



The Productivity Commission acknowledges the Traditional Owners of Country throughout Australia and their continuing connection to land, waters and community. We pay our respects to their Cultures, Country and Elders past and present.

### **The Productivity Commission**

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

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Legislative requirements to ensure privacy and secrecy of these data have been followed. For access to PLIDA and/or BLADE data under section 16A of the ABS Act or enabled by section 15 of the Census and Statistics (Information Release and Access) Determination 2018, source data are de-identified and so data about specific individuals has not been viewed in conducting this analysis. In accordance with the *Census and Statistics Act 1905*, results have been treated where necessary to ensure that they are not likely to enable identification of a particular person or organisation.

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Inequality<sup>1</sup> is a serious concern when people at the bottom of the income distribution cannot meet their basic needs or where they experience the stress of economic insecurity. And inequality is a serious concern when it limits people's future opportunities. The countries with the highest inequality are also the countries with the lowest intergenerational mobility, with children from poor families more likely to be poor themselves.

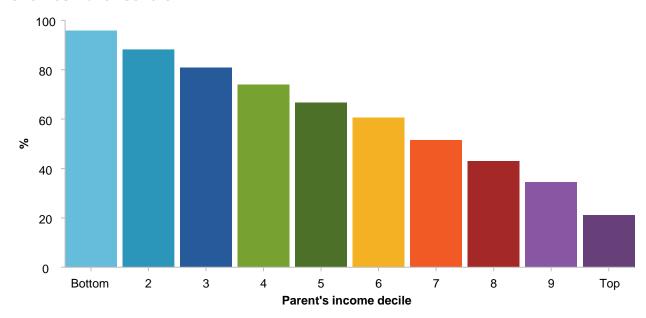
Most Australians are keen to ensure that everyone gets a 'fair go'. What does the evidence about economic mobility in Australia have to say about this? We take a look at three dimensions of mobility: mobility over the course of one's life, mobility from one generation to the next, and the chances of escaping from poverty.

While much of the data on mobility in Australia suggests a positive story, and Australia compares very well internationally, there are some worrying signs. Australians living in poverty (incomes below 50% of the median) face some of the highest barriers to economic mobility. One in 10 Australians experience persistent poverty, and where people live matters a great deal to their ability to escape poverty.

### How much are our incomes linked to our parents'?

Australia's long-term economic growth has led to each generation earning more income than the last, on average. Most Australians (67% of those born in 1976–1982) earn more than their parents did at a similar age, and this is particularly true of those born in poorer families (figure 1).

Figure 1 – Children of lower-income parents are much more likely to outearn them<sup>a,b</sup> Percent of children who earned more than their parents by parent's income decile,<sup>c</sup> 1976–1982 birth cohort



**a.** The income measure is individual 'total income' before taxes and deductions, and including government support payments for people filing tax returns. **b.** To give a proxy for lifetime income, incomes are averaged over a decade, where possible, between ages 29 and 44 for both children and parents. **c.** The child's income is compared against the income of their primary parent in the ALife-Family dataset.

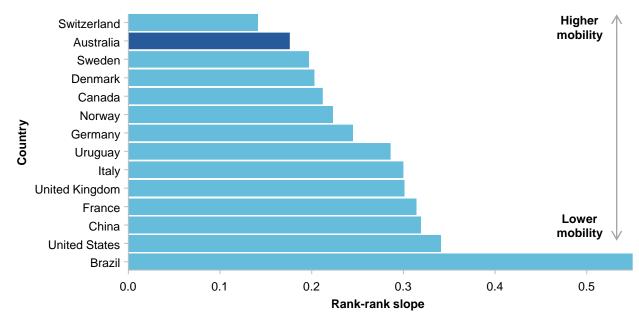
Source: Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife-Family) dataset.

<sup>&</sup>lt;sup>1</sup> The Commission's recent paper *A snapshot of inequality in Australia* described how economic resources (income and wealth) were distributed between different people, across the years impacted by the COVID-19 pandemic.

Australia has high relative income mobility – a person's rank in the income distribution is less influenced by their parents' rank than in many other countries, including Scandinavian countries (figure 2). In Australia, a 10 percentile rise in a parent's rank in the income distribution is linked to a relatively small 1.8 percentile rise in the child's rank. This indicates high equality of opportunity (in terms of incomes).

Figure 2 – Australia is one of the most mobile countries internationally, in terms of income rank





**a**. The lower the rank-rank slope, the less a change in parents' income is passed on to their children, thus indicating higher mobility. **b**. For Australia, the rank-rank slope is for people born between 1976 and 1982. **c**. Where possible, the Commission has selected estimates for other countries that are comparable to the Commission's methodology.

Sources: Acciari, Polo and Violante (2022) (Italy); Bratberg et al. (2017) (Norway and Germany); Britto et al. (2022) (Brazil); Chetty et al. (2014) (United States); Chuard-Keller and Grassi (2020) (Switzerland); Connolly et al. (2019a) (Canada); Heidrich (2017); Helsø (2021) (Denmark); Kenedi & Sirugue (2023) (France); Leites et al. (2022) (Uruguay); Rohenkohl (2023) (United Kingdom); and Huang et al. (2021) (China). For Australia, Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife-Family) dataset.

While there is substantial mobility across the income distribution, there is some persistence at both the top and bottom. Children with parents in the bottom or top income deciles are relatively more likely to remain in the bottom or top deciles themselves. Almost 15% of people with parents in the bottom income decile remained in the bottom decile, while just 6% of them ended up in the top decile. In contrast, just 7% of people with parents in the top decile ended up in the bottom decile, with 20% remaining in the top decile.

### What affects economic mobility over a person's life?

We are also concerned about whether disadvantage can be overcome over the course of a person's life.

Education is the gateway to many opportunities. People with a Bachelor's degree or higher earn 23% more than people with a year 12 qualification, on average across a lifetime. If a student misses out on early education opportunities because of family circumstances, financial barriers or local school accessibility, can they recover? Australia has very few age restrictions on attending vocational education or university and many pathways to entry, but not everyone takes up these pathways.

Adverse life events such as job loss, health problems and relationship breakdown can reduce income, and do not impact everyone equally. Job loss in particular has a persistent negative impact on income, and is more likely to be experienced by people who start on low incomes. The negative impact of health problems on income worsens over time (possibly because the health effect persists) – particularly for those on low incomes.

That said, lifetime income mobility is high, with most people moving across the income distribution at different points in their life. And many people can avail themselves of new opportunities as their circumstances change – for example, after a relationship separation, women's incomes recover in about four years.

Wealth tends to be 'stickier' than income, with people experiencing far lower levels of wealth mobility over their lifetimes. When income is adjusted to account for wealth, over 40% of people in the top or bottom two deciles in 2001 remained there in 2022.

### What affects the likelihood of escaping poverty?

While overall mobility is high in Australia, there are worrying signs that people experiencing poverty face particular difficulties moving up the income distribution. This is a concern because, although interrupted by the COVID-19 pandemic, Australia's poverty rate has steadily increased over the past two decades: survey data suggests the rate of poverty is at its highest since 2001.

About 14% of Australians experienced poverty in 2022 – or about one in seven people.<sup>2</sup> People most at risk of poverty include those not in paid employment, who come from a migrant background and do not speak English at home, over the age of 65, who rent housing, and in a single person or single parent household.

Poverty varies significantly between regions, which means where you live also affects your likelihood of experiencing poverty (figure 3). Poverty rates are generally lower in cities, but there are some pockets of high poverty, particularly in local areas with relatively high housing costs. Some of the highest concentrations of poverty are in regional and very remote areas. Although regional and remote poverty rates are somewhat moderated once their relatively lower housing costs are taken into account, people living in these areas often face considerably higher prices for everyday items than people living in cities.

How long poverty lasts matters as much as how many people it affects – longer periods of poverty are harder to exit, particularly as people age. Persistent poverty is also associated with 'going without' essential goods and services, such as medical treatment and heating.

Women are more likely to experience persistent poverty than men. And poverty is intergenerational: children who experience poverty are at increased risk of poverty as adults. Children who grew up in a family that received government support payments are twice as likely to receive support payments themselves, compared to children whose families did not receive support payments.

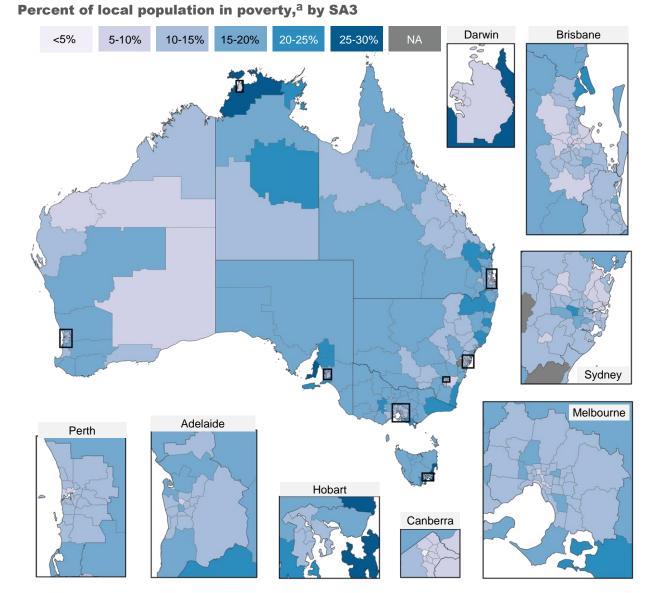
Poverty is quite a common experience, but most people spend a relatively short time in poverty – around half of poverty spells are a year or less. But there remains a significant number of people for whom poverty is ongoing: about 10% of Australians experienced poverty in at least three of the five years between 2018 and 2022. And people who previously experienced poverty were around 2.5 times more likely to re-enter poverty than those who have never experienced it. This experience of persistent poverty was in spite of the additional government support provided to low income earners during the COVID-19 pandemic.

Younger people are more likely to exit poverty. But people who rent, people with lower education levels and those with long-term health conditions are more likely to remain in poverty. People who live in disadvantaged

<sup>&</sup>lt;sup>2</sup> The poverty rate was 13.7% based on income alone, and 14.4% after accounting for housing costs.

neighbourhoods are also less likely to exit poverty, even after other characteristics are considered. People who live in remote locations in adulthood are also likely to remain in poverty over time.

Figure 3 – Poverty rates vary substantially across Australia



**a.** Local poverty rates are calculated relative to the national poverty line (50% of median household equivalised disposable income), without taking housing costs into account.

Source: Commission estimates using linked ATO Personal Income Tax, DSS government payment, Census data and ABS derived demographics data in the Person Level Integrated Data Asset (PLIDA).

# 1. Economic mobility: Why does it matter?

### **Key points**

- Economic mobility measures changes in an individual's economic wellbeing over time, either during their lifetime (life course mobility) or relative to their parents (intergenerational mobility).
- Countries that have high income inequality tend to also have low levels of mobility. While Australia sits in 'the middle of the pack' relative to other developed countries in terms of income inequality, we are placed relatively high in terms of intergenerational income mobility.
- Mobility measures provide important insights into poverty persistence and access to opportunities.

Economic mobility (referred to as 'mobility' hereafter) is distinct from but closely related to economic inequality. If we liken the income distribution to a ladder, then income inequality can be thought of as the distance between the rungs of the ladder. Income mobility tries to capture how easy it is for people to move up and down the ladder during their lifetime (life course mobility) or move to a different rung of the ladder than the ones their parents were on (intergenerational mobility).

This introductory chapter explores why examining economic mobility matters. It also sets out definitions and concepts relating to how we measure economic mobility. Chapter 2 considers mobility over the course of a person's lifetime, and chapter 3 considers mobility between generations. Examining people's ability to escape from poverty (chapter 4) is a particularly important dimension of mobility analysis.

### 1.1 Factors that influence mobility

The level of persistence in incomes across generations and over a lifetime varies in different societies. Theories of mobility help identify factors that influence income mobility or persistence: these theories explain how initial conditions (parental income and its various channels), combined with significant events throughout an individual's lifetime, can work together to shape income over their lifetime. While a summary of these factors is provided in figure 1.1 and below, a more detailed explanation is provided in appendix A.

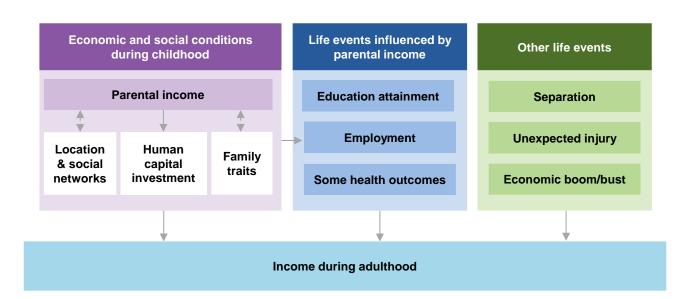


Figure 1.1 – Income is shaped by economic and social conditions during childhood, and various life events<sup>a</sup>

**a.** This diagram should be considered as a simplistic representation of complex relationships (which includes interactions between different factors) and does not show all the factors that influence income. It excludes several important factors such as individual preferences, ability and effort.

Intergenerational mobility theories suggest that the intergenerational persistence of incomes can be explained by the association between parental income and factors such as:

- **Human capital investment**: Low-income parents may have less resources to invest in their children's education, skill development and health, which affects those children's future earning potential (Becker and Tomes 1979; Loury 1981).
- Location and social networks: Location, especially remoteness, influences access to a range of services including medical and dental care, childcare, education, public transport and financial services (Baum and Gleeson 2010; Doko Tchatoka and Varvaris 2021; McLachlan et al. 2013, p. 13; Treasury 2023, p. 126). Location can also shape children's peers and social networks. Children who grow up in affluent neighbourhoods may have access to high-income peer networks and be able to draw more resources from these networks compared to children with low-income peer networks (Letki and Mierina 2015; Mani and Riley 2019).
- Other family characteristics: Low-income earners are more likely to be unemployed, single parents or
  have lower educational qualifications (chapter 4). Some people face systemic economic exclusion due to
  their Aboriginal or Torres Strait Islander background (IBA 2023, p. 7). In the case of low-income parents,
  these family characteristics can affect their children's future earnings in many different ways, including by
  influencing their preferences, values, early learning outcomes and socio-emotional wellbeing (including
  stress levels) (Barón et al. 2015; Kalil and Ryan 2020).

Literature on life course mobility suggests that income persistence over a lifetime is also affected by significant life events such as securing or losing a full-time job, marriage, separation, onset of illness or obtaining educational qualifications (Lancaster 2021; McLachlan et al. 2013; Parolin et al. 2023; PC 2018). The likelihood of some these events is also affected by initial conditions during childhood (for example, the likelihood of getting higher education qualifications is influenced by access to good schools and educational resources during childhood).

