



# Intergenerational income mobility in Australia

Prepared by Nathan Deutscher (Structural Analysis Branch, MAPD)<sup>1</sup>

## Key points

- Economists draw on a range of metrics to assess intergenerational income mobility – the degree to which high or low incomes tend to persist across generations.
- **Australia is a high mobility country** across these metrics and is significantly **more mobile than the United States**.
  - On average, having parents 10 percentiles higher in the income distribution lifts an Australian child's income by 2.2 percentiles (compared to 3.4 percentiles in the US).
  - A child born in the bottom 20 per cent in Australia is over 60% more likely to reach the top 20 per cent than if born in the US (12.3% make the jump in Australia; 7.5% in the US).
- There are meaningful differences across these measures within Australia, shining a light on the **role of labour markets, peers and role models, and education** in driving mobility.
  - Queensland and Western Australia experienced significantly more upward mobility in the mid 2010s, driven by strong local labour markets at the height of the mining boom.
  - Second generation Australians often experience striking upward mobility, largely explained by their educational aspirations and attainment.
- Newly available tax data could allow these headline metrics to be updated in mid-to-late 2023.

## Measuring, mapping, and understanding intergenerational income mobility

- Economists have developed **many measures of intergenerational income mobility** – the degree to which high or low incomes tend to persist across generations.
- **New administrative tax datasets have seen an explosion in research**, particularly in the US where mobility has been mapped in incredible detail by Raj Chetty's [Opportunity Insights](#) team.
- This note explores intergenerational income mobility in Australia, how it varies and what that tells us. It is based on the author's PhD, supported by the Treasury through a Sir Roland Wilson scholarship.

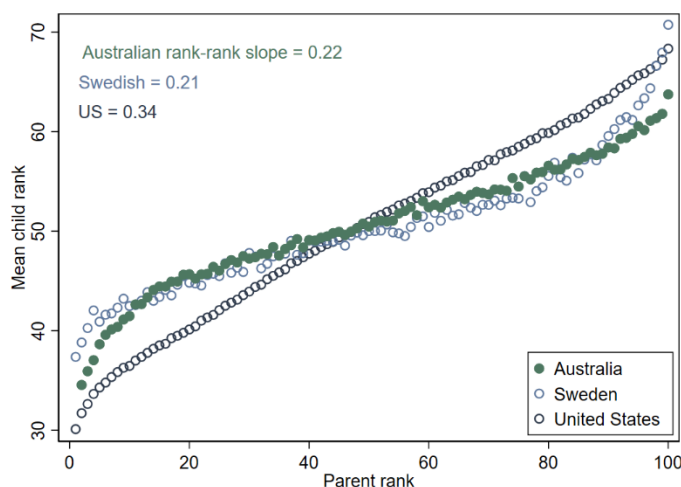
<sup>1</sup> The author would like to thank Andrew Carter, Bruce Bastian and Thomas Abhayaratna and their colleagues at the ATO for their support from 2014 onwards in building an Australian intergenerational tax dataset. Stephanie Parsons provided valuable feedback on an earlier draft.

- It examines both relative and absolute measures of mobility. One way to distinguish these, taken from [Deutscher and Mazumder \(forthcoming\)](#), is as follows:
  - **Absolute mobility** simply measures whether children are doing better – increasing the income of someone in the child generation will lift mobility.
  - **Relative mobility** measures the extent to which children from some backgrounds are doing better *than others* – increasing the income of someone in the child generation could lift or lower mobility depending on who the income went to.
- Economic shocks or policies that ‘lift all boats’ (raising all incomes) can lift absolute measures while leaving relative mobility unchanged, while those influencing persistent disadvantage or advantage will more directly affect relative measures.

