A tale of three distributions: inheritances, wealth and lifetime income

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Overview

• We provide new evidence on the impact of receipt of inheritances and other intergenerational transfers on inequality in wealth and lifetime incomes

• We look at the impact of wealth transfers on the distribution of a broad measure of wealth including state and private pensions
  – Find that effect on inequality is negligible

• We show that our results provide the best available guide to the impact of wealth transfers on inequality in lifetime incomes
  – Broader measure of wealth roughly proportional to lifetime income
Perceptions and previous literature

- Usually assumed in public debate that inheritances and gifts increase wealth inequality
  - Likelihood and size of receipt correlated with other indicators of socioeconomic advantage

- But previous literature finds wealth transfers reduce inequality (or at least do not increase it)
  - Wolff (2002) and Wolff and Gittleman (2013) for the US
  - Klevmarken (2004) for Sweden
  - Karagiannaki and Hills (2013) for the UK

- All look at marketable wealth (ie. excluding pension wealth)
Data: English Longitudinal Study of Ageing (ELSA)

• Biennial panel survey of over 50 population in England
  – Similar to HRS in the US and SHARE in Europe
  – Contains detailed information on income and wealth holdings

• We use a representative sample of 3,750 individuals aged 65 to 79

• Construct three measures of wealth
  1. “Non-pension wealth”: net financial wealth, net property wealth and physical wealth
  2. “Total private wealth”: non-pension wealth + estimated value of private pension income
  3. “Total wealth”: total private wealth + estimated value of state pension income
## Distributions of different wealth measures

<table>
<thead>
<tr>
<th>Household wealth per person (2012 prices)</th>
<th>Non-pension wealth</th>
<th>Private wealth</th>
<th>Total wealth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>£212,028</td>
<td>£326,263</td>
<td>£466,671</td>
</tr>
<tr>
<td>Median</td>
<td>£141,160</td>
<td>£230,261</td>
<td>£373,123</td>
</tr>
<tr>
<td>Gini coefficient</td>
<td>0.524</td>
<td>0.482</td>
<td>0.338</td>
</tr>
<tr>
<td>Top 10% share</td>
<td>37.6%</td>
<td>33.3%</td>
<td>26.1%</td>
</tr>
</tbody>
</table>
Data: lifetime receipt of inheritances and gifts

- Wave 6 of ELSA (2012/13) asked respondents about the value of up to 3 inheritances and large gifts ( > £1000) over their lifetime
  - Nearly a third of our sample (65-79s) have received an inheritance, and 6% have received a large gifts
Distribution of size of inheritances received

Total size of inheritance(s) received (2012 prices)
Data: lifetime receipt of inheritances and gifts

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  - Nearly a third of our sample (65-79s) have received an inheritance, and 6% have received a large gifts

- Distribution of inheritances highly unequal...
  - 15% of recipients received <£5,000 in total, 11% more than £200,000

- ... and correlated with education level and household income

- Evidence of correlation in inheritances across partners
  - 53% of those whose partner inherited also received an inheritance, compared to 18% of those whose partner did not inherit
Calculating the contribution of transfers to current wealth

• Extremely contentious issue in the literature

• True impact will depend on the impact of wealth transfers on saving and labour supply decisions
  – We abstract from these behavioural responses throughout

• We capitalise wealth transfers at a real rate of 3% since the time of receipt
  – Simplest interpretation is no crowding out of private saving, no impact on the return to private saving, and 3% real return
  – But could reflect some crowding out, offset by effect of inheritances in increasing return to private saving
The impact of transfers on wealth inequality

- Given these assumptions, we can split current wealth (W) into wealth excluding transfers (WX) and wealth transfers (T)
- Then recover the impact of transfers on wealth inequality by comparing the distributions of W and WX
  - Do this for each of our three measures of wealth
The impact of transfers on the distribution of non-pension wealth (Lorenz curves)
The impact of transfers on wealth inequality (1)

- Given these assumptions, we can split current wealth (W) into wealth excluding transfers (WX) and transfers (T).
- Then recover the impact of transfers on wealth inequality by comparing the distributions of W and WX.
  - Do this for each of our three measures of wealth.

- Transfers reduce inequality in non-pension wealth.
  - Gini coefficient falls from 0.57 to 0.52.
  - Top 10% share falls from 39.6% to 37.6%.