Changes in the different factors that explain mobility can strengthen or reduce income persistence, thus acting as drivers of or barriers to mobility. The remaining chapters in this paper explore how some of these factors affect mobility in Australia.

### Barriers to and drivers of mobility can have compounding effects

The framework discussed above suggests that intergenerational and life course mobility are affected by interactions between an individual's childhood conditions, other life events and the broader economic and policy environment (figure 1.1). As such, income changes and persistence will not look the same across the population but will vary for different groups.

Some groups face a combination of barriers to opportunity, which can compound to limit income mobility and lead to persistent disadvantage. For example, poverty rates in Aboriginal and Torres Strait Islander communities are attributable to a lack of employment opportunities and income support in remote areas (Markham 2023, pp. 2, 7), underfunded or culturally inappropriate education (CLC 2023, p. 17; VACCHO 2023, p. 23), intergenerational trauma and disadvantage (VACCHO 2023, p. 11), continued systemic and interpersonal discrimination (QAIHC 2023, p. 8) and the historic prevention of wealth building (QAIHC 2023, p. 7).

Experiencing a combination of barriers can increase exposure to negative income shocks or worsen the effect of any single negative influence like limited access to schooling or losing a job. Moreover, favourable changes like getting a school scholarship can be dampened by other barriers to mobility. In extreme cases, people with inadequate resources may experience continuous stagnant or declining economic outcomes. Conversely, at the very top of the income distribution, compounding sources of advantage could potentially mean that children are guaranteed to remain at the top.

In this paper, we seek to understand whether different kinds of mobility traps exist (chapters 2 and 3) and, specifically, whether there is a mobility trap among income support recipients and others measured as being in poverty, such as those in very remote locations (chapter 4).

### 1.2 Why does mobility matter?

### Mobility is linked to opportunity, which is important for wellbeing

Wellbeing is derived from what individuals are able to do and to be – their capabilities – rather than merely the commodities or income they possess (Sen 1999). Enhancing people's freedoms to pursue the kinds of lives they value involves providing a range of economic, social and political opportunities. Measures of mobility provide important insights into the opportunities people can access.

### Intergenerational mobility indicates whether parental income is a source of unequal opportunity

Higher intergenerational mobility<sup>3</sup> is often seen as an indicator of more equality of opportunity (Chetty et al. 2014; Torche 2015). The principle of equality of opportunity is used widely in politics and media, and in

<sup>&</sup>lt;sup>3</sup> The association between mobility and equal opportunity is more commonly made for intergenerational mobility but is sometimes also made for life course mobility.

Australia it is informally associated with the concept of everyone getting a 'fair go'. Despite this, there is no consistent definition for the term. A popular definition of ideal equal opportunity is provided by Rawls (1971, p. 73):

Assuming that there is a distribution of natural assets, those who are at the same level of talent and ability, and have the same willingness to use them, should have the same prospects of success regardless of their initial place in the social system ...

According to Rawls, a society is not considered to have equality of opportunity if an individual's economic outcomes are determined by external circumstances such as parental income and childhood neighbourhood. As such, a low level of intergenerational mobility suggests that parental income does have a large influence on an individual's economic outcomes – thus indicating an inequality in opportunity.

This paper explores drivers of and barriers to mobility in more depth, and while some of these aspects may be able to be linked relatively directly to equality of opportunity (for example, the ability to access services regardless of where you live), others may be less suited to analysis through this lens.

### Life course mobility provides insights into mobility traps and access to opportunity at different life stages

Life course mobility may indicate whether people are able to access economic opportunities at different stages of their life, including after adverse events like relationship separation or illness.

If low-income earners (or other disadvantaged groups) experience more frequent negative income shocks, larger negative income shocks or weaker recoveries from negative shocks compared to high-income earners, then this may be indicative of a mobility trap due to lack of opportunities. In chapter 2, we examine whether some groups are more likely to experience an adverse life event, and whether the impacts of such events are more likely to be negative. We seek to understand whether it is difficult for these groups to recover from adverse events.

Moreover, for a society to be free and open, it is not sufficient for opportunities to only be available in early life. Instead, opportunities should be available through a range of pathways at all stages of life (Fishkin 2014). For example, since education is particularly important for accessing employment opportunities (especially at higher income levels), we examine whether people are able to access and benefit from educational opportunities throughout their lifetimes (chapter 2).

#### But a lack of observed mobility does not always mean a lack of opportunities

People do not always choose to pursue higher incomes even if they have the opportunity to do so. Instead, the level of income they earn can be influenced by their preferences for certain jobs, time spent on leisure and motivation to earn higher incomes. To the extent that these preferences are constant throughout a lifetime, or even across generations, it may lead to lower mobility but does not necessarily reflect a lack of opportunity. For example, if low-income parents value their work for the sense of personal fulfilment it provides over any monetary benefits, it is plausible for them to pass these values on to their children. Since measures of mobility do not account for differences in preferences (as these are unobservable), they provide an imperfect indication of access to opportunities.

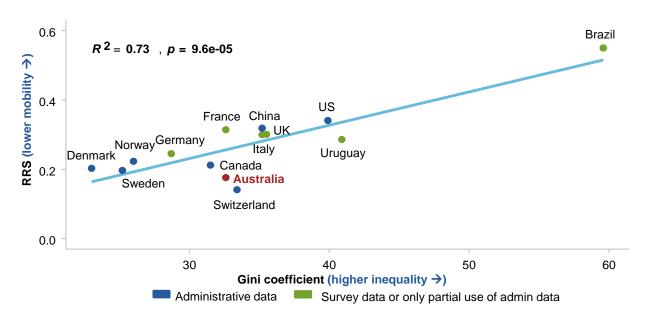
### Low mobility relates to inequality and persistent disadvantage

### Highly unequal countries have low intergenerational mobility

All else equal, greater inequality – represented by more distance between the rungs of the income distribution ladder – can mean that climbing up the ladder becomes more difficult, leading to lower mobility. Highly unequal countries tend to have low levels of intergenerational mobility, as illustrated by the so-called 'Great Gatsby Curve' (figure 1.2).<sup>4</sup> While Australia sits in 'the middle of the pack' relative to other developed countries in terms of income inequality, we are placed relatively high in terms of intergenerational income mobility.

Figure 1.2 – Countries with higher income inequality tend to have less intergenerational mobility<sup>a</sup>

Rank-rank slope (RRS)<sup>b</sup> and Gini coefficient



**a.** Where possible, studies are selected based on use of administrative data, use of family income as the primary income measure of parental and child income and use of multiple years of income data. Most studies estimate intergenerational mobility for children born in the late 1970s or early 1980s. **b.** The rank-rank slope measures the relationship between a parent's rank and their children's rank in their respective income distribution (described in detail in section 3.2).

Source: Acciari, Polo and Violante (2022) (Italy); Bratberg et al. (2017) (Norway and Germany); Britto et al. (2022) (Brazil); Chetty et al. (2014) (United States); Chuard-Keller and Grassi (2020) (Switzerland); Connolly et al. (2019a) (Canada); Heidrich (2017); Helsø (2021) (Denmark); Kenedi & Sirugue (2023) (France); Leites et al. (2022) (Uruguay); Rohenkohl (2023) (United Kingdom); and Huang et al. (2021) (China). For Australia, Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife-Family) dataset. Gini coefficients are obtained from World Bank (2023) using 1995 data where possible. Exceptions are Switzerland, France and China where data from 2000 (for Switzerland) and 1996 (for France and China) are used instead due to missing data for these countries in 1995.

<sup>&</sup>lt;sup>4</sup> The 'Great Gatsby Curve' (Krueger 2012) provides a simple starting point for understanding the relationship between income and intergenerational mobility. This paper's Great Gatsby Curve plots the relationship between income inequality, as measured by the Gini coefficient, and a set of cross-country intergenerational mobility estimates, measured by the rank-rank slope. Other versions of the Great Gatsby Curve have conventionally plotted the correlation between the Gini coefficient and the father-son intergenerational elasticity of income (IGE) rather than the rank-rank slope (Andrews and Leigh 2009; Corak 2013; Durlauf et al. 2022). Appendix A explains how and why figure 1.2 differs from other estimates of the Great Gatsby Curve in more detail.

The Great Gatsby Curve does not prove that the relationship between inequality and mobility is causal, but the strength of the observed relationship suggests that the structural features of a society that generate high inequality may also limit people's mobility. While cross-country differences may also be attributable to cultural, legal and institutional differences between countries, there is evidence that the Great Gatsby Curve also exists across regions within a country (Acciari et al. 2022; Chetty et al. 2014; Fan et al. 2021; Heidrich 2017; Kwon and Jeon 2020; Soria 2022) and over time within a country (Connolly et al. 2019b; Durlauf and Seshadri 2018; Fan et al. 2021).

Related literature suggests that there could be a cyclical relationship between inequality and mobility – high inequality leads to low mobility in the next generation, which in turn increases future inequality (Durlauf et al. 2022; Narayan et al. 2018, pp. 56–57). This means that if we want to prevent inequality from growing, we need to make sure that people have access to opportunities that can change their fortunes.

### Low mobility can lead to persistent poverty

Mobility helps inform how concerned we should be with inequality by highlighting the long-run dynamics of inequality (Jäntti and Jenkins 2015, pp. 815–816). We would be more concerned with high levels of inequality if this inequality persisted or compounded over a lifetime or across generations. Such a society would see the same set of individuals earn low incomes over their lifetimes and their children would go on to become low-income earners in the future, leading to persistent disadvantage. While a lack of upward mobility, or significant amounts of downward mobility, has implications for people at all levels of the income distribution, it matters most in relation to low-income earners (including people experiencing poverty).

Both measures of life course and intergenerational mobility provide important insights in this respect.

- Low intergenerational mobility may indicate the persistence of disadvantage across generations. Cohort or geographical analysis of intergenerational mobility can help identify the traits associated with intergenerational persistence of disadvantage (chapters 3 and 4).
- Mobility patterns over an individual's lifetime can provide insights into the traits or life events that are associated with entry into and exit from poverty, and persistence of poverty (chapter 4).

### 1.3 Is there a 'right' level of mobility?

Identifying the optimal level of mobility for promoting wellbeing depends on whether we are talking about absolute or relative mobility (box 1.1).

Absolute mobility is easy to interpret – more upward absolute mobility means more people are economically better off. Greater upward absolute intergenerational and life course mobility means that a greater proportion of people outearn their parents and their own past incomes. We care about raising incomes because income shapes people's abilities to achieve valued life outcomes, and as such contributes to individuals' capabilities and outcomes (Sen 1999).<sup>5</sup>

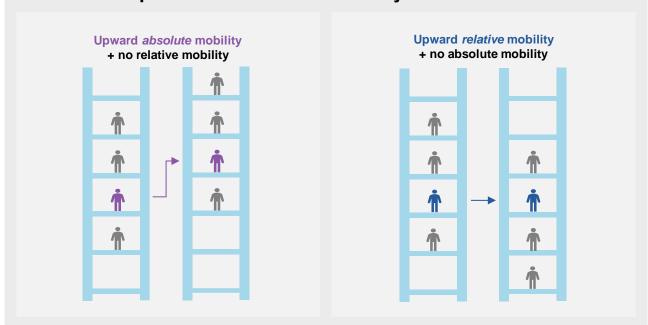
<sup>&</sup>lt;sup>5</sup> Sen's capability framework (1999) suggests that an individual's income is one of several factors (including other economic resources, personal characteristics and societal influences) that shape an individual's ability to achieve life outcomes that are important for wellbeing. The relationship between income and wellbeing (including details on different income measures like personal and equivalised household income) is explored in further detail in PC (2024, pp. 6; 52–54; 63–64) and PC (PC 2018, pp. 20–23).

### Box 1.1 - Absolute and relative mobility

Where a person's real income changes, this is reflected in **absolute mobility**. It is measured by comparing real income (which is the nominal value of income after accounting for price inflation) for an individual at two different points in time. Absolute mobility does not tell us anything about how an individual's economic wellbeing compares to peers in their society. But it gives us an indication of how material wellbeing is changing over time.

Where a person's position in the income distribution changes, this is reflected in **relative mobility**. If you identify a group of people and rank them according to their income, relative mobility is measured as changes in the ranking or position relative to others. While everyone can experience upward *absolute mobility* at the same time, the same cannot be said about upward *relative mobility*. For every person that moves up the income ranking (experienced upwards mobility), one person must move down (experience downward mobility).

#### Illustrative example of absolute and relative mobility<sup>a</sup>



**a.** The ladders in the diagram represent the income distribution with a higher rung representing higher incomes. The figures show mobility for the purple and blue people.

### There is no optimal level of relative mobility

Finding an optimal level of relative mobility is harder because not everyone can experience upward relative mobility at the same time. It is not necessarily desirable for a society to have zero association between past and future economic positions or parents' and children's economic positions. While higher mobility may be linked with greater access to opportunity, there are costs involved with very high levels of mobility and people may have different preferences as how to balance these trade-offs.

- Very high relative income mobility over a short period of time would reflect large income fluctuations and therefore significant income risk, which reduces the wellbeing of risk-averse individuals (Jäntti and Jenkins 2015, p. 817).
- Very high intergenerational mobility would mean that parents have limited influence over their children's traits, abilities and preferences, which is not necessarily socially desirable.

### There can be different views on what makes a low level of relative mobility 'unfair'

Concern about low relative mobility is influenced by individual perceptions of how 'unfair' the factors that drive low mobility levels are. Some are comfortable with parents passing on advantages to their children. Some may believe that all individuals with equal 'natural abilities' should have equal opportunities to achieve the same level of wellbeing (Rawls 1971). Some may believe that all individuals should have equal opportunity to achieve wellbeing, regardless of their 'natural abilities', over which they have no control (Roemer 2002). While the latter group would be concerned with low mobility if it were explained by persistence in 'natural abilities' over generations, others would find it acceptable.

This paper does not take a stance on the best way to assess relative mobility. Instead, the Commission has tried to provide facts and measures of mobility using available data sources<sup>6</sup>, acknowledging that these measures provide an incomplete picture of people's access to opportunity and wellbeing since they omit information on preferences or abilities. These mobility measures are useful as they enable comparisons over time and across different cohorts, aiding individuals in making more informed personal judgements about the fairness of mobility in Australia.

<sup>&</sup>lt;sup>6</sup> A more detailed explanation of most of the datasets used in this paper and their limitations is provided in PC (2024, pp. 64–65). Information on the ALife-Family dataset, which is used to estimate intergenerational mobility, is provided in appendix C.