### Australia has enjoyed high levels of intergenerational income mobility

- The simplest way to explore intergenerational income mobility with large datasets is to visualise it.
- Figure 1 shows the average rank in the child income distribution for children born to parents at each point in the parent income distribution for Australia, the US and Sweden (for earlier birth cohorts).
  - **Australian data** is from [Deutscher and Mazumder \(2020\)](#) and **follows over 1 million children born in Australia between the 1978-82 income years**. More details are in the Appendix.
  - Each green dot captures the average experience of over 10,000 children.
- There is **clear persistence in income ranks across generations** (Figure 1) – those born higher in the parent income distribution end up higher, on average, themselves. The slope of a line of best fit through this relationship is a common measure of mobility.
  - **Australia’s ‘rank-rank slope’ of 0.22 makes it one of the more mobile advanced economics** (on par with Sweden).
  - It implies that, on average, having parents 10 percentiles higher in the income distribution lifts an Australian child’s income by 2.2 percentiles, compared with 3.4 percentiles in the US.

**Figure 1: Intergenerational income mobility in Australia, the United States and Sweden**



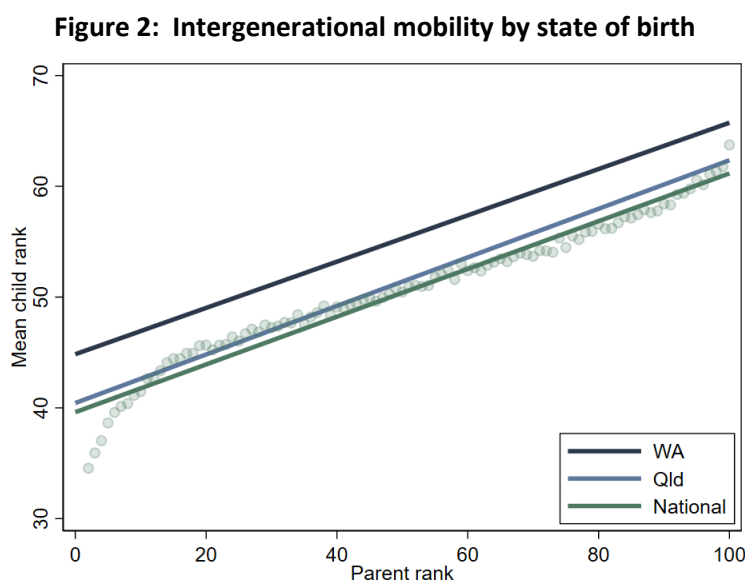
Source: Australian data from Deutscher and Mazumder (2020) (1978-82 income year birth cohorts), United States from Chetty et al (2014) (1980-82 birth cohorts) and Sweden from Bratberg et al (2017) (1957-64 birth cohorts).

Note: Plots the rank in the child income distribution for children born to parents at each point in the parent income distribution.

- **Income ranks are more entrenched in the tails of the distribution**, as shown by the steeper slopes in Figure 1.
  - In Sweden, children born into the top percentile have even stronger outcomes than in the US. Past research on these ‘capitalist dynasties in a land of equal opportunity’ suggests this reflects inherited wealth (and hence capital income) rather than IQ, non-cognitive skills or education ([Björklund et al 2012](#)).
  - In all three countries, poverty in the bottom decile is particularly entrenched.
- Figure 1 reflects only the averages of a wide range of experiences: some children rise from the bottom of the income distribution to the top; others do the opposite. These **transition probabilities** are another common measure of mobility, and **Australia is also highly mobile on these measures**.
  - An Australian born in the bottom 20 per cent is over 60% more likely to reach the top 20 per cent than a child born in the US (12.3% make this jump in Australia; 7.5% in the US).
- Both the rank-rank slope and transition probabilities are relative measures of mobility – lifting incomes in the child generation would only lift mobility if it went to the ‘right’ children.

### Strong local labour markets can drive strong absolute mobility

- [Deutscher and Mazumder \(2020\)](#) also explore the geography of mobility, highlighting the **upward mobility generated by the mining boom** in the early 2010s (when outcomes were observed).
- The mining states of Western Australia and Queensland saw higher child income ranks across the parent income distribution: **strong local labour markets ‘lifted all boats’**, improving absolute mobility, but not changing the slope of the relationship, or relative mobility (Figure 2).



Source: Deutscher and Mazumder (2020).

Note: Plots the rank in the child income distribution for children born to parents at each point in the parent income distribution for the full population ('National') and those born in WA or Qld. Lines of best fit shown for all three populations, underlying dots only for full population.

