living.

USoc collects detailed income information from all adults in the household allowing for calculation of disposable household income. That is to say the sum, across all household members, of income (after the deduction of Income Tax and National Insurance Contributions) from employment and self-employment, investments and savings, private and occupational pensions, Social Security benefits and tax credits.

However, it is not always possible to interview all adults in the household and in these instances an available interviewee will provide income information for the non-present adult. Understandably, it is sometimes difficult to collect accurate information about another person’s income, and this missing or inaccurate information could lead to biased estimates of household income. Hence only households where all adults were interviewed were used in the analysis.

During data preparation it was noticed that the amount of income households received from benefits and pensions in wave 1 was markedly lower than in wave 2. These differences were not seen in other sources of income collected by USoc and did not appear in other surveys covering a similar period. The cause of the discrepancy was likely to be due to people not recalling all of their benefit and pension receipt (a mechanism was included in the survey from wave 2 that improved this process). Hence a procedure was applied to the wave 1 data that imputed the wave 2 benefit and pension data for those who received that source in wave 2 but did
not mention it in wave 1 and were eligible to receive it in wave 1. For more information see Lord et al (2014, forthcoming - ‘Child poverty transitions: Imputation strategies for the income data in Understanding Society’).

Identifying child poverty transitions

Because USoc follows children over time it can be used to explore transitions into and out of child poverty across consecutive waves. The analysis for this project focuses on two-wave transitions and pools the two pairs of consecutive waves from the first three waves of USoc. This has the analytical advantage of increasing the sample size, thereby allowing for more powerful analysis of smaller subgroups, such as children whose parents separate. Table A shows how a respondent who took part in waves 1, 2 and 3 would be used twice in the analysis to observe transitions from wave 1 to wave 2 and wave 2 to wave 3.

<table>
<thead>
<tr>
<th>Time 1</th>
<th>Time 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter poverty</td>
<td>Not poor</td>
</tr>
<tr>
<td>Avoid poverty</td>
<td>Not poor</td>
</tr>
<tr>
<td>Exit poverty</td>
<td>Poor</td>
</tr>
<tr>
<td>Consecutive poverty</td>
<td>Poor</td>
</tr>
</tbody>
</table>

Two-wave poverty transitions are often expressed as poverty entrance and exit rates:

- The poverty entry rate identifies individuals moving into low income between one year and the following year, expressed as a percentage of the total number of individuals who were above the poverty line in the first year.
- The poverty exit rate identifies individuals moving out of low income between one year and the following year, expressed as a percentage of the total number of individuals who were in low income in the first year.

According to this definition, the child poverty entry rate was 12% and the child poverty exit rate was 48%. However, one of the problems with a relatively short run of data is miscategorising poverty transitions – for example, someone who moves from £1 above the poverty line to £1 below the poverty line may have moved into poverty but is unlikely to have experienced a marked change in living standards. Furthermore, this transition may have been caused by measurement error. Therefore, to help classify poverty transitions we only count a poverty entry (exit) when it involved moving at least 10 per cent below (above) the poverty line.

Analysis

The analysis presented in this report is based on children, rather than all individuals (children and parents) or households. The characteristics of the household, such as income or parental relationship status, are assigned to the children in that household.
Child poverty transitions: early findings report

The analysis was carried out on a particular subset of the USoc sample - children who were in consecutive waves of USoc and who lived in households where all adults completed an interview in both waves. New weights were constructed to correct for differential survey response and attrition. Regression analysis was used to construct the weights, which took into account the following characteristics of children (and their family): whether parents were working; child’s age and sex; whether child lived in an ethnic-minority boost household\(^1\); number of individuals in household; number of adults in household; whether child lives in private rented accommodation; and whether child lives in social rented accommodation. This built on work carried out by ISER, at the University of Essex, for a previous project for CPU (contact CPU for more details\(^2\)).

\(^1\) USoc includes an Ethnic Minority Boost sample, which was undertaken to produce enough cases (1,000) to analyse households and individuals from five major ethnic groups in the UK: Indian, Pakistani, Bangladeshi, Caribbean, and African.

\(^2\) Contacts.CPU@childpovertyunit.gsi.gov.uk
Results

Below we present findings on child poverty transitions. As all figures are based on survey data they are subject to a degree of uncertainty. Small differences should be treated with caution as these will be affected by sampling error and variability in non-response.

Table 1 shows the percentage of children in each of the four child poverty transition groups; enter poverty, avoid poverty, exit poverty, and consecutive poverty.