### 2. Life course mobility

### **Key points**

- Australia has relatively high income mobility, but people at either end of the income distribution are more likely to remain there.
  - Australia's income mobility compares well with our peers. Most people move through income deciles over time, with around 93% of working age people spending time in at least three different income deciles between 2001 and 2022.
  - But people at either end of the income distribution are the most likely to remain where they are. Of people
    in the top two deciles in 2001, 32% were still there in 2022. And of those in the bottom two deciles in 2001,
    42% remained there after twenty years.
- Wealth tends to be even 'stickier' than income, and it increases the level of persistence at the ends of the distribution.
  - When income is adjusted to account for wealth holdings, the percentage of people in the top two deciles over a twenty year period increases from 32% to around 41% and the percentage in the bottom two deciles increases from 42% to around 45% of people.
  - Looking at wealth mobility in isolation, around half of the people in the top or bottom two wealth deciles remained there over two decades later.
- Education provides opportunities for people to improve their earning potential. On average, people with a Bachelor's degree or higher earn 23% more than people who complete year 12 only, and 35% more than those who have only completed year 11 or below.
  - Men tend to earn more than women despite acquiring the same levels of education.
  - Those who do not attain further education beyond high school may be limited in their mobility. People who
    have only completed year 12 or below are twice as likely as those with a Bachelor's degree to end up in the
    bottom income quintile after 10 years.
- Significant life events do not impact everyone equally, and how people recover from shocks provides insights into what opportunities are available to them.
  - People on low incomes are most likely to experience job loss. On average, job loss decreases income by around 20% in the year following job loss, and this effect persists strongly over many years.
  - Health conditions, such as suffering severe personal injury or illness, persistently decrease income over time, particularly for people on low incomes.
  - Separating from a long-term partner decreases household income for women but not men, although women's household income recovers after about four years, on average.

# 2.1 How do people's economic positions change over their lives?

The extent to which any individual can access opportunities and improve their economic circumstances is synonymous with the idea of a 'fair go'. While there is no 'optimal' level of mobility (section 1.3), measuring the extent of mobility over an individual's lifetime tells us about the opportunities they have to change their position and the life events that may influence where they end up. In particular, it tells us whether disadvantage can be overcome over the course of a person's life.

### Most people move through income deciles during their life ...

Around 93% of people during their working life<sup>7</sup> spent time in at least three different income deciles in the period 2001 to 2022 (Commission estimates using HILDA), and there was substantial movement across income deciles over these two decades (table 2.1), with less than 1% remaining in the same income decile throughout (appendix B). People may move up income deciles as their working life progresses, reflecting the accumulation of skills, knowledge and experience. But career changes or changes in family circumstances can also lead to reduced income and downward mobility.<sup>8</sup>

Table 2.1 – Most people move through income deciles over time<sup>a</sup>

Proportion of people aged 25 to 40 in each income decile in 2001 by income decile in 2022

	Income decile, 2022										
		1	2	3	4	5	6	7	8	9	10
	1	35.2	19.9	10.9	7.4	5.1	8.6	2.9	2.3	4.8	3.3
	2	13.1	15.2	16.5	14.0	6.7	7.4	8.8	6.5	6.2	5.0
2001	3	5.8	8.3	10.8	14.0	9.2	7.4	17.8	10.4	11.1	5.4
Income decile, 2001	4	10.7	12.1	6.1	12.0	11.3	9.1	10.3	12.1	7.8	8.9
gec	5	4.8	7.1	8.3	13.2	22.5	10.3	7.4	10.7	11.0	5.8
e mo	6	6.7	8.2	9.9	11.9	13.1	9.0	7.5	8.5	12.6	10.5
<u>=</u>	7	12.9	6.3	10.4	6.7	9.5	15.6	12.7	9.0	8.6	8.4
	8	3.3	10.5	15.6	6.4	7.8	9.5	11.7	10.0	13.1	12.8
	9	3.9	7.7	5.6	10.6	8.8	15.6	10.2	14.1	8.1	15.2
	10	4.4	3.4	6.4	3.7	6.0	7.9	10.6	16.5	16.8	24.7

a. Income decile is measured using household equivalised disposable income.

Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

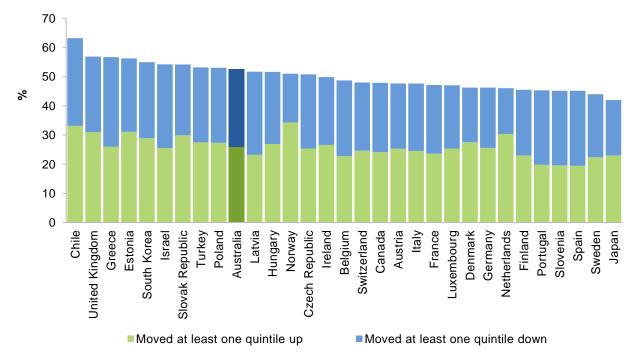
<sup>&</sup>lt;sup>7</sup> These estimates are based on HILDA data relating to income over the period 2001 to 2022 for people aged between 25 and 40 years of age in 2001 and so, on average, remain within 'working age' for the duration of the period 2001 to 2022. The Commission has focused on measuring income mobility through changes in relative income deciles during a person's working life, as this is the period where changes in relative income can provide valuable insights about the influence of changing circumstances and opportunities (which are explored in sections 2.2 and 2.3).

<sup>&</sup>lt;sup>8</sup> Changes such as having children or separating from a partner alter the composition of the household for the purposes of equivalised household income deciles. Having children typically results in a fall in income decile initially, as equivalised household income spreads income over more household members. Conversely, as children begin to earn incomes themselves or move out of home, income deciles tend to rise for the parent.

### Australia's income mobility is comparable to our peers

Australia has relatively high income mobility when compared to other countries (figure 2.1). When comparing the proportion of working age people that have moved at least one income quintile over a four year period, Australia is above the OECD average.

Figure 2.1 – Income mobility among working-age Australians is comparatively high<sup>a</sup>
Share of people aged between 18 and 65 moving income quintiles over a four-year span



**a.** Income is equivalised household disposable income (equivalised using square root scale). Source: Commission estimates based on OECD (2018).

# ... but people at the ends of the distribution are most likely to remain there

While Australia generally has relatively high mobility, there is significant 'stickiness' or persistence at the ends of the income distribution. People in the highest and lowest income decile in 2001 were most likely to be in the same decile in 2022 (table 2.1). Around 42% of people in the bottom two income deciles in 2001 remain there in 2022, and 32% of the top two deciles in 2001 remained there in 2022. This is higher persistence than the middle of the distribution. Only 28% of the middle two deciles in 2001 remained there in 2022.

Income is often an enabler for people to access opportunity, so this persistence at the bottom of the income distribution over a lifetime may be of particular concern. It suggests that there are barriers to mobility for some people that can lead to persistent poverty over many years (chapter 4).

#### Wealth exaggerates the persistence for those at the top and bottom

Taking both income and wealth into account gives a clearer picture of material wellbeing, as individuals can use income or draw down on their stocks of wealth to maintain a standard of living, pursue opportunities (such as education) or manage the effects of a shock (like losing a job or having a child).

The persistence at the ends of the income distribution is larger once wealth is taken into account, because wealth mobility tends to be lower than income mobility (box 2.1). As such, mobility is more limited when we measure relative changes in wealth-adjusted income<sup>9</sup> (table 2.2) than when we look at income alone (table 2.1). Around 45% of people in the bottom two deciles in 2001 remained there in 2022, and 41% of the top two deciles in 2001 remained there in 2022. This is considerably higher persistence than the middle of the distribution. Only 19% of the middle two deciles in 2001 remained there in 2022.

Table 2.2 – Mobility using wealth-adjusted income is more 'sticky' for those at the ends of the distribution<sup>a</sup>

Proportion of people aged 25 to 40 in each wealth-adjusted income decile in 2001 by income decile in 2022

	Wealth-adjusted income decile, 2022											
		1	2	3	4	5	6	7	8	9	10	
2001	1	26.5	19.1	15.7	10.5	6.1	6.3	7.3	2.2	6.0	8.0	
ile, 2	2	24.4	20.3	14.6	12.8	7.4	7.4	5.1	2.8	2.1	2.5	
dec	3	10.3	13.3	14.2	13.0	10.6	15.5	3.9	10.5	7.2	2.4	
ome	4	5.8	12.8	10.5	9.3	16.6	12.7	14.9	8.0	6.7	3.5	
d inc	5	8.8	4.7	11.4	11.2	10.0	9.2	17.1	13.2	9.7	5.3	
ıstec	6	7.3	11.6	5.0	16.2	12.2	6.5	9.2	6.1	15.4	10.1	
-adjı	7	8.9	4.8	11.7	10.5	11.5	13.2	7.2	11.8	13.0	7.3	
Wealth-adjusted income decile,	8	3.5	6.3	9.7	8.1	11.6	8.2	8.5	17.4	9.9	16.4	
We	9	1.3	4.3	2.7	4.7	11.1	14.6	13.3	16.6	15.1	15.6	
	10	2.5	0.5	3.9	4.8	3.6	6.9	13.8	12.2	15.9	35.5	

**a.** Estimates of wealth-adjusted income are calculated using the fixed-income approach, as outlined in PC (2024). Given the ages of the cohort, there is minimal difference between the fixed income and lifetime annuity methods.

Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

<sup>&</sup>lt;sup>9</sup> Wealth-adjusted income is calculated by converting net wealth to a series of yearly income payments (known as annuitised wealth), which is then added to annual disposable income (PC 2024, pp. 31–33). This paper uses the fixed rate method of calculating wealth-adjusted income which assumes that households receive a fixed return on their assets and debts.

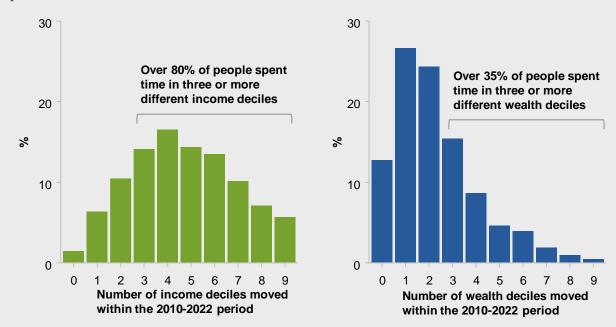
#### Box 2.1 - Wealth is even more 'sticky' than income

Wealth is much more 'sticky' than income, with people experiencing far lower levels of wealth mobility over time. Wealth is a 'stock' concept that measures the value of accumulated assets and so wealth typically builds over the life course due to, for example, accumulation of savings from income, growth in superannuation balances and increasing values of assets such as housing.

As wealth accumulates over time, there tends to be less change in relative positions. When we measure wealth mobility for people of all ages over the period 2010 to 2022<sup>10</sup>, around 35% of people spent time in three or more different wealth deciles, whereas over 80% of people spent time in three or more income deciles over this period.

### Income is more mobile than wealth – most people move across multiple income deciles over a lifetime but relatively few do for wealth<sup>a,b</sup>

Movement of people between income and wealth deciles within the 2010–2022 period



**a.** Difference between deciles is for people in all HILDA waves between 2010 and 2022 **b.** Wealth deciles are measured in 2010-11, 2014-16, 2018-19 and 2022-23.

Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

Mobility is lowest at the top and bottom of the wealth distribution. Around half the people in the top or bottom two deciles remained there over two decades later (table below). Only one in five people move from the bottom two deciles into the top half of the distribution over the period 2002 to 2022, and similarly, only one in five fall out of the top half of the distribution.

<sup>&</sup>lt;sup>10</sup> These estimates are based on HILDA data relating to income and wealth over the period 2010 to 2022 for people in HILDA in both 2010 and 2022.

Box 2.1 - Wealth is even more 'sticky' than income

#### Wealth is persistent over time<sup>a</sup>

Proportion of people in each wealth decile in 2002 by wealth decile in 2022

	Wealth decile, 2022										
		1	2	3	4	5	6	7	8	9	10
	1	38.4	23.0	10.0	6.2	5.1	4.9	2.9	1.9	3.0	0.7
	2	16.6	23.8	13.8	15.3	8.0	4.5	4.8	7.2	2.4	3.3
2002	3	11.9	12.0	17.3	12.7	15.1	11.4	7.6	7.1	3.4	1.9
ile, 2	4	7.2	12.3	12.4	17.1	12.6	13.2	11.0	8.1	4.6	1.8
decile,	5	4.5	5.7	15.2	15.6	12.5	15.9	10.1	9.4	7.7	3.9
Wealth	6	3.1	7.1	9.5	9.8	13.6	11.7	17.9	10.8	11.8	5.6
We	7	3.4	5.0	6.8	7.4	11.2	8.5	14.2	18.4	17.3	8.0
	8	2.7	3.8	7.6	7.7	9.7	12.9	13.8	13.6	12.4	16.5
	9	1.2	3.2	3.6	5.3	9.8	11.3	13.2	13.6	19.0	20.8
	10	2.2	2.1	1.0	3.6	3.8	7.0	7.8	12.7	21.2	39.0

a. Wealth decile is determined using household equivalised wealth values.

Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

### 2.2 Education and income mobility over a lifetime

Education provides people from all backgrounds with the means to improve their earning potential: in the context of having a 'fair go', accessible education provides significant opportunities to transform an individual's economic wellbeing.

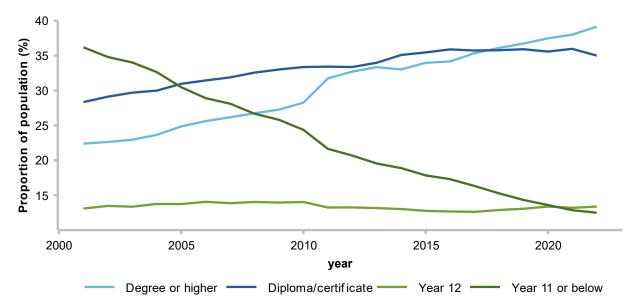
Education develops skills, which lead to higher rates of employment and higher lifetime earnings for individuals. Across all education types, an additional year of education can boost annual earnings by 13% on average, while just completing year 12 can increase annual earnings by around 27% (Leigh 2024; Leigh and Ryan 2008). Evidence also suggests that education has driven many of the improvements in intergenerational mobility among first and second generation Australians (Deutscher 2020b).

Australians are increasingly pursuing further education.<sup>11</sup> In the 20 years between 2002 to 2022, the proportion of Australians who have completed a degree or higher qualification increased from 22% to 39% (figure 2.2). The proportion of people who have not completed year 12 has also fallen drastically from 35% to 12% over that period, likely due to population compositional changes and many jurisdictions raising the

<sup>&</sup>lt;sup>11</sup> Education is also not always limited to formal settings. Interpersonal and other important skills can be acquired through social and community interactions. For instance, cultural education in Aboriginal and Torres Strait Islander communities can build skills like resilience, systems thinking and conflict resolution (Jobs and Skills Australia 2023, p. 20). However, tacit forms of skills and knowledge are hard to observe or capture in large-scale data. Instead, formal educational attainment is often used as a signal for employment, which has meaningful implications for income mobility.

minimum school leaving age to 17 years in the 2000s (ACARA 2010). More recently, however, school attendance rates have noticeably dropped since COVID-19 and have not recovered to pre-COVID levels (ACARA 2023).

