Discussion of ‘The inequality of extreme incomes’

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Purpose of paper

• Set out the circumstances in which the addition of previously missing observations at the top & bottom of income distribution lead to increased inequality

• Provide an empirical application of these findings using data for 50 US states.
Missing observations at the bottom

- Paper highlights issue with missing observations due to challenges in capturing migrants in surveys or Census data collection.
  - For many stats offices, where collection relies on household surveys, the issues of missing populations can stretch far wider: e.g.

<table>
<thead>
<tr>
<th>Category</th>
<th>Approximate population</th>
<th>% of UK population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homeless (inc. roofless, sofa-surfers, &amp; those in hostels, B&amp;B’s &amp; other unsuitable temp. accom.)</td>
<td>160,000</td>
<td>0.24%</td>
</tr>
<tr>
<td>Travellers in caravan sites</td>
<td>90,000 - 120,000</td>
<td>0.15%</td>
</tr>
<tr>
<td>Student halls of residence</td>
<td>500,000</td>
<td>0.75%</td>
</tr>
<tr>
<td>Care homes &amp; long stay hospitals</td>
<td>510,000</td>
<td>0.75%</td>
</tr>
<tr>
<td>Other non-private household (inc. prisons, military accom. &amp; immigration removal centres)</td>
<td>210,000</td>
<td>0.32%</td>
</tr>
</tbody>
</table>

Source: Bramley, Sosenko & Wood (2018)
Under-coverage of top incomes is a well recognised issue which can have significant impacts on inequality levels & trends: e.g.

Source: UK ONS, Shine et al. (2019)
Main findings

- Theoretical part shows adding observations at the extremes of the distribution does not necessarily lead to increased inequality
  - Empirical application highlights inequality almost always increased in practice
- Adding observations at the top of the distribution weighs more on inequality than adding observations at the bottom
Discussion

• Well-written, clear paper which makes a useful contribution to our understanding of the impact of missing observations on inequality
  • Given the Gini coefficient doesn’t necessarily increase if observations added at top/bottom of distribution, does this suggest we should focus more on alternative inequality measures? e.g. Palma Ratio
Discussion

• Equations presented assume new observations = lowest \( (x_1) \) or highest \( (x_n) \) from original distribution
  • How are conclusions affected if the new observations for top above original distribution?
  • Missing likely to include very richest in society e.g. Forbes 400 members
• Evidence in some countries that issues at top primarily under-reporting rather than missing observations (e.g. Burkhauser et al. 2018)
  • Can the framework be extended to reflect this?

Source: UK ONS, Shine et al. (2019)
Discussion of empirical application

- Data taken from US Current Population Survey
  - Lowest incomes in each state $0 - Are these genuine zeros or do they reflect survey under-reporting?
    - Not clear what income measure used – assume market income given the level of Gini’s?
  - Would be interesting to see application based on e.g. disposable income where less likely to see zero incomes – would the same findings hold?
- Upper bound estimates for pop changes at top & bottom estimated from internal migration levels & estimates of legal & unauthorised migrant population
  - Assume in practice many of these individuals will have incomes away from extremes, so true values will be a lot lower
Discussion of empirical application

• Adding 1% of pop. at top will result in inequality higher than adding 18% at bottom – though as low as 5% in Kentucky
  • For countries where missing non-private household population is a significant % of overall population (and missing at top potentially less than 1%), the missing observations at the bottom may be more important
  • Whilst researchers’ focus on top incomes has been sensible, still incredibly important to better capture the poorest in society in both inequality & other statistics