

Intergenerational wealth transmission in Great Britain

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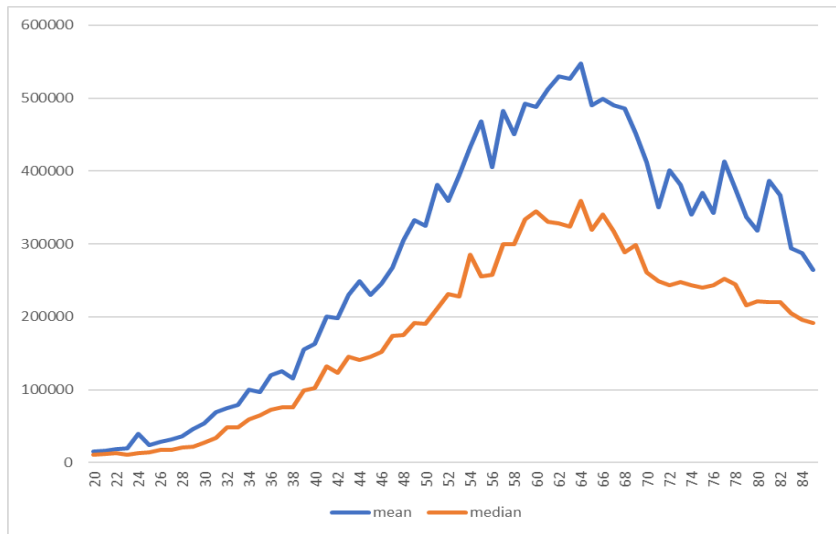
Policy context in GB

- Wealth inequalities have come to the forefront of the policy agenda
 - Average level of net household wealth at the 90th percentile is almost 98 times the level at the 10th percentile (ONS, 2018).
 - 1 in 3 individuals in population between 2014-16 report no housing wealth (ONS, 2017). So having vs not having.
 - Palomino et al. (2020) estimate intergenerational transfers contribute 33% of total wealth inequality, falling to 23% after controlling for family background
 - Strong link between **parents owning home and offspring owning home** (Blanden and Machin, 2017; Blanden et al. 2021).
- Literatures shows importance of **family background** in influencing life chances.
 - In this paper we consider the extent of **intergenerational persistence of wealth** in Great Britain.

Data

- Wealth and Assets Survey (waves 1-6), representative of GB. Biennial. Wave 1 contained 30,000 households.
- Estimation predominantly based on wave 3 onwards due to consistent measures of total net wealth (individual level)
- WAS oversamples wealthier households by a rate of between 2.5 and 3 times compared to other addresses
- Total net wealth, net housing wealth, pension wealth and net financial wealth all available (consistent measure) from wave 3 onwards

Wealth in GB I



Notes: Figures based on WAS wave 3 (2010-2012). Y axis measures individual level total net wealth. X axis refers to age. See Appendix A for definitions. Figures quoted in 2015 prices. N=38,020.

Empirical strategy

- 2s2sls: impute wealth based on parents with same characteristics as offspring's parents at peak wealth (age 64)
- We create 5 groups based on parents education and housing which are strong predictors of total wealth (Gregg, 2017) and for offspring act as markers of relative wealth by family background early in life
- **Empirical question: whether these differences are maintained when offspring are teenagers (parents circa 40) and when parents reach peak wealth at age 64.**

Methods

- Given focus is total net wealth (rarely zero) use log transformation. Given specification essentially an elasticity.
- Ideal scenario: $\log W_{\text{offspring}64} = \alpha + \beta \log W_{\text{parent}64} + \varepsilon$ without reporting error. Given data not feasible.
- We instead observe offspring wealth at their current age and regress this against imputed wealth based on parent characteristics, formally:
 - $\log W_{\text{offspring}28-45} = \pi + \beta \log W_{\text{imputed}_{\text{wealth}}} + \vartheta$
 - we also estimate a rank specification

Methodological challenges

- The fact we don't have long panel data and measure parents wealth prior to peak wealth implies 3 issues which must be addressed:
 - (1) proxy markers of parent wealth are measured rather than true
 - (2) not measured at peak but when parents are around 40 (retrospective q's refer to when offspring is a teenager)
 - (3) measure actual offspring wealth well before peak wealth
- (1)-(3) create issues of measurement error and hence attenuation bias and lifecycle bias due to age (Haider and Solon, 2006).