Figure 2.2 – An increasing number of Australians are educated at higher levels<sup>a</sup> Distribution of highest educational attainment, 2000–2022



a. Population restricted to people aged 25 to 65.

Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

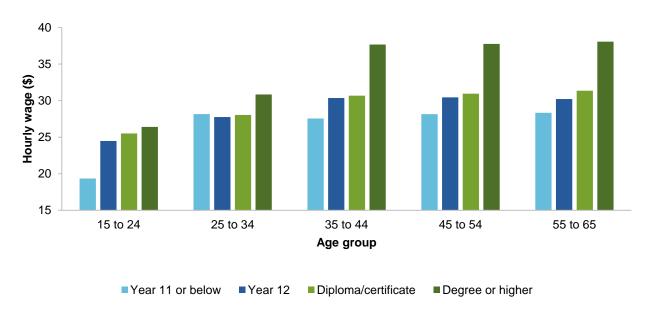
### **Educational attainment is associated with higher income**

On average, people with a degree or higher earn around 23% more than people with year 12 qualifications, and 35% more than people with year 11 or below levels of attainment. But there is variation in the earnings differential associated with more education across a lifetime: it is relatively small early on in people's careers, but wider as people progress through their working lives (figure 2.3).

<sup>&</sup>lt;sup>12</sup> These estimates are based on Commission analysis of HILDA data and take into account differences in health, occupation, marital status, location and other factors (appendix B).

Figure 2.3 – Wage differentials by education level are persistent<sup>a</sup>

Average expected hourly wages by highest educational attainment and age



a. Estimates use pooled data from HILDA waves 18 to 22.

Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

Learning can happen at any stage during a lifetime. Among OECD countries, Australia has a relatively high adult participation in formal education (OECD 2020). In the 2020-21 financial year, 15% of people aged between 25 and 54 had engaged in formal study in the last year, and around 33% engaged in informal study (ABS 2021c).<sup>13</sup>

Higher education attainment is typically associated with higher earnings regardless of when the education is undertaken (Chesters 2015), suggesting that people can access opportunities provided by education at any stage in life. Although some evidence suggests that the economic pay-off from adult education is lower than those engaging at younger ages, there are still strong increases in job satisfaction and perceived employment opportunities (Coelli and Tabasso 2019). However, this also suggests that people who do not acquire an education early in their lives could be at an economic disadvantage, particularly in terms of earnings accumulated over their lifetime. Completing high school becomes important for giving people options to pursue further education later in life if they choose to take it.

In this context, lifelong learning is essential for forging alternate paths and increasing opportunities for lifetime economic mobility. Although there are very few age restrictions on when further education can be undertaken in Australia and with various pathways to entry (Chesters et al. 2020; Karmel 2004), not everyone takes up these pathways. Removing structural barriers and supporting a culture of lifelong learning is particularly important for adapting to the fast changing nature of work and skills needed in the workforce to help avoid or alleviate the economic consequences of unemployment spells (PC 2023).

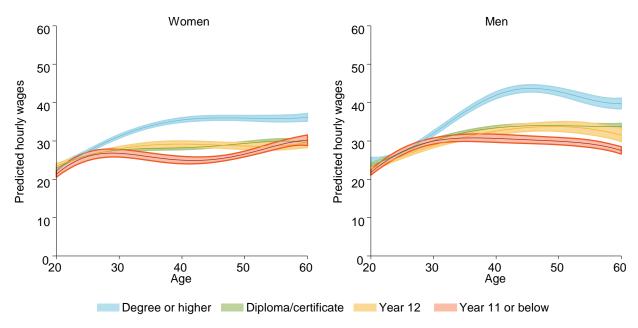
<sup>&</sup>lt;sup>13</sup> Formal study refers to a recognised qualification such as Degree, Diploma, Certificate and includes study at school. Informal study refers to learning that occurs away from a structured, formal classroom environment.

### Men tend to earn more than women, even with similar education levels

Men and women receive different returns from similar education attainment. Even after accounting for differences in occupation type, part-time work status, marital status and other factors, men with a Bachelor's degree or higher earn, on average, 28% more than men with year 12 qualifications. The equivalent comparison for women is 21%. However, the estimated payoff for completing year 12 is higher for women than for men. Women completing year 12 earn around 16% more than women who do not, while men earn around 5% more (Commission analysis of HILDA).

These average effects vary for different age groups. Wage gaps between young men and women, likely to be early in their career, are relatively narrow in all education groups. For example, men and women aged between 25 and 34 with degree or higher qualifications both earn \$30–\$31 in averaged expected hourly wages. A gap emerges, however, for older age groups (figure 2.4). For people aged 45 to 54 with degree or higher qualifications, women earn around \$35 per hour on average, compared to men earning around \$40 per hour.

Figure 2.4 – Snapshot of earnings by education and age<sup>a,b</sup>
Expected average hourly wages by age, gender and highest educational attainment,
2018–2022



**a.** Estimates use pooled data from HILDA waves 18 to 22. **b.** Bands show mean expected wages and 95% confidence intervals conditional on age and education. Model accounts for sample selection bias and other factors such as state, region, marital status, children, health and part-time work status (see appendix B).

Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

In an earlier research paper *A snapshot of inequality in Australia*, the Commission observed that there are a range of factors behind the well-documented gender pay gap (PC 2024). Similar factors may also explain the differential returns to education between men and women, which exist even though more women have invested in higher education than men.<sup>14</sup> These factors include that women take on relatively more caring

<sup>&</sup>lt;sup>14</sup> Around 50% of women aged 35 to 44 hold a Bachelor degree or higher qualification, compared to around 39% for men in the same age group (ABS 2023a).

responsibilities than men, with mothers having lower labour force participation than fathers, and women experiencing a 'motherhood penalty' with a larger drop in earnings after the arrival of a child (Bahar et al. 2023). In addition, female-dominated industries (such as health care and education) typically attract lower pay than male-dominated industries, while occupations with limited flexibility that reward long hours are disproportionately worked by men and have large gender wage gaps (Sobeck 2022).

Various other life events can financially impact men and women differently. For example, separation from a partner economically disadvantages women more often than men (Broadway et al. 2022). The Commission considers the impact of this life event in section 2.3.

### Income mobility varies for people with different education levels

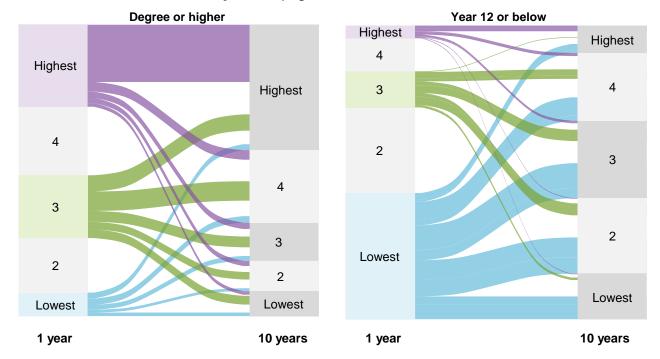
People's early investments in education have implications for their income mobility. People who complete a degree or higher qualification tend to remain in higher income quantiles after study, while those who do not pursue further study beyond high school tend to spread more across the income distribution over time (figure 2.5). More specifically:

- Around two in five people with degrees or higher qualifications end up in the top income quintile after 10 years, but for those who have only completed high school or below it is around one in ten.
- About 16% of people who have only completed high school or below end up in the bottom income quintile after 10 years, while only 8% of people with degrees or higher qualifications are there.
- Of those in the bottom income quintile a year after leaving school, 47% remain in the bottom two quintiles after 10 years. The comparable figure for people completing a degree or higher is only 28%.

While further education enables people to increase their incomes more persistently and to a greater extent, there is still a considerable level of income mobility for those who do not attain more education. Some of this group, however, is more likely to remain at the bottom of the income distribution and may be at higher risk of falling into or staying in poverty (chapter 4).

Figure 2.5 – People with a degree or higher are more likely to stay at the top of the income distribution<sup>a, b</sup>

Transition between income quintiles, by level of education



**a.** Estimates use uses HILDA data from all waves, capturing people from ages 16 to 64. **b.** The left panel illustrates people's position in the income distribution 1 and 10 years after attaining their degree and who did not pursue further education. The right panel illustrates people who only completed year 12 or below with no further education in the subsequent 10 years, and their position in the income distribution at the 1 and 10 year points after leaving school. Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

### 2.3 The impact of life events on income mobility

Over their lifetimes, people experience various life events or 'shocks' that can impact their incomes. This could include obtaining further education (section 2.2), switching careers and changes in personal circumstances. Where these events have the potential to significantly and unexpectedly reduce income, a society that values a 'fair go' would see that people are able to eventually recover from a shock, and not be held back by their unfortunate circumstances.

In this section, the Commission has analysed the impact of three negative shocks – losing a job, experiencing serious personal illness or injury, and separating from a long-term partner – using an event study model to measure the likely effect on people's earning capacity (see appendix B for further detail on the methodology).<sup>15</sup>

<sup>&</sup>lt;sup>15</sup> The effects of significant life events extend far beyond economic outcomes. Life events can affect a person's wellbeing in many ways, including their physical and mental health, leisure time, and quality of life more broadly. Here, our focus is specifically on income mobility. Furthermore, many studies have explored the economic impacts of other life events not analysed in this report, such as switching jobs (Deutscher 2019), becoming a parent (Bahar et al. 2023), going to jail (Western 2002), being a victim of crime (Dinisman and Moroz 2017), and being affected by a natural disaster (Bui et al. 2014; Groen et al. 2020; Johar et al. 2022).

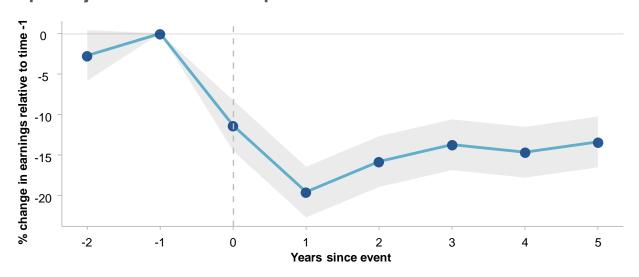
Life events do not impact everyone equally. Some groups are more likely to experience particular shocks or face larger consequences from the same shock. For example, disadvantaged households (identified as low socioeconomic status) are more likely to experience adverse life events (Baxter et al. 2012; Moloney et al. 2012). Experiencing multiple negative income shocks can lead to compounding effects and therefore be more difficult to recover from, reducing human capital accumulation and limiting opportunities to move up the income distribution.

### Job loss leads to a significant and persistent decrease in earnings

Around 534,000 people in Australia lost a job in 2022 (ABS 2023c). Losing a job, on average, decreases earnings by around 20% in the year following the job loss. While income recovers to some extent in subsequent years, the negative impact of job loss on income persists strongly over time (figure 2.6). Other studies have similarly found large and persistent impacts of job loss or mass layoffs on income in Australia (Lancaster 2021; Marti et al. 2023). The impact of job loss on earnings in Australia is larger than general estimates for Scandinavian countries but smaller than for countries in Southern Europe (Marti et al. 2023). This potentially reflects differences in the availability of job opportunities between countries, as well as the degree of government support for re-employment.

Figure 2.6 – On average, job loss decreases disposable income by around 20% in the year after job loss, and this effect persists over time<sup>a</sup>





**a.** Vertical line represents the year of job loss. Shaded area shows 95% confidence intervals. Job loss is identified by whether the individual was fired or made redundant in the last 12 months. Event study regression coefficients are estimated on income levels and then converted to percentages using average income before job loss. Includes data from 2002 to 2022, capturing people experiencing a job loss between 2004 and 2017.

Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

<sup>&</sup>lt;sup>16</sup> This captures people classified as involuntarily ceasing their last job, including retrenchment, dismissals, and losing a job due to ill health or injury.

<sup>&</sup>lt;sup>17</sup> To define job loss, we use HILDA's variable of whether someone was fired or made redundant in the last 12 months. Lancaster (2021) defined job loss slightly differently using transitions from employment to unemployment. Our chosen definition of job loss likely contributes to why we don't see the largest impacts in the year of job loss as Lancaster (2021) found. If someone loses their job towards the end of the financial year, this will likely have a larger effect on their income in the following financial year.

Previous research has found that the size of the earnings reduction from job loss is relatively similar between women and men, as well as across different levels of education and income (Lancaster 2021). It might be expected that people with higher education or higher income would experience greater demand for their skills and recover more quickly from job loss. However, other labour market factors also influence the ability to recover, including occupation and industry of employment<sup>18</sup> as well as job search intensity. Someone struggling financially is likely to search for a job more intensely, while someone who previously had high income is more likely to have the means to delay re-entry into the workforce.

Furthermore, these results provide insights into the average impact of job loss and not the overall incidence of job loss. People with lower income or lower levels of education are more likely to lose their job compared to people of high income or high levels of education (Lancaster 2021), emphasising that life events do not impact everyone equally. Ananyev et al (2023) found that those at the bottom of the distribution are more likely to experience earnings shocks; however, their earnings are also more likely to recover from these shocks.

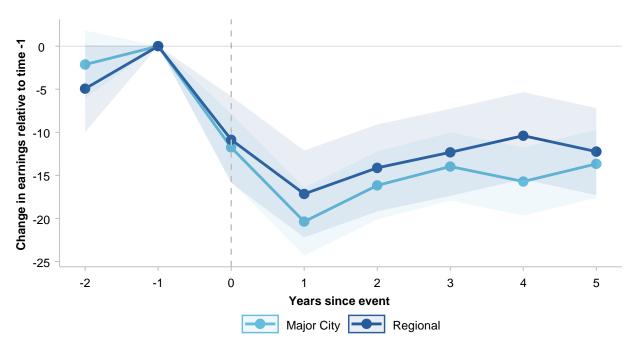
The Commission's analysis shows that people in major cities have a similar experience of recovering from job loss to people in regional locations (figure 2.7). One might expect a faster recovery in major cities because of higher labour demand and a greater likelihood of finding a better job match due to the concentration of many businesses in one location (Fujita and Thisse 1996). However, major cities have higher labour supply and there have been instances of high vacancy rates in parts of regional Australia (Houghton et al. 2023). Our finding is an average across regional areas, masking a wide variety of local labour market conditions across regional Australia. Furthermore, this result could be impacted by other factors such as job search intensity (as discussed above) and moving locations in response to job loss.

