Understanding the prevalence and effects of deep poverty through existing data infrastructure

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<table>
<thead>
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</thead>
<tbody>
<tr>
<td>OECD Public social expenditure (% of GDP)</td>
<td>14.4</td>
<td>16.4</td>
<td>17.3</td>
<td>20.4</td>
<td>23.0</td>
<td>+32.9%</td>
</tr>
<tr>
<td>G7 Public social expenditure (% of GDP)</td>
<td>15.8</td>
<td>17.5</td>
<td>19.6</td>
<td>23.5</td>
<td>27.4</td>
<td>+39.8%</td>
</tr>
<tr>
<td>UK Public social expenditure (% of GDP)</td>
<td>15.6</td>
<td>14.9</td>
<td>16.8</td>
<td>23.1</td>
<td>22.5</td>
<td>+33.9%</td>
</tr>
<tr>
<td>OECD Mean poverty gap after taxes and transfer</td>
<td>0.267</td>
<td>0.290</td>
<td>0.292</td>
<td></td>
<td></td>
<td>+9.4%</td>
</tr>
<tr>
<td>G7 Mean poverty gap after taxes and transfer</td>
<td>0.298</td>
<td>0.300</td>
<td>0.302</td>
<td></td>
<td></td>
<td>+1.3%</td>
</tr>
<tr>
<td>UK Mean poverty gap after taxes and transfer</td>
<td>0.260</td>
<td>0.291</td>
<td>0.327</td>
<td></td>
<td></td>
<td>+25.8%</td>
</tr>
<tr>
<td>OECD Net replacement rate in unemployment</td>
<td>57</td>
<td>57</td>
<td>59</td>
<td></td>
<td></td>
<td>+3.5%</td>
</tr>
<tr>
<td>G7 Net replacement rate in unemployment</td>
<td>58</td>
<td>55</td>
<td>55</td>
<td></td>
<td></td>
<td>-5.2%</td>
</tr>
<tr>
<td>UK Net replacement rate in unemployment</td>
<td>41</td>
<td>38</td>
<td>33</td>
<td></td>
<td></td>
<td>-19.5%</td>
</tr>
</tbody>
</table>

Source: OECD (2024)
Outline

1. What do we already know about the prevalence, profile and effects of deep poverty?
2. What forms and degrees of poverty are currently missed through existing data infrastructure and analysis?
3. What can be done about it?
1. What do we already know about the prevalence, profile and effects of deep poverty?
Poverty Gap, 1994-2020

£ per week, net equivalised income after housing costs (2019-20 prices)

< 60% of median incomes
< 50% of median incomes
< 40% of median incomes
< 50% below the poverty line
Falling deeper

Poverty gap by ethnicity

Median incomes as a ratio of the relative poverty line (60%)
Greater poverty exposure and risk

Real terms change in average (mean) cash benefits received between 2011-2020 by ethnicity

Breakdowns are offered at the family (benefit unit) level in 2020/21 prices

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>All</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>-£1,596</td>
<td>-£1,596</td>
</tr>
<tr>
<td>Other</td>
<td>-£963</td>
<td>-£963</td>
</tr>
<tr>
<td>Mixed</td>
<td>-£510</td>
<td>-£510</td>
</tr>
<tr>
<td>Asian</td>
<td>-£728</td>
<td>-£728</td>
</tr>
<tr>
<td>BME</td>
<td>-£1,040</td>
<td>-£1,040</td>
</tr>
<tr>
<td>White</td>
<td>-£645</td>
<td>-£645</td>
</tr>
</tbody>
</table>

All

Women
Percentage change between median incomes of interval groups, 2007/08-2018/19 (AHC, £pw equivalised 2018/19 prices)

- 0%-5%: 0%
- "0-10%": -5%
- 10.1%-20%: 3%
- 20.1%-30%: 5%
- Population Median: 6%

*excluding bottom 3%
## Current measures of poverty depth in the UK (1)