- **Where a child grows up matters because it is typically where they end up working.** Moving far from home is uncommon in Australia, around 90 per cent of the sample living in the same state as adults, and around 70 per cent living in the same local labour market.<sup>2</sup>
  - New US research from Opportunity Insights shows that low rates of internal migration and low responsiveness to local conditions in the United States results in most of the wage gains from local labour market shocks flowing to those who were born there ([Hendren et al 2022](#)).

### Peers and role models appear to matter too

- **Where a child grows up can also matter because it influences who they grow up with** – the role models and peers that become particularly important as a child grows up.
- [Deutscher \(2020a\)](#) looks at the relationship between a child's eventual income rank and the ranks of not only their parents but the parents of those born in the same year and in the same postcode.
  - Being born into a higher income peer group is associated with higher income later in life, **with the influence of the peer group up to a fifth of that of your own parents.**
- The Opportunity Insights team has used Facebook data to show that relatively more connections between low- and high-income children is one of the best predictors of upward mobility ([Chetty et al 2022a](#)).
- The team goes on to show the lack of such connections reflects segregation along economic lines between *and* within groups such as schools – when children from low-income families go to school they are less likely to be exposed to *or* to 'friend' those from high-income families ([Chetty et al 2022b](#)).

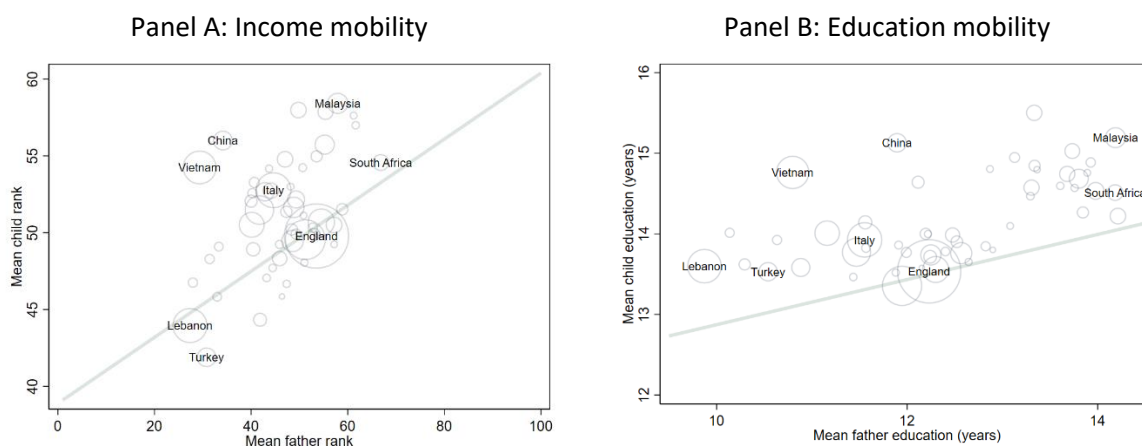
### Second-generation success reflects strong educational aspirations and attainment

- A final feature of mobility in Australia is the **striking success of second-generation Australians**, which is explored in more detail using 1976-2016 Census and test score data in [Deutscher \(2020b\)](#).
- Figure 3 shows the average parent and child outcomes for second-generation Australians relative to the relationship for those whose parents were born in Australia.
- Migrant communities with low incomes or education levels in the first generation tend to have lower incomes, relative to other migrant communities, in the second generation – as is true of those whose parents were born in Australia.
- More notable is the tendency of migrants to outperform locals with similar backgrounds.
  - For example, Vietnamese Australians had fathers with an average income rank at the 29<sup>th</sup> percentile but ended up at the 54<sup>th</sup> percentile in the space of a generation.
  - Migrants from more culturally similar backgrounds (e.g. English-speaking countries) have outcomes that are fairly consistent with locals.

<sup>2</sup> This is broadly in line with other sources. In the Household Income and Labour Dynamics Australia (HILDA) survey, of Australian-born individuals in their 30s in 2019: around 85% lived within 500 kilometres of both parents; around 70% within 100 kilometres and around 40% within 10 kilometres. In the US, 90% of young adults are less than 500 miles from where they grew up and 80% less than 100 miles from where they grew up ([Hendren et al 2022](#)).