<sup>&</sup>lt;sup>18</sup> Different education cohorts are over-represented in particular industries (Oxford Economics Australia 2023) and occupations (ABS 2023a), which could impact ease of re-employment.

<sup>&</sup>lt;sup>19</sup> HILDA is not representative for remote Australia (Watson 2021), so these results have not been included.

Figure 2.7 – The impact of job loss is similar between people in major cities and those in regional locations $^{a,b}$ 





**a.** Vertical line represents the year of job loss. Shaded areas show 95% confidence intervals. Job loss is identified by whether the individual was fired or made redundant in the last 12 months. Event study regression coefficients are estimated on income levels and then converted to percentages using average income before job loss. Includes data from 2002 to 2022, capturing people experiencing a job loss between 2004 and 2017. **b.** People who live in remote and very remote locations have been excluded due to low sample size.

Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

Finally, previous research has found that while older people are less likely to experience job loss compared to younger people, older people who do lose their job have larger decreases in income than younger people who lose their job (Lancaster 2021). Many factors could be influencing different experiences of job loss across life stages, including opportunities to reskill, structural change, occupation and industry of employment, and willingness to accept part-time or casual employment.

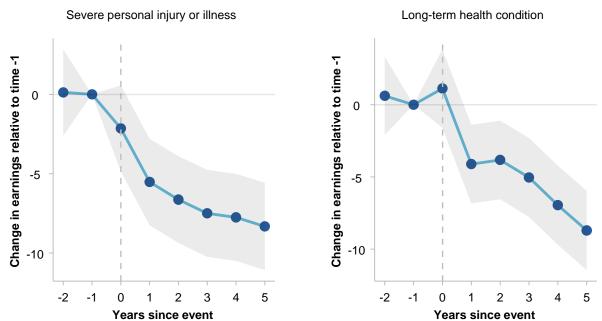
## Health shocks persistently decrease income, particularly for those of low socioeconomic status

Almost 10% of people in Australia suffer severe personal injury or illness a year and around 30% have a long-term health condition,<sup>20</sup> with older people far more likely to have one or more chronic health conditions than younger people (ABS 2023b). Health shocks can impact quality of life and wellbeing in many ways, as well as the ability to earn income.

<sup>&</sup>lt;sup>20</sup> These numbers are based on HILDA data, which differs slightly to other data sources. For example, the National Health Survey (NHS) finds that 81% of people had at least one long-term health condition, however there are differences between the definition of long-term health condition used by the NHS and HILDA. For example, the NHS includes people who are short or long sighted, while HILDA includes sight problems *not* corrected by glasses/lenses.

Health shocks have significant and persistent negative impacts on income; however, the size of impact varies depending on the definition of health shock used. After suffering severe personal illness or injury, income decreases by an average of 6% in the following year, while this decrease is around 4% for experiencing a long-term health condition.<sup>21</sup> For both health shocks, the negative impact tends to worsen over time (figure 2.8).<sup>22</sup> Other health shocks, such as sharp increases in bodily pain or decreases in self-reported measures of mental health, also have negative impacts on income (see appendix B).

Figure 2.8 – Health shocks decrease income, with this effect worsening over time<sup>a,b</sup> Impact of health shocks on individual disposable income



**a.** Vertical line represents the year of health shock. Shaded area shows 95% confidence intervals. Event study regression coefficients are estimated on income levels and then converted to percentages using average income before shock. Includes data from 2002 to 2022, capturing people experiencing a health shock between 2004 and 2017. **b.** Results capture people who initially did not have a long-term health condition or serious personal illness or injury. Some people, for example those with a long-term health condition for the full sample, are excluded from the analysis. Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

People of lower socioeconomic status have larger ongoing decreases in income from suffering severe personal injury or illness (figure 2.9).<sup>23</sup> People in the bottom half of the income distribution experience a 21% reduction in income, on average, five years after this health shock. This decrease is around 5% for people in the top half of the income distribution. These differences could be influenced by various factors, such as a person's access to resources in response to the health shock or their type of work. Those with higher income may be more likely to access additional health resources such as private health insurance, or work in a job

<sup>&</sup>lt;sup>21</sup> While it looks as if income increases in the year of experiencing a long-term health condition (figure 2.8, panel B), this estimate is statistically insignificant (the 95% confidence interval contains zero).

<sup>&</sup>lt;sup>22</sup> Similarly, García-Gómez et al. (2013) use Dutch administrative data to show that sudden illness has significant and persistent negative impacts on employment and income.

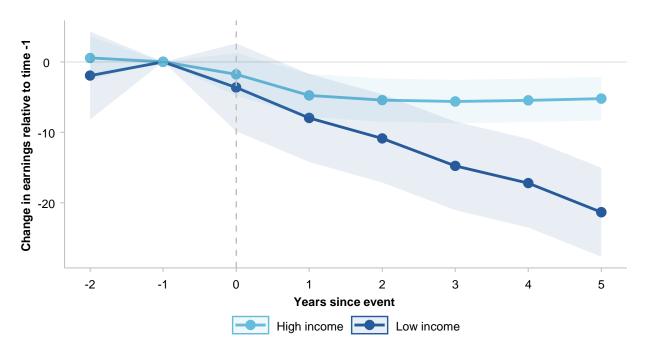
<sup>&</sup>lt;sup>23</sup> This result did not hold across all health shocks. For people experiencing a long-term health condition, the decrease in income was relatively similar across income groups.

that could be more accommodating of health shocks. This could indicate that people with lower income face some barriers to recovering from a health shock that limits their income mobility in subsequent years.

In addition to the larger negative impact on income, people of low socioeconomic status are generally at greater risk of poor health than people of higher socioeconomic status (AIHW 2022). Those from disadvantaged backgrounds have less economic resources to draw from in response to shocks such as personal injury or illness, emphasising that life events are not experienced by all groups equally.

Figure 2.9 – Suffering severe personal injury or illness has larger ongoing impacts for people of low income  $^{a,b}$ 





**a.** Vertical line represents the year of health shock. Shaded area shows 95% confidence intervals. Event study regression coefficients are estimated on income levels and then converted to percentages using average income before shock. Includes data from 2002 to 2022, capturing people experiencing a health shock between 2004 and 2017. **b.** The high (low) income group includes people in the top (bottom) half of the income distribution when first observed in the sample. Therefore, for those who suffered personal injury or illness, their income group is assigned based off their income before the health shock.

Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

Almost 30% of people who retired between 2002 and 2022 suffered severe personal injury or illness in the year of or prior to their retirement. Such health shocks likely resulted in some people retiring earlier than planned: our analysis finds that people who recently experienced a health shock retired, on average, 1.3 years earlier than people who did not.<sup>24</sup> Other studies have also found that health shocks are an important determinant of retirement (Jones et al. 2010; Munnell et al. 2019). For example, Zucchelli et al. (2010) use HILDA data to show that health shocks are a key determinant of early exit from the labour market. The prevalence and impact of health effects on early exit from the labour market are higher for less educated

<sup>&</sup>lt;sup>24</sup> This includes people who experienced serious personal injury or illness in the year of or prior to their retirement. The analysis controls for several other factors that could affect retirement, such as pre-retirement income, occupation, and industry, as well as education, gender, and regional location.

workers (De Breij et al. 2020), further highlighting disparities that exist in the experience of life events across cohorts.

### Separation decreases household income for women but not men

There were around 49,000 divorces in Australia in 2022 (ABS 2023e). The proportion of divorces involving children under 18 years has remained at around 50% since the early 2000s (Qu and Baxter 2023). Following separation from a long-term partner, women experience a significant decrease in equivalised disposable income, while men's equivalised income increases (figure 2.10, panel A).<sup>25</sup> This gender difference in the impacts of separation has also been found in other OECD countries (de Vaus et al. 2015), influenced by lost partner income as well as a greater likelihood of women being the primary residential parent for families with children (Broadway et al. 2022).

Women bear a disproportionately high burden of caring responsibilities compared to men (ABS 2022; Kleven et al. 2019). Women are more likely than men to cite caring for children as the main reason for not starting a job or working more hours (Australian Government 2023) and 83% of one-parent families are single mother families (ABS 2023d). The high burden of caring responsibilities impacts equivalised household income following separation, <sup>26</sup> limiting women's ability to make up for lost partner income following separation.

However, individual disposable income for women increases following separation, by far more than individual income for men (figure 2.10, panel B).<sup>27</sup> This may reflect the need to make up for lost partner income following separation through, for example, accessing additional government support payments (such as the Parenting Payment Single) and/or increasing labour force participation.<sup>28</sup> Furthermore, the increase in individual disposable income helps women bounce back from the initial loss in household income. This is shown in the recovery of women's equivalised income several years after separation (figure 2.10, panel A), with no statistically significant impact of separation on women's equivalised income by four years after the event.<sup>29</sup>

<sup>&</sup>lt;sup>25</sup> Equivalised income is a measure of household income that adjusts for household size and composition. For example, an adult couple without kids has higher equivalised income to an adult couple with the same total household income with kids. While the rest of the analysis in section 2.3 uses individual income, we also examine equivalised income here because of how separation can impact household composition (particularly in the case of parents with children).

<sup>26</sup> Equivalised income adjusts for the fact that larger households require more resources to be shared across each person. For example, an adult with children has lower equivalised household income than a lone adult on the same individual income.

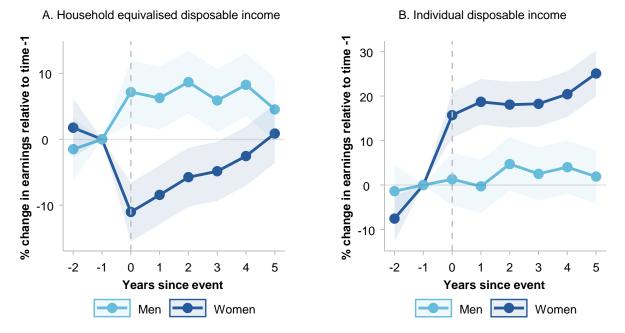
<sup>&</sup>lt;sup>27</sup> It is important to note that this change in individual income is relative to the person's income before separation and does not capture differences in levels or the impact of differences in wealth. On average, women still have lower levels of income and are more likely to enter poverty following separation than men (Broadway et al. 2022).

<sup>&</sup>lt;sup>28</sup> Government payments increase sharply following separation for women but not men, indicating that additional support such as parenting payments play an important role in the recovery of women's income following separation. Labour income also increases following separation for women (albeit more gradually), suggesting that increasing labour force participation also has an impact (see appendix B for further detail).

<sup>&</sup>lt;sup>29</sup> This recovery is unlikely to be driven by children moving out of home since unequivalised household income for women also recovers to a large extent following separation (see appendix B for further detail).

Figure 2.10 – Equivalised income for women decreases following separation, but individual income (including government transfers) increases<sup>a</sup>

Impact of separation on different income measures for women and men



**a.** Vertical line represents the year of separation. Shaded area shows 95% confidence intervals. Event study regression coefficients are estimated on income levels and then converted to percentages using average pre-separation income. Includes data from 2002 to 2022, capturing people experiencing separation between 2004 and 2017.

Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

# 3. Intergenerational economic mobility

### **Key points**

- Australia's long-term economic growth has led to each generation earning more income on average than the last.
  - About 67% of Australians born in 1976–1982 earned higher individual incomes than their parents did at the same age.
  - Women (56%) are less likely than men (77%) to earn higher individual incomes than their parents.
- Australia has relatively high intergenerational mobility compared to other countries. On average, about one-fifth of a change in parents' income is passed on to their children.
- However, there is some persistence in income across generations at the top and bottom of the distribution. This indicates there are instances where a parent's advantage or disadvantage is passed down to their children.
- The intergenerational persistence of people's incomes is affected by where they grew up.
  - Intergenerational income mobility is high and fairly similar across most states and territories.
  - People who grew up in the Northern Territory, on average, experienced the lowest intergenerational income mobility in Australia.
- \* The persistence of wealth across generations is higher than the persistence of income.
  - Inheritances account for about one third of the intergenerational persistence of wealth.

While chapter 2 looked at mobility over the course of a person's life, this chapter looks at mobility across generations between parents and children. It examines the extent to which people earn higher real incomes than their parents (section 3.1), and the extent to which people's incomes are associated with their parents' incomes (section 3.2).

The Commission's analysis on intergenerational mobility focuses on income as a proxy for economic wellbeing – for example, if parents earn low incomes, is it likely their children will also earn low incomes? Data on income is more readily available than for other indicators of wellbeing, and more extensive research has been undertaken on intergenerational income mobility. The intergenerational persistence of wealth, as another measure of economic resources, is discussed at the end of the chapter.

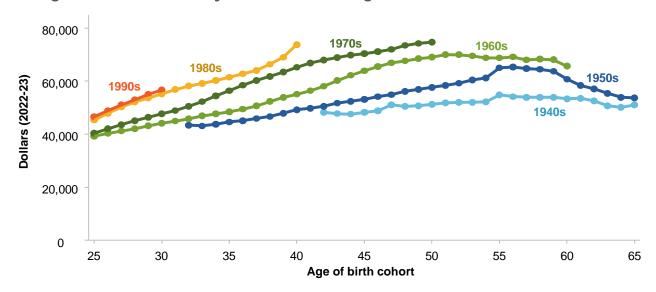
### 3.1 Are people earning more than their parents?

It is a common value among Australians that each generation should leave the next generation better off. The extent to which people are better off than their parents is an important indicator of intergenerational mobility, equity, and material progress. As an indicator of living standards, although an incomplete indicator, the Commission has focused on whether each generation has earned higher real individual disposable incomes than the previous generation.<sup>30</sup>

### Each generation earned more than the previous ...

On average, each generation earned higher individual disposable incomes than the previous generation at a given age. Australia's economic prosperity over the long term has led to a significant increase in real incomes and material living standards over time. However, slow growth in recent periods has meant people born in the 1990s have experienced almost no growth in incomes between the ages of 25–30 compared to those born in the 1980s (figure 3.1).

Figure 3.1 – Incomes have grown for each successive generation until recently<sup>a,b</sup> Average individual income by birth decade and age



**a.** HILDA data shows similar trends, including the lack of growth in individual disposable incomes for those born in the 1990s. **b.** Using HILDA, when the income measure is equivalised household disposable income, the average incomes of those born in 1990s are materially higher than those born in the 1980s, which reflects the incomes of other household members increasing.

Source: Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife-Family) dataset.

<sup>&</sup>lt;sup>30</sup> The Commission has used individual incomes as the primary measure of income for this section, as the Commission has focused on each generation's incomes and people's ability to earn higher incomes *themselves* relative to the previous generation or their parents. Individual incomes also better illustrate disparities across demographics: equivalised measures mask differences in individual outcomes, such as gender and age income gaps. However, individual incomes do not entirely reflect a person's economic wellbeing or access to economic resources, which is better measured by equivalised household incomes. Where available, comparisons with estimates using equivalised household incomes are made in the footnotes.