<table>
<thead>
<tr>
<th>Source</th>
<th>Nomenclature</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD (2024)</td>
<td>'Poverty gap'</td>
<td>Income-based: Average (mean) incomes of those falling below the poverty line expressed as ratio. The poverty line is set at 50% of median household incomes for the overall population</td>
</tr>
<tr>
<td>Hirsch et al. (2020)</td>
<td>'Low income gap'</td>
<td>Income-based: Proportion of the population falling below the income needed to achieve a Minimum Income Standard (based on a socially perceived and expert-informed basket of items to attain an 'adequate standard of living') times by the average amount they fall below the threshold</td>
</tr>
<tr>
<td>Joseph Rowntree Foundation (Padley and Stone, 2022)</td>
<td>'Depth of low income'</td>
<td>Income-based: Proportion of the population falling more than 75% below the income needed to achieve a Minimum Income Standards (based on a socially perceived and expert-informed basket of items to attain an 'adequate standard of living')</td>
</tr>
<tr>
<td>Joseph Rowntree Foundation &amp; Child Poverty Action Group (Lee, 2020; JRF, 2022)</td>
<td>'Deep poverty'</td>
<td>Income-based: Proportion of the population with a net equivalised household income that falls more than 50% below median incomes (after housing costs)</td>
</tr>
<tr>
<td>Joseph Rowntree Foundation (JRF, 2022)</td>
<td>'Very deep poverty'</td>
<td>Income-based: The proportion of the population with a net equivalised household income that falls more than 40% below median incomes (after housing costs)</td>
</tr>
</tbody>
</table>
# Current measures of poverty depth in the UK (2)

<table>
<thead>
<tr>
<th>Source</th>
<th>Nomenclature</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Metrics Commission Bradshaw and Movshuk (2019)</td>
<td>‘Deep poverty’</td>
<td>Income-based: The proportion of the population with a net equivalised household income that falls more than 50% below the relative poverty line (after housing costs)</td>
</tr>
<tr>
<td></td>
<td>‘Extreme poverty’</td>
<td>Composite: All those who fall below an equivalent income threshold of €6000 and are materially deprived of 7 or more items (out of 13 items in total).</td>
</tr>
<tr>
<td>Heriot-Watt University &amp; Joseph Rowntree Foundation (Fitzpatrick et al., 2021)</td>
<td>‘Severe poverty’</td>
<td>Composite: Includes those who are a) experiencing material deprivation (lacking a third of key items) or have a housing issue (overcrowding, poor quality, suitability or affordability); and b) living on less than 40% of median net equivalised household income (after housing costs); and c) experiencing financial strain (current or future financial difficulty such as difficulty paying rent, as well as subjective perceptions).</td>
</tr>
<tr>
<td>DWP (DWP, 2020a)</td>
<td>‘Severe low income and deprivation’</td>
<td>Composite: Children and pensioners who are a) experiencing material deprivation (scoring more than 25 when it comes to lacking key items), and b) living on less than 50% of median equivalised household income (before housing costs).</td>
</tr>
<tr>
<td>Heriot-Watt University &amp; Joseph Rowntree Foundation (Fitzpatrick et al., 2021)</td>
<td>‘Destitution’</td>
<td>Composite: Individuals accessing crisis services who a) lack two or more of 6 essential items (food, shelter, heating etc), or b) falling below a very low income threshold based on (perceived) ability to purchase essentials: £70 for a single adult living alone, £95 for a lone parent with one child, £105 for a couple and £145 for a couple with two children (after housing costs).</td>
</tr>
</tbody>
</table>
Proportion of the low-income population (below 60% of median incomes) in ‘deep poverty’ according to different measures, 1994-2021
The stickiness of deep poverty (compared to shallow poverty)

Rates of Persistent Poverty (Falling below 60% of median incomes in wave N, and for at least 2 of following 3 Waves)

<table>
<thead>
<tr>
<th>Year</th>
<th>Shallow Poverty (40-60% below median incomes)</th>
<th>Deep Poverty (&lt; 40% below median)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-12</td>
<td>37%</td>
<td>44%</td>
</tr>
<tr>
<td>2010-2013</td>
<td>40%</td>
<td>49%</td>
</tr>
<tr>
<td>2011-2014</td>
<td>44%</td>
<td>52%</td>
</tr>
<tr>
<td>2012-2015</td>
<td>43%</td>
<td>49%</td>
</tr>
<tr>
<td>2013-2016</td>
<td>40%</td>
<td>48%</td>
</tr>
<tr>
<td>2014-2017</td>
<td>42%</td>
<td>50%</td>
</tr>
<tr>
<td>2015-2018</td>
<td>42%</td>
<td>56%</td>
</tr>
<tr>
<td>2016-2019</td>
<td>42%</td>
<td>50%</td>
</tr>
<tr>
<td>2017-2020</td>
<td>37%</td>
<td>52%</td>
</tr>
</tbody>
</table>

Source: Understanding Society (2023); author’s own analysis
Mean Scores for Mental Health, SF-12 Mental Component Summary (PCS), Waves 1-12 (2009-10 to 2020-21), Weighted

Income Status
- No Poverty (60%+ above median incomes)
- Shallow Poverty (40-60% of median incomes)
- Deep Poverty (Less than 40% below median incomes)