Measurement error and attenuation bias (skip)

- Measurement error → downward attenuation bias (cannot average over obs)
- Instead: 2s2sls and predict wealth off markers which reflect permanent differences among individuals (Dearden, Machin and Reed, 1997)
- Some evidence of upward bias following this strategy (see Jerrim et al. 2014)
- Rank-rank regression approach is not subject to this upward bias and provides an accurate estimate of intergenerational rank correlation.
 - At the cost of not being able to capture extent of wealth inequalities just reordering.
 - So standard regression β can be thought of as upper bound and lower bound is rank-rank estimate

Lifecycle bias (skip)

- Upper age we take for parent is 75 (due to diminishing sample and increasing selection)- so offspring 45
- Given lifecycle profile of wealth, likely to observe a downward lifecycle bias at young ages (lower inequality in wealth)
- Rank-rank regression lifecycle biases are much smaller- inequalities have no influence just rank ordering

Lifecycle bias (skip)

- Two counterfactual exercises

For parents

- Predict wealth at 64 based on current position in distribution (attach wealth at peak)
 - This affects β spec not rank given ordering is assumed fixed
 - We can extend age range assuming rank ordering is stable

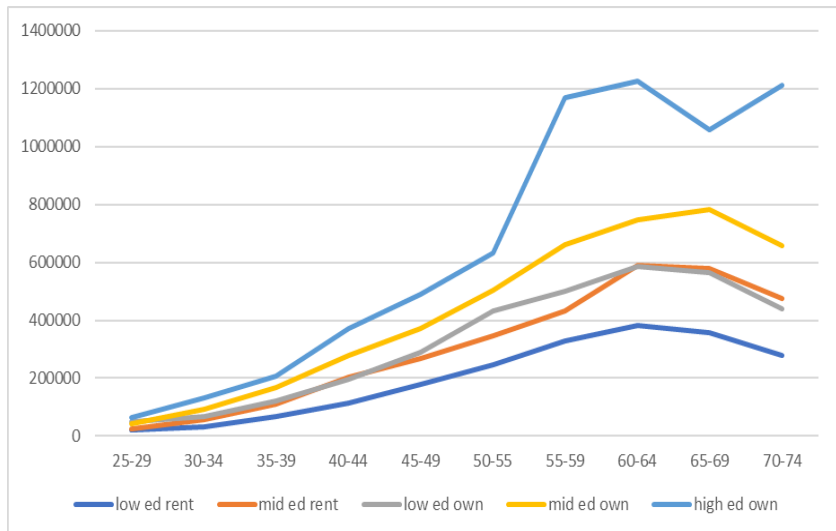
Lifecycle bias (skip)

For offspring

- Repeat and take rank order at current age
- Impute value at 64 based on current rank

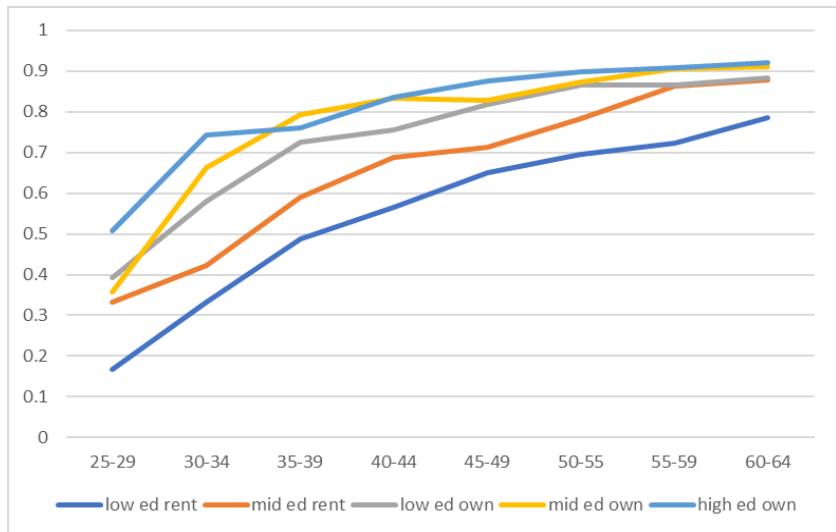
Finally, we also use panel to investigate changes in β and rank across successive 4-year groups

Net wealth by parent characteristics



Notes: estimates based on Wealth and Assets Survey wave 3 (2010-2012). X axis refers to age groups and Y axis net wealth. Legend corresponds to 5 groups based on parental housing and education characteristics. Figures quoted in 2015 prices.

Housing by parent characteristics



Notes: Proportion based on having net property wealth (defined in appendix A). Estimates based on wave 3 of WAS (2010-2012). Legend corresponds to 5 groups based on parental housing and education characteristics.