Weak income growth for people born in the 1990s reflects the poor economic outcomes experienced by younger people following the global financial crisis (GFC). In 2021, the Commission (2020c) found average individual disposable incomes grew strongly for all age groups between 2001 and 2008, but then declined only for young Australians aged 15 to 34 between 2008 and 2018.

This decline was primarily caused by a relatively weak labour market for younger Australians following the GFC. Younger Australians experienced stagnant wages and were more likely to obtain jobs with lower educational requirements and earnings potential relative to comparably-skilled younger people in 2001, which can have long-term negative effects on their wages and occupational choices (PC 2020c).

However, it is too early to come to strong conclusions. More years of data are needed to determine whether this pattern will continue – particularly in light of more recent economic conditions – but the lack of income growth for those born in the 1990s indicates the trend that each generation earned more than the previous may have stalled (figure 3.1).

### ... and most – but not all – people earn more than their parents

While people in each generation earned more than the previous generation *on average*, this does not mean everyone in the generation earned more, which raises the question of how many people actually earn more than their parents? Measuring absolute intergenerational mobility answers this question – it refers to the proportion of people who earn higher real incomes than their parents.<sup>31</sup>

The Commission finds that 67% of people born between 1976–82 earned higher individual incomes than their parents.<sup>32</sup> While the Commission's dataset and measure of income differs, this is very similar to Kennedy and Siminski's (2022, pp. 12–13) estimate of 68% for people born in 1987, and higher than Berman's (2022, p. 74) estimate of 63% for people born in 1986.<sup>33</sup> This suggests that for the most recent birth cohort available, most – but not all – people earn more than their parents.<sup>34</sup>

Based on their estimate of 68% for the 1987 cohort, Kennedy and Siminski (2022, p. 4) concluded that it 'puts Australia with a cluster of Scandinavian countries as having amongst the highest absolute mobility in the world'. While Berman's (2022, p. 74) estimate of 63% is a little lower, Australia still places above many other countries such as Canada, France, Japan and the United States.

Additionally, the lower the parent's income, the greater the proportion of children who earn higher incomes than their parents. About 96% of children with parents in the bottom income decile earned more than their

<sup>&</sup>lt;sup>31</sup> This analysis uses the ATO Longitudinal Information Files Family (ALife-Family) dataset with a sample of over 200,000 parent/child linkages to conduct analysis of absolute intergenerational mobility. Consistent with the literature on absolute intergenerational mobility, this analysis uses total income before taxes and deductions as the primary income measure. More detail on the ALife-Family dataset and the Commission's methodology is outlined in appendix C.

<sup>&</sup>lt;sup>32</sup> The Commission's estimate reported here is based on the individual income of the parent ranked highest in the ALife-Family parent-child linkage (the 'primary parent'), but the results are broadly similar when the other parent's income is used (appendix C).

<sup>&</sup>lt;sup>33</sup> These estimates are not directly comparable due to different methodologies and income measures. The Commission directly observed the parent and child's incomes using ALife-Family, whereas both Berman (2022) and Kennedy and Siminski (2022) measured absolute mobility indirectly using a 'copula and marginals' approach (see Chetty et al. (2017)). Berman (2022) used equal-split tax unit incomes, Kennedy and Siminski (2022) used household incomes (usually the sum of personal and spouse income), whereas the Commission uses individual incomes. Estimates for different income measures are outlined in appendix C.

<sup>&</sup>lt;sup>34</sup> This rate is even higher if equivalised household gross income is used. Kennedy and Siminski (2022, pp. 21, 23) estimated that 78% of people born in 1987 earned higher incomes than their parents, which is higher than their estimate of 68% using unequivalised household gross income.

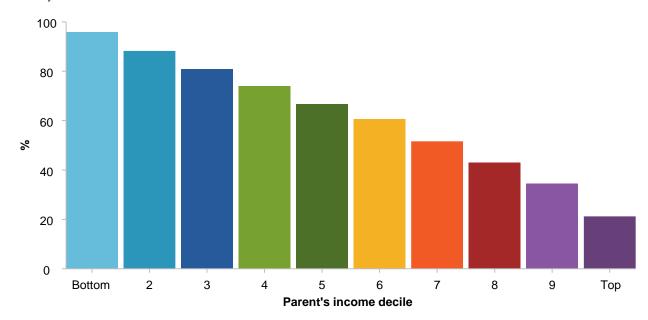
parents did around the same age, but only 21% of children with parents in the top income decile earn more (figure 3.2).

This reflects the substantial upwards and downwards mobility between generations in Australia in that some people – particularly those with higher-income parents – will be lower on the income distribution than their parents and earn lower incomes as a result (section 3.2). But this is not inherently a bad thing – it is a side effect of having a highly mobile country with relatively equal opportunity.

The Commission notes these estimates are for people born prior to the 1990s. Negligible income growth for those born in the 1990s (figure 3.1) suggests the proportion of those born in the 1990s who will go on to earn higher incomes than their parents may decline.

Sustained productivity growth that increases real incomes across the distribution over the long term would allow more people to earn more than their parents, even if they end up in a lower rank in the income distribution compared to their parents.

Figure 3.2 – Children of lower-income parents are much more likely to outearn them<sup>a,b,c</sup> Percent of children who earned more than their primary parent by parent's income decile, 1976–82 birth cohort



**a.** The income measure is individual 'total income' before taxes and deductions, and including government support payments for people filing tax returns. **b.** Both children and parents are around the same age for the period their incomes are averaged, between ages 29 to 44. Incomes are averaged over a decade where possible to give a proxy for lifetime income. **c.** The child's income is compared against the income of their 'primary parent', which is the highest ranked parent in the ALife-Family parent/child linkages (appendix C).

Source: Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife-Family) dataset.

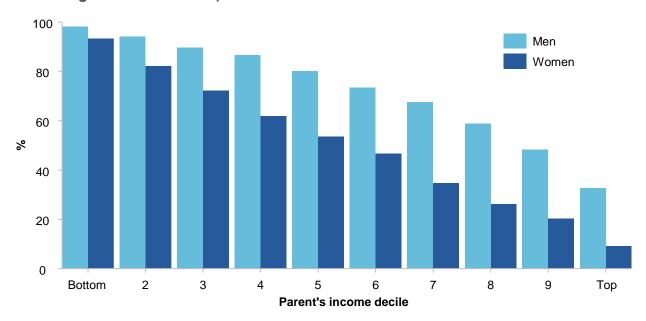
# Women are less likely than men to earn higher incomes than their parents

While 67% of the 1976–82 birth cohort overall earned higher incomes than their parents, there is variation depending on the gender of the child. Just over half of women (56%) earned higher incomes than their

parents, compared to the vast majority of men (77%). Men with middle- to high-income parents are more than twice as likely to outearn their parents than women (figure 3.3).

Figure 3.3 – Fewer women earn higher incomes than their parents compared to men<sup>a,b,c</sup>

Percent of children who earned more than their primary parent by parent's income decile and gender of the child, 1976–82 birth cohort



**a.** The income measure is individual 'total income' before taxes and deductions, and including government support payments for people filing tax returns. **b.** Both children and parents are around the same age for the period their incomes are averaged, between ages 29 to 44. Incomes are averaged over a decade where possible to give a proxy for lifetime income. **c.** The child's income is compared against the income of their 'primary parent', which is the highest ranked parent in the ALife-Family parent/child linkages (appendix C).

Source: Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife-Family) dataset.

A key reason why women are less likely to outearn their parents is the gender pay gap (discussed more generally in section 2.2 and PC (2024, pp. 43–46)). Most men (64%) earn higher incomes than their fathers, and most women (68%) earn higher incomes than their mothers (figure 3.4). But there is a substantial difference when comparing children's incomes with their parents of the opposite gender. While 86% of men earn more than their mothers, only 37% of women earn more than their fathers. This drives the overall result that a lower proportion of women earn higher incomes than their parents (figure 3.3). It also means men are more likely than women to outearn both their fathers and mothers.

Over time, women's rising labour force participation and the declining gender pay gap may lead to a reduction in the gender differences associated with how many people earn more than their parents. Further discussion on inequality by gender can be found in the Commission's *A snapshot of inequality in Australia* research paper (PC 2024).

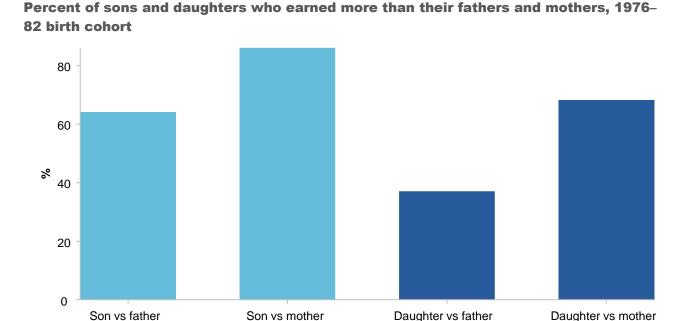


Figure 3.4 – Women are unlikely to earn more than their fathers<sup>a,b</sup>

**a.** The income measure is individual 'total income' before taxes and deductions, and including government support payments for people filing tax returns. **b.** Both children and parents are around the same age for the period their incomes are averaged, between ages 29 to 44. Incomes are averaged over a decade where possible to give a proxy for lifetime

Parental relationship

Source: Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife-Family) dataset.

# 3.2 How much of people's incomes are explained by what their parents earn?

In addition to leaving each generation better off, it is also a common value of Australians that everyone should have a 'fair go' no matter what background they come from (DHA 2020). Relative intergenerational mobility measures how strongly the economic wellbeing of a parent affects their children's economic wellbeing. As discussed above, the Commission has focused on income; that is, how strongly a parent's income or position in the income distribution affects their children's income or position in the income distribution.<sup>35</sup>

Measures of relative intergenerational income mobility provide an indicator of equality of opportunity (section 1.2). They can highlight barriers to opportunity and whether a child's opportunity is affected by the income of their parents. A strong relationship between a parent and their children's income suggests there is low intergenerational income mobility and less equal opportunity because a child's income is largely determined by that of their parents'.

<sup>&</sup>lt;sup>35</sup> While the Commission's analysis of absolute mobility (section 3.1) primarily used individual income, the Commission's analysis of relative intergenerational mobility focuses on how economic wellbeing is passed on between parents and children. Therefore, the Commission has used family incomes as the primary income measure, which is the combined income of an individual and their spouse if they have one, consistent with Deutscher and Mazumder (2020).

### Measuring relative intergenerational income mobility

The most common measures of relative intergenerational income mobility are:

- intergenerational elasticity (IGE): measures the percentage increase in a child's income associated with a 1% increase in the parent's income.
- rank-rank slope: measures the relationship between a parent's rank and their child's rank in their respective income distribution, rather than the income itself.

Both measures describe the relationship between a parent's and child's incomes but focus on slightly different concepts of mobility (box 3.1).

The Commission's analysis of relative intergenerational mobility in this section replicates Deutscher and Mazumder's (2020) analysis in Australia, but there are some differences between their sample and methodology and that of the Commission's. More detail on the Commission's dataset and methodology, as well as the differences with Deutscher and Mazumder (2020), are noted in appendix C.

### Box 3.1 - Is there a preferred measure of relative intergenerational mobility?

Intergenerational elasticity (IGE) is a well-established measure and allows for comparability of findings to past studies and across countries. It is a relative measure because it looks at percentage changes in income, rather than levels of income. However, the IGE can be sensitive to sampling and specification, and is strongly influenced by income inequality. There are also issues with accounting for people with no income.

In contrast, because the rank-rank slope focuses on income *ranks*, rather than the value of the income itself, the rank-rank slope is more robust to different model specifications and lower sample sizes, and can be computed even if some people have no income.

Given the limitations of the IGE, researchers have increasingly used the rank-rank slope measure as the preferred measure of relative intergenerational mobility over the IGE. However, these measures focus on slightly different concepts of economic mobility, meaning the IGE would still be appropriate if it better aligned with the research question of interest.

This paper presents estimates for both the IGE and rank-rank slope. However, there are various other measures of relative intergenerational mobility the Commission has not considered in this paper (see Deutscher and Mazumder (2023) for a comprehensive review – they found strong correlations between measures that are conceptually similar and different measures can provide insights into different concepts of mobility).

Source: Chetty et al. (2014); Mazumder (2016); Nybom and Stuhler (2017).

### Australia is a highly mobile country ...

#### A parent's income has little effect on the income of their children ...

There is a relatively weak relationship between the incomes of parents and their children, suggesting Australia is a highly mobile country (table 3.1). The Commission's estimated IGE of 0.197 means a 10% increase in a parent's income is associated with a 1.97% increase in their child's income. Similarly, a

rank-rank slope of 0.176 means a 10 percentile increase in a parent's rank in the income distribution is associated with a 1.76 percentile increase in the child's rank.

Table 3.1 – Intergenerational mobility in Australia is very high<sup>a,b</sup>

### Intergenerational earnings elasticity and rank-rank slope

	Commission estimates	Deutscher and Mazumder (2020)
	(Birth cohort of 1976-82)	(Birth cohort of 1978-82)
Intergenerational elasticity (IGE)	0.197	0.185
Rank-rank slope	0.176	0.215

**a.** The income measure is 'total income', which includes government transfers where available, but before taxes and deductions. Incomes are averaged over a decade where possible to give a proxy for lifetime income. **b.** Family income is used in the analysis, which is the combined annual income of the individual and their spouses. Individual income is used if a person does not have a partner.

Source: Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife-Family) dataset; Deutscher and Mazumder (2020).

These estimates address some of the limitations of previous studies by using more extensive administrative data (box 3.2). As a result, these estimates suggest Australia is more mobile than previously thought.<sup>36</sup>

### Box 3.2 – Administrative data has improved the measurement of intergenerational mobility

Measuring economic mobility requires longitudinal data on outcomes of both parents and children over a long period. Researchers have largely relied on the HILDA survey to analyse relative intergenerational mobility, but data limitations meant it was not possible to fully capture the outcomes of both parents and children. This results in biased estimates unless strong assumptions are met, though studies attempted to correct for this bias (Deutscher and Mazumder 2020; Huang et al. 2016; Leigh 2007; Mendolia and Siminski 2016; Murray et al. 2018). Some of the challenges include:

- imputed earnings: earlier studies imputed parents' earnings using strong assumptions, rather than directly observing their income. Some studies also focused on wages and salaries rather than total income
- parental relationships: earlier studies focused on the incomes of fathers and their sons, rather than the incomes of both mothers and fathers, as well as sons and daughters
- attenuation bias: people's incomes can fluctuate a lot in a short time. Using short-term, volatile income
  data creates a bias in the estimates because the fluctuation in income does not reflect longer term or
  lifetime income
- lifecycle bias: people's income changes over the course of their lives. Using income that is too early or
  too late in this lifecycle may not reflect their lifetime income, such as income early in a person's career
  before they have accumulated much experience.