Note: Scale with a range of 0 (low functioning) to 100 (high functioning)
Mean Scores for Mental Health by Income Status Change (three-wave period), SF-12 Mental Component Summary (MCS), Waves 3-12 (2011-12 to 2020-21), Weighted. Only those with consistent income statuses

Income Status Change
- Red: Remains out of Poverty
- Blue: Remains in Shallow Poverty
- Green: Remains in Deep Poverty

Note: Scale with a range of 0 (low functioning) to 100 (high functioning)
Mean Scores for Subjective wellbeing (GHQ), Waves 1-12 (2009-10 to 2020-21), Weighted

Note: Scale ranging from 0 (indicating the least amount of distress) to 36 (indicating the greatest amount of distress)
Mean Scores for Subjective wellbeing (GHQ) by Income Status Change (three-wave period), Waves 1-12 (2009-10 to 2020-21), Weighted. Only those with consistent income statuses

Income Status
- Remains out of Poverty
- Remains in Shallow Poverty
- Remains in Deep Poverty

Note: Scale ranging from 0 (indicating the least amount of distress) to 36 (indicating the greatest amount of distress)
Mean Scores for Satisfaction with Life Overall, Waves 1-12 (2009-10 to 2020-21), Weighted

Scale ranging from 1 (Not satisfied at all) to 7 (Completely satisfied)
Mean Scores for Satisfaction with Life Overall by Income Status Change (three-wave period), Waves 1-12 (2009-10 to 2020-21), Weighted. Only those with consistent income statuses

Note. Scale ranging from 1 (Not satisfied at all) to 7 (Completely satisfied)
2. What forms and degrees of poverty are currently missed through existing data infrastructure and analysis?
Current living arrangements of people in destitution, 2019 and 2022

Source: Fitzpatrick et al., 2023
25%

Unadjusted and adjusted poverty rates, 2021/2022

<table>
<thead>
<tr>
<th></th>
<th>Unadjusted</th>
<th>Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>60% of median incomes (Relative poverty line)</td>
<td>22%</td>
<td>23%</td>
</tr>
<tr>
<td>50% below the poverty line (SMC)</td>
<td>6%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Unadjusted and adjusted proportion of the low-income population (below 60% of median incomes) in "deep poverty" (50% below the poverty line, 2021/2022)

<table>
<thead>
<tr>
<th></th>
<th>Unadjusted</th>
<th>Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;deep poverty&quot;</td>
<td>28%</td>
<td>32%</td>
</tr>
</tbody>
</table>

Source: Family Resources Survey and Fitzpatrick et al, 2023, author’s own analysis
But who is understood as a policy priority also changes...

- 40% of those in “deep poverty” (50%+ below poverty line) are in single workless households
- But receive relatively little attention in research and policy-making process
- Make up 49% of UC caseload
## Income and characteristics of people across the income distribution, 2019-20

<table>
<thead>
<tr>
<th></th>
<th>Median Income^</th>
<th>Mean Income^</th>
<th>Food Insecure</th>
<th>Female</th>
<th>BAME</th>
<th>Private Renter</th>
<th>Receiving benefits†</th>
<th>Self-employed†</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bottom 3 income percentiles^</strong></td>
<td>-£14</td>
<td>-£32</td>
<td>17%</td>
<td>49%</td>
<td>24%</td>
<td>38%</td>
<td>24%</td>
<td>14%</td>
</tr>
<tr>
<td><strong>In relative poverty</strong></td>
<td>£203</td>
<td>£173</td>
<td>21%</td>
<td>53%</td>
<td>24%</td>
<td>29%</td>
<td>46%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td>£476</td>
<td>£587</td>
<td>8%</td>
<td>51%</td>
<td>15%</td>
<td>19%</td>
<td>20%</td>
<td>8%</td>
</tr>
</tbody>
</table>

^ £ per week, net equivalised household income after housing costs (2019-20 prices)

* Those falling more than 60% below median incomes (after housing costs)

† One or more person in the household, working-age population

Source: DWP (2022b), author’s calculation
Average incomes and rates of food insecurity at different poverty thresholds, 2019-2020

£ per annum, net equivalised household income after housing costs (2019-20 prices)

<table>
<thead>
<tr>
<th>Percentage of Median Incomes</th>
<th>Median Income</th>
<th>Median Income (% of poverty line)</th>
<th>Food Insecure</th>
<th>Severe Food Insecurity</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>£25,446</td>
<td>167%</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>60% of median incomes</td>
<td>£11,263</td>
<td>74%</td>
<td>21%</td>
<td>10%</td>
</tr>
<tr>
<td>50% of median incomes</td>
<td>£9,438</td>
<td>62%</td>
<td>23%</td>
<td>12%</td>
</tr>
<tr>
<td>40% of median incomes</td>
<td>£7,665</td>
<td>50%</td>
<td>23%</td>
<td>12%</td>
</tr>
<tr>
<td>50%+ below the poverty line</td>
<td>£5,736</td>
<td>38%</td>
<td>24%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Source: DWP (2022b), author’s calculation
Excluding/managing lowest incomes...