- **Migrant upward income mobility tends to reflect upward educational mobility.** [Deutscher \(2020b\)](#) shows second-generation Australians aspire to more education, attain it, and earn more as a result: both cultural factors (the value placed on education) and the context of migration (whether the first generation was making sacrifices for the second) appear to drive this.

**Figure 3: Intergenerational mobility of second-generation Australians (1987-91 birth cohort)**



Source: Deutscher (2020b).

Note: Each circle shows, for a given country of origin, the average individual income rank of second-generation Australians against that of their fathers (Panel A) and the average years of education against that of the fathers (Panel B). The lines represent the relationship between parent and child income ranks or years of education among children born to Australian fathers. See Deutscher (2020b) for more details.

## Australia's success also points towards headwinds for current generations

- A drawback of all measures of intergenerational mobility is that they are lagged indicators – results in this note relate to people born from the late 1970s to the early 1990s rather than a child born today.
- But the drivers of mobility highlighted above can point to potential headwinds to mobility.
  - **Declining growth rates:** just as local labour markets drive local measures of mobility, slower real income growth reflecting the productivity slowdown across advanced economies (see the recent [Treasury Round Up](#)) will likely further dampen national measures of absolute mobility.
    - : For example, [Kennedy and Siminski \(2021\)](#) show that **around two-thirds of Australians in their early 30s have higher real incomes than their parents did at the same age.**
    - : While this is high by international standards, it has fallen from around 80 per cent for the baby boomers, with most of the fall reflecting lower income growth. Similar falls have been seen in other advanced economies as post-WWII growth subsided ([Bernam 2022](#)).
    - : Perversely, one way in which parents can counter this lower real income growth is to 'hoard opportunity' – if children simply inherit parent income ranks (no relative mobility) then even anaemic income growth will see them with higher incomes than their parents.
  - **Declining student test scores:** Australian student test scores as measured by the OECD's PISA program have been falling (see [Budget Statement 4](#)), and there are large gaps in outcomes and resources between advantaged and disadvantaged students and schools (see [Grattan analysis](#)). These results could weigh on both absolute and relative mobility.
  - **Access to opportunity:** The importance of place means barriers to geographic mobility – be it high housing prices or poor commuting infrastructure – can also constrain social mobility.
    - : In [testimony](#) to a US House Committee, Raj Chetty noted the strong correlation between land-use regulations and the rental cost of moving to higher-opportunity neighbourhoods,

and also that randomised control trials show that housing vouchers that generate moves to better neighbourhoods can have long-lasting effects for children.

- In theory, anything which influences incomes in parent or child generations can influence measures of intergenerational mobility, at times in different ways for different measures.
  - By exploring how mobility varies within the country, we can get a sense of the economic shocks, trends and policy that matter and that may influence mobility in the years ahead.

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## Appendix

- The author's PhD research, supported by Treasury through a Sir Roland Wilson PhD scholarship, involved working with the ATO to build Australia's first intergenerational tax dataset.
- This dataset links children born from the late 1970s onwards back to their parents, and then links both generations to tax returns and third-party reported income from the 1991 income year onwards.
- Headline figures reported here draw on [Deutscher and Mazumder \(2020\)](#), which **follows over 1 million children born in Australia in the 1978-82 income years** and measures total household income:
  - for the child generation from 2011-2015 (when typically in their early 30s).
  - for the parent generation from 1991-2001 (when typically when in their 40s and 50s)
- For the purposes of much of the analysis, these real income levels are converted to percentile ranks, from 1-100, in either the parent or child income distribution.
- The sample captures over 90 per cent of all children born in this window. It is representative – mirroring the family sizes, structures, and incomes apparent in other sources.
- The ATO has been refining and extending these links between household members and is now making the data available to researchers (including in government).
- The new data will extend the dataset back to earlier birth cohorts (the late 1960s) and forward to more recent outcomes (currently through to 2019).

## Data disclaimer

This note draws on research that uses Australian Taxation Office (ATO) data.

This note also uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The HILDA Project was initiated and is funded by the Australian Government Department of Social Services (DSS) and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute).

The findings and views reported in this note, however, are those of the author and should not be attributed to the ATO, DSS or the Melbourne Institute.