<sup>&</sup>lt;sup>36</sup> In the Commission's 2018 report on inequality and mobility, the Commission found estimates of IGE in the literature to lie between 0.22–0.41 and concluded that intergenerational income mobility in Australia was about average compared to other OECD countries (PC 2018, pp. 92–94).

### Box 3.2 – Administrative data has improved the measurement of intergenerational mobility

More extensive linked administrative data has become increasingly available in recent years. The ATO Longitudinal Information Files Family (ALife-Family) dataset provides administrative tax and other data on a random sample of 10% of taxpayers between 1991 and 2020, with linkages between parents, children and spouses (appendix C).

This provides longer term data on the incomes of a much larger sample of parents and children. While administrative data is not perfect – for example, it does not capture those who do not file tax returns or receive government transfers and may not include all sources of income – it addresses some of the limitations of earlier studies using HILDA.

- The income of both parents is observable and does not need to be imputed, meaning family income
  can be used rather than individual income. This income includes labour income, capital income,
  transfer income and taxes, not just wages and salaries.
- The longer dataset means the income of both parents and children can be averaged over a longer period and during a period that is more reflective of their lifetime income to reduce attenuation and lifecycle bias.
- Incomes of fathers, mothers, daughters and sons can be observed, rather than the income of just the father and son.

Given the different dataset and methodology used, the Commission's estimates in this paper are not directly comparable with those of earlier studies using HILDA data.

#### ... which means Australia is among the most mobile countries in the world

The above estimates of intergenerational mobility (table 3.1) highlight that Australia is one of the most economically mobile countries in the world. These estimates are close to other highly mobile countries such as Canada, Denmark, Norway and Sweden, and are much lower than less mobile countries such as Brazil and the United States (figure 3.5).

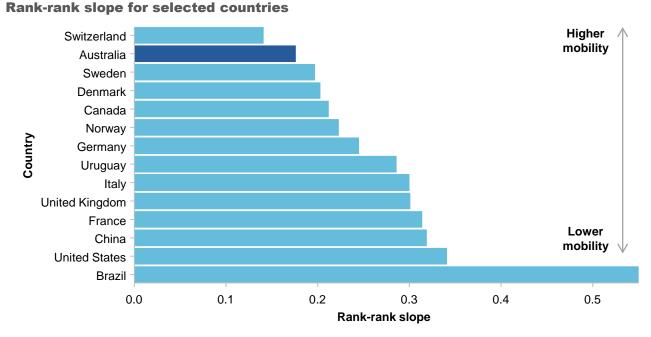


Figure 3.5 – Australia has relatively high intergenerational income mobility<sup>a,b,c</sup>

**a.** These estimates are the same as those presented in the Great Gatsby Curve in figure 1.1. **b.** Where possible, the Commission has selected estimates for other countries that are reliable and as comparable to the Commission's methodology, including the estimates are based on administrative data, uses family income as the primary income measure, and averages incomes over multiple years. **c.** Estimates for Germany, China and the United Kingdom are based on survey data. The estimate for France combines administrative data with imputation methods. Estimates for Brazil and Uruguay combine the use of administrative data on formal income with other data sources on informal income. More detail on some of the differences in these studies are noted in appendix A.

Source: Acciari, Polo and Violante (2022) (Italy); Bratberg et al. (2017) (Norway and Germany); Britto et al. (2022) (Brazil); Chetty et al. (2014) (United States); Chuard-Keller and Grassi (2020) (Switzerland); Connolly et al. (2019a) (Canada); Heidrich (2017); Helsø (2021) (Denmark); Kenedi & Sirugue (2023) (France); Leites et al. (2022) (Uruguay); Rohenkohl (2023) (United Kingdom); and Huang et al. (2021) (China). For Australia, Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife-Family) dataset.

### ... but mobility varies across the community

The results above suggest Australia as a whole is highly mobile, but mobility across Australia varies, with incomes being much more persistent across generations for some parts of the community.

#### There is some intergenerational persistence at the top and bottom

Mobility at different parts of the distribution can be measured by looking at where children end up in the income distribution given their parents' rank in the distribution. For example, if a parent is in the bottom decile, what is the likelihood their child will stay in the bottom decile or reach the top decile?

At first glance, there is upwards and downwards mobility across generations and across the income distribution (table 3.2). Mobility is especially high for children of parents in the middle of the income distribution, who have a roughly equal chance of ending up in any of the 10 deciles.

Table 3.2 – There is a lot of movement across the distribution between generations  $^{a,b,c,d,e}$ 

Transition matrix for parent's and child's income deciles, 1976-82 birth cohort

		Child's income decile									
		1	2	3	4	5	6	7	8	9	10
	1	14.6	13.4	12.0	11.0	9.9	9.4	8.3	7.8	7.1	6.4
	2	12.5	12.5	11.7	11.6	10.3	9.4	9.1	8.5	7.8	6.6
ie	3	11.2	11.3	11.4	10.8	10.6	9.8	10.0	9.0	8.5	7.3
Parent's income decile	4	10.3	11.1	10.9	10.8	10.7	10.5	9.7	9.3	8.7	8.0
come	5	10.1	10.4	10.5	10.5	10.7	10.3	10.0	9.9	9.4	8.1
s inc	6	9.3	9.9	10.2	9.7	10.7	10.5	10.0	10.3	10.2	9.1
rent	7	8.9	9.3	9.3	9.7	10.1	10.7	10.8	10.8	10.9	9.5
Ра	8	8.1	8.3	9.2	9.7	9.5	10.5	10.8	11.0	11.5	11.5
	9	7.5	7.5	8.1	8.6	9.4	10.3	10.7	11.8	12.6	13.5
	10	7.5	6.4	6.6	7.6	8.0	8.7	10.5	11.5	13.2	20.1

a. This table can be interpreted as for parents in a particular income decile on the left, X% of their children end up in the decile on the top.
b. The income measure is 'total income', which includes government transfers where available, but before taxes and deductions. Incomes are averaged over a decade where possible to give a proxy for lifetime income.
c. Family income is used in the analysis, which is the average of the combined annual income of the individual and their spouses. Individual income is used if a person does not have a partner.
d. A rate above 10% indicates they are over-represented in that decile while a rate below 10% indicates they are under-represented in that decile.
e. The sum of each row and column may not equal 100% due to rounding.

Source: Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife-Family) dataset.

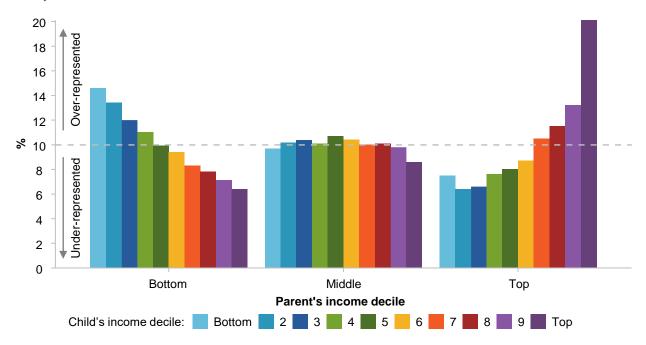
But while there is substantial mobility across the distribution, there is some persistence at both the top and bottom. Children with parents in the bottom or top decile are relatively more likely to remain in the bottom or top decile themselves (table 3.2; figure 3.6). There are various factors that can explain such persistence across generations, including parents' investment in their child's human capital, the characteristics of their family, and their location and social connections (discussed in greater detail in section 1.1).

For example, 14.6% of people with parents in the bottom decile remained in the bottom decile, yet just 6.4% of them ended up in the top decile. In contrast, just 7.5% of people with parents in the top decile ended up in the bottom decile, with 20.1% remaining in the top decile (table 3.2; figure 3.6). This suggests that although many people with lower-income parents have opportunities to reach the middle to upper deciles, they may have *less* opportunity compared to those with middle- to higher-income parents.

Relative economic mobility is therefore lower for those at the top and bottom of the distribution, which reflects a degree of intergenerational advantage and disadvantage. In particular, intergenerational advantage is much more persistent than intergenerational disadvantage. While people with parents in the bottom decile are disproportionately likely to remain in the bottom decile (14.6%), the rate at which people with parents in the top decile remain in the top decile is substantially higher (20.1%) (table 3.2; figure 3.6).

Figure 3.6 – Incomes are more persistent for people with parents at the top and  $bottom^{a,b,c}$ 

Percent of children who ended up in each income decile by their parents' income decile, 1976–82 birth cohort



**a.** The values for parents in the 'middle' income decile uses the average of deciles 5 and 6. Bottom refers to decile 1 and top refers to decile 10. **b.** These numbers were directly taken from the Commission's estimates of the complete transition matrix in table 3.2. **c.** The dotted line at 10% represents the likelihood of ending up in that income decile if children had an equal chance of ending up in any of the 10 deciles, regardless of their parents' decile. Values above the dotted line mean they are over-represented in that decile and values below the dotted line mean they are under-represented in that decile.

Source: Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife-Family) dataset.

Intergenerational disadvantage can also be reflected in poverty being passed on from parents to their children, as well as through the persistence of government support payments (such as disability, carer and unemployment payments). Further discussion on the intergenerational persistence of poverty and the receipt of government support payments is discussed in section 4.3.

Australia's relative intergenerational mobility is higher than the United States, which has greater persistence at the top and bottom. People with low-income parents are much more likely to reach the higher deciles and less likely to remain in the bottom in Australia compared to the United States, while Australians with high-income parents are less likely to remain at the top and more likely to end up at the bottom (table 3.3).

Table 3.3 – Intergenerational income mobility at the top and bottom are much higher in Australia than the  ${\bf US}^{a,b}$ 

Select transition matrix results for Australia and the United States

	Parents in the b	ottom two deciles	Parents in the top two deciles		
	Australia	Australia United States		United States	
What is the probability their child ends up in	Commission estimates	Chetty et al. (2014)	Commission estimates	Chetty et al. (2014)	
the bottom two deciles	27.0%	33.7%	14.5%	10.9%	
the bottom four deciles	49.7%	61.7%	29.9%	22.8%	
the top four deciles	30.8%	19.8%	52.0%	60.1%	
the top two deciles	14.0%	7.5%	29.7%	36.5%	

**a.** The numbers for Australia were calculated from the Commission's estimates of the complete transition matrix in table 3.2. **b.** The Commission's estimates for Australia are based on the 1976–82 birth cohort, while Chetty et al.'s (2014) estimates are based on the 1980–82 birth cohort.

Source: Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife-Family) dataset; Chetty et al. (2014).

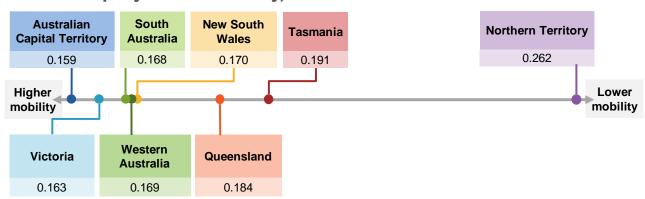
### Intergenerational income mobility is lowest in the Northern Territory

The estimates of mobility discussed above are at a national level. But the availability of economic opportunities can vary significantly in different locations, and people's incomes are also affected by where they grew up (Deutscher 2020a).

The Commission finds that income mobility is high and fairly similar across most states and territories, though with some small variations. However, people who grew up in the Northern Territory stand out as having significantly lower intergenerational income mobility than people who grew up elsewhere in Australia (figure 3.7).

Figure 3.7 – People who grew up in the Northern Territory experienced the lowest intergenerational income mobility in Australia $^{a,b,c,d}$ 

Rank-rank slope by state and territory, 1976-82 birth cohort



**a.** A person's national ranking is used for estimates of the regional rank-rank slopes rather than their ranking in the state or territory income distribution. **c.** If IGE is used, the order of states and territories would change, but the qualitative finding that most states and territories have fairly high and similar rates of mobility would not change, as well as Northern Territory having significantly lower income mobility. **d.** Family income is used in the analysis, which is the average of the combined annual income of the individual and their spouses. Individual income is used if a person does not have a partner.

Source: Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife Family) dataset.

The relatively lower income mobility for people who grew up in the Northern Territory reflects its unique circumstances, which lead to high rates of disadvantage and relatively high persistence in disadvantage between parents and children.

About 42% of children (aged under 18) in the Northern Territory lived in remote or very remote areas, compared to 6% in the next highest state of Western Australia, and just 2% in Australia overall (ABS 2021a). Remote areas generally have poorer access to services – particularly education and healthcare – which can affect a child's development, as well as provide fewer job opportunities (PC 2020b; section 1.1). Section 4.3 discusses how remoteness can affect people's risk of being and remaining in poverty.

Families and children in the Northern Territory also experience much higher rates of socioeconomic disadvantage than in other states and territories, such as greater rates of unemployment, family violence and unstable housing. These factors lead to poorer opportunities and outcomes for children growing up in the Northern Territory (PC 2019, p. 44), thereby contributing to the intergenerational persistence of disadvantage.

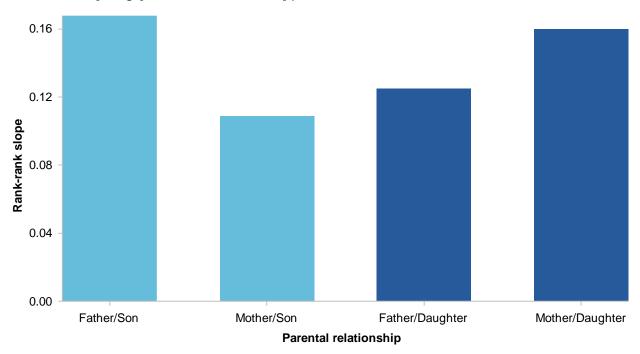
The Commission notes that while these state and territory estimates are more detailed than national estimates, they still mask the substantial variation in experiences across regions within the same state and territory. For example, previous research has found that people with low-income parents in some remote mining regions in Queensland and Western Australia have actually experienced relatively high upward mobility (Deutscher and Mazumder 2020, p. 9).

### **Mobility varies by parental relationship**

Intergenerational mobility can also vary by the individual relationships between fathers, mothers, sons and daughters. Consistent with the aggregate results, there is a small link between the incomes for each combination of parent/child. This link appears to be relatively higher between parents and children of the same gender – father/son and mother/daughter – and relatively lower between parents and children of the opposite gender – father/daughter and mother/son (figure 3.8).