Mismatch between reported incomes, consumption, national benefit levels:

- Ineligibility
- Fluctuating deductions
- Sanctions
- Non-take-up of benefits
- Smoothing consumption practices
- Poverty premium
- Over-reported consumption (status/stigma)
- Income fluctuation
- Net dissaving for those towards the bottom
Data coverage and quality

Response Rate to the Family Resources Survey 2000-2022

- 65% 66% 63% 64% 62% 62% 60% 59% 59% 59% 62% 60% 60% 58% 56% 54% 52% 50% 49%
- 26%
- 23%
- 0%
Why does this matter?

- Qualitative longitudinal fieldwork with 40 individuals in “deep poverty”
- Capture range of experiences, particularly those often “missing” or under-represented in poverty research
- 76 interviews conducted so far: 40 in Wave 1, and 36 in Wave 2 with a retention rate of 90%
- More inclusive recruitment and retention strategy:
  - Retention rate would have otherwise been much lower (63%) by Wave 2
  - Deep poverty often triggered considerable upheaval
  - 1/3 had either lost, sold, pawned or changed their telephone a third
  - 1/3 had moved to different or lost accommodation during fieldwork.

- Crucially, those falling into deeper forms of poverty were much more likely to move and change their contact details:
  70% of those with worse incomes had done so, compared to only 28% of those whose incomes had remained the same or improved
Attrition Rates by Income Status
(Respondent in wave N but no response in any future waves, unweighted)

Source: Understanding Society (2023); author’s own analysis
A ‘Missing Minority’ in Poverty Statistics and Analysis

• Private households tend to be the target sample of population income surveys
• Significantly undermines examination of poverty incidence, depth and determinants due to the...

1. Size
2. Poverty risk
3. Distinctive characteristics

...of a "missing minority" in distributional analyses.
• Dominant methods of poverty measurement and analysis render certain groups more socially legible than others in welfare policy and politics.

• Need to ensure all social groups are accounted for and incorporated in poverty analysis and policy evaluation

• Failure to do so risks:
  • Reproducing the very exclusions implicated in (extreme) disadvantage
  • Misunderstanding the full extent, dynamics and shape of economic inequality
3. What can be done about it?
Through new analysis of hitherto fragmented data, WHOCOUNTS will correct for noncoverage error in official EU statistics (EU-SILC) to better understand the changing profile, drivers and depth of poverty across Europe.

***

Doing so will:
1. avoid under-estimating (extreme) poverty along key socio-demographic lines
2. improve understanding of anti-poverty policy
3. nuance explanations of poverty risk, dynamics and the groups worst affected
Implementation

• Work Package 1: Country Case Selection and Data Collection on the ‘Missing Minority’

• Work Package 2: Data Imputation to Re-estimate the Extent, Profile and Depth of Poverty

• Work Package 3: Modelling to Explore Determinants of (Extreme) Poverty

• Work Package 4: Implications for Poverty Analysis, Welfare Politics and Anti-Poverty Policymaking
Figure 1. Proportion of overall population not living in private households

Source: Eurostat (2021a), author’s own calculation
Diversity within the NPH

The known demographic profile of the non-private-household population differs considerably across European countries (June, 2022, Commander et al., 1997; Commander et al., 2002; Veiga, 2013; Törmälehto, 2019):

- Significant variation in the age, education level and citizenship status of those missing
- The share of women in non-private-households is 20% higher than men in a number of Southern European countries
- In Finland, the median income of the non-private household population is 2/3 of sampled population
- NPH exhibit consistently distinct employment rates, receipt of social transfers and property income

Nicaise et al., (2019) estimate that the official poverty rate in Belgium is between 0.6 and 1.7 percentage points higher.
Conclusions

• The prevalence and intensity of poverty is likely underestimated as a result of current data infrastructure and practices

• Non-trivial population subgroups are missing that are likely to distort our understanding of deep poverty risks and determinants

• Despite considerable social policy expenditure on NPH, we don’t fully understand how they feature in low-income living standards and trends

• Those missing are diverse in their characteristics across countries: dispersion across communal establishments varies by gender, ethnicity, disability and citizenship status and life course stage

• Improving accuracy of poverty estimates and determinants can and should inform more effective targeting of social policy interventions and transfers
Thanks for listening.

Papers drawn on in this presentation are available at

www.deep-poverty.co.uk