- Why? Transfers are a bigger share of wealth towards the bottom of the distribution.
The impact of transfers on the distribution of total private wealth (Lorenz curves)

- Total private wealth
- Total private wealth excluding transfers

Proportion of individuals

Proportion of non-pension wealth
The impact of transfers on the distribution of total wealth (Lorenz curves)
The impact of transfers on wealth inequality (2)

- Key result: wealth transfers do not reduce inequality in total wealth (including state and private pension wealth)

- Gini coefficient is unchanged (at 0.34) and the top 10% share are also broadly unaffected

- Why? State pension wealth is much more important towards the bottom of the distribution
  - Once it is included, transfers no longer give a disproportionate boost to low-wealth individuals
What about the impact on lifetime income inequality?

- We do not currently have data containing lifetime incomes and lifetime receipt of wealth transfers for the same individuals.

- Our approach is to go “via” the wealth distribution:
  - Using data containing both individual’s lifetime incomes and wealth holdings in retirement for a slightly earlier cohort.
Data: the ELSA-NI administrative data link

- Wave 1 of ELSA (2002/03) linked to National Insurance records
  - Records annual earnings since 1975 (topcoded until 1997) and number of weeks worked between 1948 and 1975
  - Can be used to construct full lifetime earnings histories
  - No data on unearned income, state benefits or employer pension contributions

- We construct three measures of net lifetime income
  1. Net lifetime earnings + net lifetime state pension income
  2. Net lifetime earnings + net lifetime state pension income + 0.5*net lifetime private pension income
  3. Net lifetime earnings + net lifetime state pension income + net lifetime private pension income
What about the impact on lifetime income inequality?

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- Our approach is to go “via” the wealth distribution.
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- Can look at the relationship between net lifetime incomes and our three measures of wealth.
Median regression of the ratio of wealth to net lifetime income (including 50% private pension income)

<table>
<thead>
<tr>
<th></th>
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<th>Private wealth</th>
<th>Total wealth</th>
</tr>
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<tbody>
<tr>
<td>Constant</td>
<td>0.155*** (0.010)</td>
<td>0.211*** (0.013)</td>
<td>0.583*** (0.014)</td>
</tr>
<tr>
<td>Quintile 2 of net LI</td>
<td>0.003 (0.014)</td>
<td>0.037* (0.019)</td>
<td>-0.051*** (0.020)</td>
</tr>
<tr>
<td>Quintile 3 of net LI</td>
<td>0.017 (0.014)</td>
<td>0.102*** (0.019)</td>
<td>-0.016 (0.020)</td>
</tr>
<tr>
<td>Quintile 4 of net LI</td>
<td>0.062*** (0.014)</td>
<td>0.127 (0.019)</td>
<td>-0.008 (0.020)</td>
</tr>
<tr>
<td>Quintile 5 of net LI</td>
<td>0.111*** (0.014)</td>
<td>0.254*** (0.019)</td>
<td>0.047*** (0.020)</td>
</tr>
</tbody>
</table>

Notes: Sample size is 1,567 individuals. *,**,*** on constant indicate statistically different from zero at 10%, 5%, 1% confidence interval (respectively). *,**,*** on quintile coefficients indicate coefficient is statistically different from the previous quintile at the 10%, 5%, 1% confidence interval (respectively).
Wealth and lifetime incomes

• Non-pension wealth as a share of lifetime income increases significantly across the lifetime income distribution
  – 16% for bottom quintile, 22% for fourth quintile, 27% for top quintile
  – ie. non-pension wealth is more unequal than lifetime incomes

• Total wealth as a share of lifetime income much more similar across the lifetime income distribution
  – 58% for bottom quintile, 57% for fourth quintile, 63% for top quintile
  – ie. inequality of total wealth similar to that of lifetime income
Inheritances and lifetime incomes

• (Negligible) impact on inequality in total wealth likely to be better guide than (negative) impact on inequality in non-pension wealth
  – Distribution of total wealth more similar to that of lifetime income

• Impact on distribution of total wealth and lifetime incomes likely to be qualitatively similar
  – Smaller impact on distribution of lifetime incomes
  – Under assumption that correlation between transfers and non-transfer wealth close to that between transfers and lifetime income

• All conclusions for this cohort of older individuals in England
  – Might be different among later cohorts for whom wealth transfers are more prevalent
Conclusion

• Growing policy concern about the role of wealth transfers in widening inequality and strengthening intergenerational links
  – But academic literature to date suggests transfers reduce inequality in marketable (non-pension) wealth

• We show that this inequality-reducing impact does not hold for a broader measure of wealth including private and state pensions
  – Wealth transfers no longer give disproportionate boost to low wealth households

• Use link to lifetime earnings to suggest negligible impact on total wealth inequality is better guide to impact on lifetime incomes
  – Distributions of total wealth and lifetime incomes similar