### Table 1  Child poverty transitions (including 10% rule)

<table>
<thead>
<tr>
<th>Base: Children (in consecutive waves, pooled)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter poverty (Not poor → Poor)</td>
<td>6</td>
</tr>
<tr>
<td>Avoid poverty (Not poor → Not poor)</td>
<td>74</td>
</tr>
<tr>
<td>Exit poverty (Poor → Not poor)</td>
<td>8</td>
</tr>
<tr>
<td>Consecutive poverty (Poor → Poor)</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Unweighted base: 20,792

Source: Understanding Society waves 1-3

- A similar proportion of children enter and exit poverty across two waves (6% and 8% respectively)
- Nearly three quarters (74%) of children were not in poverty in either wave, whereas 12% of children were poor in both waves.

Table 2 presents child poverty entry and exit rates for all children. As explained in the methodology section above, the percentages are based on children ‘at risk’ of each event, for example, children who enter poverty are expressed as a percentage of all children not in poverty in the first wave.

### Table 2  Child poverty entry and exit rates (including 10% rule)

<table>
<thead>
<tr>
<th>Base: Children (in consecutive waves, pooled)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter poverty (Not poor → Poor)</td>
<td>7</td>
</tr>
<tr>
<td>Avoid poverty (Not poor → Not poor)</td>
<td>93</td>
</tr>
<tr>
<td><strong>Unweighted base</strong></td>
<td><strong>16,727</strong></td>
</tr>
<tr>
<td>Exit poverty (Poor → Not poor)</td>
<td>38</td>
</tr>
<tr>
<td>Consecutive poverty (Poor → Poor)</td>
<td>62</td>
</tr>
<tr>
<td><strong>Unweighted base</strong></td>
<td><strong>4,065</strong></td>
</tr>
</tbody>
</table>

- Around two out of five (38%) children who were poor in one wave were not poor in the next wave
- Fewer than one in ten (7%) children who were not poor in one wave entered poverty in the next wave
Table 3 presents child poverty entry rates for selected sub-groups of children. This includes children whose circumstances have changed between waves, for example their parents separated.

| Table 3 Child poverty entry rates by sub-group of child (including 10% rule) |
|----------------------------------|-------------------------------|
| **Base: Children (in consecutive waves, pooled)** | \begin{tabular}{l|cc}
  
  All children & Poverty entry rate & Unweighted base \\
  & (%) & (n) \\
  | & 7 & 16,433 |
  
  **Family type** & & 
  Couple in both waves & 6 & 12,027
  Lone parent in both waves & 12 & 4,194
  Changed status: Couple → Lone parent & 14 & 109
  Changed status: Lone parent → Couple & 3 & 103
  
  **Number of children** & & 
  1 child in both waves & 6 & 3,516
  Changed status: 1 child → 2 children & 6 & 744
  2 children in both waves & 6 & 6,826
  Changed status: 2 children → 3 children & 14 & 449
  3 children in both waves & 7 & 3,086
  Changed status: 3 children → 4 or more children & 26 & 215
  4 or more children in both waves & 15 & 1,522
  
  **Economic status** & & 
  Full employment in both waves & 1 & 6,390
  Part employment in both waves & 6 & 3,268
  Workless in both waves & 18 & 2,117
  Changed status: Full employment → part employment & 13 & 713
  Changed status: Full employment → workless & 36 & 138
  Changed status: Part employment → full employment & 3 & 622
  Changed status: Part employment → workless & 43 & 259
  Changed status: Workless → part employment & 12 & 223
  Self-employed in either wave & 10 & 2,927
  
  **Only families in work in first wave:** & & 
  Contract type of main earner (first wave) & & 
  Permanent job & 6 & 13,409
  Fixed period or fixed task contract & 6 & 434
  Agency temping & 3 & 117
  Casual type of work & 26 & 108
  Other way non-permanent & 10 & 144
  
  Source: Understanding Society waves 1-3
  1 Couple: both in full-time work, Couple: one parent in full-time work and one parent in part-time work, Lone parent in full-time work
  2 Couple: one parent in full-time work, Couple: one parent in part-time work, Couple: both in part-time work, Lone parent in part-time work

\[3\] Note that some categories are not included in Table 3 because the sub-group is too small to produce robust findings – for example, only very few families went from 1 to 3 children (e.g. had twins) so this category is not included in the table.
• Children in families who increased the number of children from 2 to 3 and from 3 to 4 were particularly likely to enter poverty. There was a poverty entry rate of 14% for children living in families that went from 2 to 3 children, and 26% for children living in families that went from 3 to 4 or more children.

• Children in families with 4 or more children in both waves were also more likely to enter poverty (15%).

• Children who lived in a couple family that separated had an increased risk of entering poverty (14%).

• After separation, lone parent family incomes are on average 28% below pre-separation levels (not in table\(^4\)).

• There is an increased risk of poverty entry for children of parents doing casual work (26%).

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\(^4\) This follows the method used by Jenkins, S. (2008) who calculated the median percentage change in net income between the interview before and after the separation. Reference - Jenkins, S. (2008) Marital Splits and income changes over the longer term ISER, 2008-07, University of Essex.