Findings: taking offspring to peak wealth (age 64)

Peak on peak estimates based on predicted wealth at 64 using Original Rank Position

Specification	Offspring age <u>27-29</u>	Offspring age 31-33	Offspring age 35-37	Offspring age 39-41	Offspring age 43-45
β	0.31*** [0.06]	0.42*** [0.05]	0.39*** [0.05]	0.36*** [0.04]	0.32*** [0.03]
Rank-rank	0.17*** [0.04]	0.33*** [0.03]	0.27*** [0.03]	0.28*** [0.03]	0.30*** [0.03]
$N_{offspring}$	502	717	885	1064	1178
Specification	Offspring age <u>47-49</u>	Offspring age 51-53	Offspring age 55-57	Offspring age 59-61	Offspring age 63-65
β	0.31*** [0.03]	0.27*** [0.03]	0.34*** [0.03]	0.28*** [0.03]	0.31*** [0.02]
Rank-rank	0.31*** [0.03]	0.27*** [0.03]	0.39*** [0.03]	0.32*** [0.03]	0.37*** [0.03]
$N_{offspring}$	1216	1189	1194	1308	1550

Finding I

- Suggest that either the life-cycle bias in estimating intergenerational wealth transmission is such that
 - it diminishes with age or somewhat more concerning,
 - that **intergenerational wealth inequalities are widening sharply in younger compared to older age cohorts**
- We verify this using the panel
- Our approach misses direct intergenerational associations due to inheritances (it is implicit in panel estimation).

Finding II

- Difference between the stability of the rank order measure across cohorts and the lower intergenerational correlations in wealth values.
- To explore this we look at the family origin position (median rank in the parental distribution) of the least and most wealthy 10% of offspring for each age group.

Finding II

- Those who form the least wealthy 10% of the population come from ever increasingly deprived family origin as we consider older age groups.
 - People in their early 30s in bottom decile (top) decile are drawn from around the 27th (55th) percentile of parental wealth, at age 55+ this is just the 13th (37th) percentile.
- Same pattern of growing reinforcement of advantage with age **does not apply** to the wealthiest 10% of the adult offspring.

Panel analysis

Age group at wave 3 (central birth year)	27-29 1988	31-33 1984	35-37 1980	39-41 1976	43-45 1972	47-49 1968	51-53 1964	55-57 1960	59-61 1956	63-65 1952
Log-Log										
β cross section full sample wave 3	0.29*** [0.05]	0.41*** [0.04]	0.38*** [0.04]	0.38*** [0.04]	0.38*** [0.04]	0.34*** [0.04]	0.30*** [0.03]	0.39*** [0.03]	0.28*** [0.03]	0.31*** [0.03]
β balanced panel wave 3	0.28*** [0.08]	0.41*** [0.06]	0.39*** [0.06]	0.36*** [0.06]	0.41*** [0.06]	0.33*** [0.05]	0.29*** [0.04]	0.42*** [0.04]	0.27*** [0.03]	0.31*** [0.03]
β balanced panel wave 5	0.25*** [0.08]	0.56*** [0.06]	0.45*** [0.07]	0.44*** [0.06]	0.44*** [0.05]	0.40*** [0.05]	0.32*** [0.05]	0.42*** [0.04]	0.31*** [0.03]	0.32*** [0.03]

Panel analysis

- IWE clearly rising as people age
 - differences across the cohorts in intergenerational wealth associations are strong enough to flatten out the underlying life-cycle bias
- Not visible in cross section estimates alone

Pooled analysis

- Pool waves 3-round 6 to compare individuals of the same age and how the IWE is changing across time
- Estimate IWE is increasing at around 0.63^{***} log points per year/ 3.6 log points over 6 years. Rapid change given base of 0.35.
- Implies rapidly divergent associations between offspring wealth and parent background- individual's family background becoming increasingly important.
- Implies intergenerational persistence in wealth will double in six decades

Conclusion

- Intergenerational transmission of wealth: 30 and 35% of wealth differences in the parent generation passing onto offspring
- Consistent with studies documenting the extent of intergenerational wealth transmission in Scandinavia and the US (Boserup, Kopczuk and Kreiner (2013, 2017); Black et al. (2020)).
- Placing the UK between them and not dissimilar to earnings persistence based on analysis of BCS (1970)
- Younger cohorts born 1968 onwards have already achieved these levels of cross-generational persistence in wealth. **This is surprising and a concern.**

Conclusion

- Panel data clearly shows that there is far higher wealth persistence for those currently in their 30s and 40s than for people who were at the same age just 4 years previously
- Annual pace at which inequalities is rising (as measured by IWE) is significant and a major concern for policymakers
- Mechanisms driving the changes we observe is of paramount importance (ongoing research)