Figure 3.8 – Intergenerational income mobility is lower between parents and children of the same  $gender^{a,b,c}$ 





**a.** The income measure is 'total income', which includes government transfers where available, but before taxes and deductions. **b.** Both children and parents are around the same age for the period their incomes are averaged. Incomes are averaged over a decade where possible to give a proxy for lifetime income. **c.** This analysis uses the individual incomes of parents and children.

Source: Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife-Family) dataset.

The Commission's estimates are broadly similar to that of Deutscher and Mazumder (2020), and this relationship is qualitatively consistent with Fairbrother and Mahadevan's (2016) result using HILDA. Fairbrother and Mahadevan (2016, pp. 219, 223) identified various possible explanations for this relationship.

- Children could be more likely to follow parents of the same gender into the same, or similar paying, occupation, resulting in incomes that are more similar to that parent. Women are also more likely to work part-time than men, which could result in weaker relationships in the incomes of fathers/daughters and mothers/sons.
- Even where parents and children of the same gender have the same occupation, gender inequality in the labour market – where women earn less than men in the same occupation – could still result in a weaker relationship between the incomes of fathers/daughters and mothers/sons.
- There may also be a stronger link between the human capital of fathers/sons and mothers/daughters. For
  example, Fairbrother and Mahadevan (2016) found that women with low-income fathers were more likely
  to attain higher levels of education than men with low-income fathers, thus 'the higher mobility of
  daughters with respect to fathers' earnings may be because their educational achievement is less
  dependent on their father's earnings'.

### Wealth is more persistent across generations than income

In this paper, the Commission has focused on intergenerational income mobility as an indicator of the extent to which a parent's circumstances act as a barrier to opportunity for their children. Intergenerational income mobility is also an indicator of long-run inequality and whether there is persistent advantage, disadvantage or poverty across generations (section 1.2). In addition, the greater availability of income data and literature enables relatively detailed analysis of intergenerational income mobility.

However, income is not the only economic resource that affects how economic wellbeing is passed on across generations. Parents can draw on their wealth to give their children greater opportunities, or pass on their wealth directly to the next generation. This could result in the persistence of economic advantage or disadvantage across generations even if there was little relationship between the incomes of parents and children.<sup>37</sup>

There has been limited research on the persistence of wealth across generations in Australia, but the research available highlights the importance of wealth when considering intergenerational mobility. Siminski and Yu (2022, pp. 201–205) found a 10 percentile increase in the parent's wealth rank was associated with a 2.5 percentile increase in their child's wealth rank, but this relationship was much stronger for older children.

- Child when aged 20–27 years old: a 10 percentile increase in the parent's wealth rank was associated with just a 1 percentile increase in their child's wealth rank, which indicates a very low persistence of wealth.
- Child when aged 40–65 years old: a 10 percentile increase in the parent's wealth rank was associated with a 4.9 percentile increase in their child's wealth rank, which indicates a much higher persistence of wealth.

As previously noted by the Commission (2021b, p. 57), the higher persistence among older children 'likely reflects that wealthier parents made larger investments in their children's education and broader human capital development, which yielded financial returns later in life'. It may also reflect that people are more likely to be older when they receive inheritances from their parents.

Given these results and the Commission's estimates for income (table 3.1), wealth is much more persistent than income. This suggests intergenerational wealth mobility is much lower than for income, which is consistent with wealth being much less mobile than income over the life cycle (chapter 2).

The factors that can lead to income persistence are similar for wealth. For example, wealthier parents have more economic resources to invest more in their children's education and human capital, which leads to significant returns that accumulate over time. They are also more likely to pass on knowledge, attitudes and values that support wealth accumulation, such as teaching financial literacy and guiding their investments (section 1.1).

However, unlike income, wealth can also be passed on directly to children. The Commission (2021b, pp. 58–59) estimated that inheritances accounted for about one third (36%) of the intergenerational persistence in wealth among Australians aged 64–78 in 2018 whose parents had both died.

Transfers and gifts from a parent to their child during their lifetime can also provide substantial advantages in accumulating wealth. This includes parents paying for their children's education so they do not have any student debt, and contributing to their children's house deposit to enable earlier and greater accumulation of housing wealth (Cigdem and Whelan 2017; Rauscher 2016, pp. 172–175).

<sup>&</sup>lt;sup>37</sup> Income and wealth alone are imperfect measures of the intergenerational persistence of economic wellbeing. The ideal measure of the intergenerational persistence of economic wellbeing would be all the economic resources available to a person over their lifetime, but this is not practical to measure due to data limitations.

### 4. Poverty and low mobility

### **Key points**

- Poverty is a situation where people have an inadequate level of economic resources to participate in broader society. In 2022, 13.7% of Australians had incomes below the relative income poverty line before accounting for housing costs. After accounting for housing costs, the poverty rate was 14.4%.
  - Although interrupted by the COVID-19 pandemic, the poverty rate in Australia has increased over recent years.
- People most at risk of poverty include those not in paid employment, who come from a migrant background and do not speak English at home, over the age of 65, who rent housing, and living alone or in a single parent household.
  - After controlling for other characteristics such age, family type, education and employment, Aboriginal and Torres Strait Islander people are not at greater risk of poverty than other Australians.
- The amount of time that people remain in poverty is important due to the costs associated with entrenched disadvantage. Longer periods of poverty are harder to exit, and people who do exit poverty are more likely to re-enter than those who have not previously experienced poverty.
  - Younger people are more likely to be able to exit poverty.
  - People who rent, people with lower education levels and those with long term health conditions are more likely to remain in poverty.
  - People who live in disadvantaged neighbourhoods are also less likely to exit poverty, even after other characteristics are considered.
- The experience of poverty earlier in life is associated with an increased risk of poverty in adulthood.
  - People who have low incomes between the ages of 15 and 17 are more than 30% more likely to have low incomes when they are between the ages of 25 and 32.
  - Children who grew up in a family that received government support payments are twice as likely to receive such payments as adults, compared with children who grew up in a family that that did not receive payments.

A low income can mean that people have insufficient economic resources to effectively participate in broader Australian society. This is referred to as poverty: a situation where people's resources are 'so limited as to exclude them from the minimum acceptable way of life' (European Economic Community, in Nolan 2024). Income is only one element of the economic resources available to a household, while other measures of economic disadvantage also consider information about people's wealth or financial resilience.

A lack of economic mobility for people who live on low incomes means that some of these people will experience ongoing poverty and its negative consequences. Amongst other things, the experience of poverty and material deprivation is linked to poorer mental and physical health outcomes as well as worse child development outcomes (EIAC 2024, tbl. 1).

This is particularly serious given that the likelihood of exiting poverty decreases as a person spends more time in poverty (Buddelmeyer and Verick 2008; Vera-Toscano and Wilkins 2020). A person in poverty has fewer resources to draw upon during an unexpected event, such as an illness, which can lead to longer poverty spells and worse outcomes. And people experiencing prolonged poverty may not be able to take advantage of opportunities when they are available. The longer people spend in unemployment, the harder it can be for them to find a job, potentially due to increased social isolation and loss of skills (Cassidy et al. 2020).

This chapter looks at the prevalence of poverty in Australia, how it has changed over recent years, and poverty rates for different demographic groups across the Australian population. It goes on to analyse poverty persistence in Australia, both over several years and between generations. The Household Income and Labour Dynamics in Australia (HILDA) survey is used to examine changes in poverty and poverty persistence, while the Person Level Integrated Data Asset (PLIDA) is used to present detailed poverty rates among different population groups and regions.

### 4.1 How prevalent is poverty in Australia?

'Relative' poverty measures define poverty as a level of income below a threshold, usually as a percentage of median income. These measures are commonly used across developed countries, including the European Union and many OECD countries (NASEM 2023).

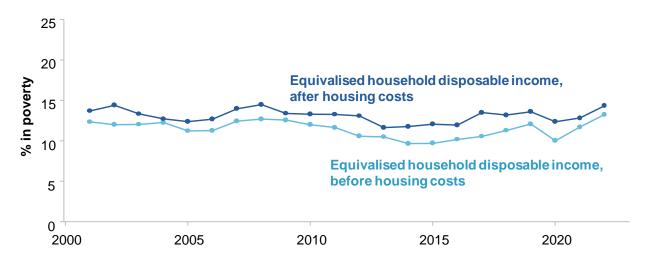
In Australia, the rate of income poverty is commonly measured as the proportion of the population who live on less than 50% of the median equivalised household disposable income.<sup>38</sup> Using linked administrative data, which has a broad coverage of the Australian population, the prevalence of income poverty (measured before accounting for housing costs) was 13.7% in 2021-22. This represented around 3.5 million people across the country.

Survey data provides a measure of how poverty has changed over recent years. Prior to the COVID-19 pandemic, income poverty rates (before accounting for housing costs) were increasing, from a low of 9.2% in 2015-16 to 11.7% in 2019-20 (figure 4.1). In 2020, poverty dropped by nearly two percentage points, due to an increase in government support payments during the pandemic that provided a 'poverty-alleviating income floor for workers in low-earning occupations and those on unemployment benefits' (Breunig and Sainsbury 2023, p. 70). After the conclusion of these additional support payments, poverty rates appear to be returning to their previous trend. In 2021-22 – the most recent HILDA data available – poverty rates have increased to the highest level recorded in the 22 years that the survey has been running.

<sup>&</sup>lt;sup>38</sup> 'Disposable' means that income is measured after tax. 'Equivalised household income' takes into account people's household size and composition. The concept of equivalised household disposable income is discussed further in the appendix of PC (2024).

Figure 4.1 – Income poverty rates have been relatively stable, but show signs of a recent uptick $^{\rm a}$ 





**a.** Poverty rates are calculated using measures of household equivalised disposable income, before and after housing costs are accounted for. Households with negative or zero disposable incomes and those with income from people who are self-employed are excluded from these calculations consistent with Bradbury et al. (2018).

Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

# Measuring available economic resources by accounting for housing costs

Income by itself can provide only a partial indicator of poverty. Housing costs are generally unavoidable and unalterable in the short to medium-term, which means that assessing income alone is an incomplete indicator of how well a household is able to support its way of living (Bradbury and Saunders 2022).

Housing is an unavoidable need, but costs vary considerably by location and type of housing, and because some people own their own home while others are paying rent or servicing mortgages. To the extent that housing costs are unavoidable, measuring income poverty using disposable income *after* excluding housing costs is likely to represent a better indication of the economic resources available to a household to spend on other basic economic needs, particularly for those on low incomes (box 4.1). But this approach does not account for differences in preferences for housing – low-income people who choose to spend more on housing are more likely to be classified as being in poverty.

As housing tends to take up a larger and increasing proportion of expenditure by lower -income households (PC 2021a), the rate of income poverty after excluding housing costs is higher than the poverty rate calculated before housing costs. In 2022, the income poverty rate after excluding housing costs was 14.4% – about one in seven Australians (table 4.1).<sup>39</sup> Bradbury and Saunders (2022) have found that, although before-housing-costs poverty decreased in the first years of the pandemic, after-housing-costs poverty did not decline as much, because of rising housing costs over this period.

Unless otherwise stated, all poverty rates in this chapter are calculated after taking into account housing costs. Equivalised household disposable income after housing costs is calculated by subtracting housing

<sup>&</sup>lt;sup>39</sup> The after-housing costs poverty rate in estimated using the HILDA survey is around 13.7% in 2021-22, which is about 0.7 percentage points less than the population-level estimates produced using the PLIDA.

costs, in the form of rent or mortgage repayments, from household disposable income. This value is then equivalised using the OECD-modified equivalence scale (PC 2024). People in households with equivalised household disposable income less than half of the national median are considered to be in poverty.

### Box 4.1 – Disposable income after excluding housing costs is a better measure of economic resources available to low-income households

Housing costs vary according to the type, size and location of the dwelling as well as how housing is financed. If there is an increase in the costs of low-quality rental housing, households have little option but to pay higher prices. This is reflected in the fact that two thirds of renting households in the bottom 40% of the income distribution spent more than 30% of their disposable income on housing (PC 2021a, p. 306). Poverty estimates that account for these differences will provide more information about the subsequent level of people's economic resources.

Homeowners who have paid off their mortgage typically have much lower housing costs, and so have more income available for other consumption than people servicing a mortgage or paying rent. In contrast, people who are paying off a mortgage or renting have much less disposable income remaining after paying these housing costs.

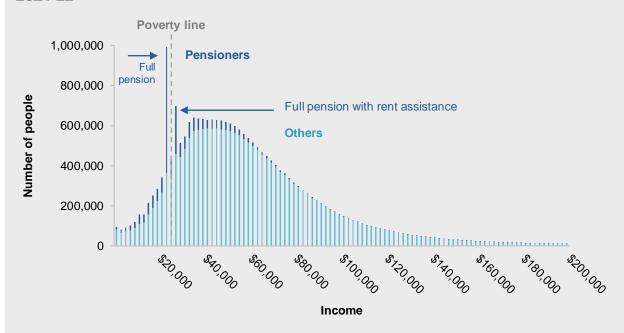
Moreover, renters may receive additional income from government provided rental assistance. When examining only income, this may make renters appear to have a lower risk of poverty. But since rents are typically higher than rental assistance, renters may have less income available to spend on other necessities to support their wellbeing, and be more at risk of poverty.

For example, before accounting for housing, many older Australians have incomes at around the poverty line (figure below). This is because the aged pension sits just below the poverty line, putting older people without other income in poverty. However, while those receiving additional rent assistance instead have income above the poverty line when housing costs are not accounted for (figure below), studies have found that after accounting for housing costs, poverty rates are almost 50% for the one in eight older Australians who rent their homes (Davidson et al. 2023, p. 26).

### Box 4.1 – Disposable income after excluding housing costs is a better measure of economic resources available to low-income households

#### Many older people rely on the aged pension and rent assistance

Distribution of equivalised disposable income by aged pension recipient status, 2021-22



Source: Commission estimates using linked ATO Personal Income Tax, DSS government payment, Census data and ABS derived demographics data in the Person Level Integrated Data Asset (PLIDA).

Measuring poverty after housing costs has several potential limitations.

- Including housing costs in poverty analysis can capture decisions and outcomes that are unrelated to poverty (Johnson and Webb 1992, pp. 287–288). Housing costs can represent both a consumption preference (some people choose to pay more for expensive homes) and an investment (paying down a mortgage is effectively a form of saving). However, the extent to which this is relevant for people earning low incomes is limited increasing house prices mean that home ownership is not a viable option for most low and many middle-income earners (PC 2021a).
- While excluding housing costs accounts for the effects of regional variation in housing costs on disposable income, it may be inconsistent to account for regional differences in housing costs but not other regional price differences (Payne and Samarage 2020, p. 17).

### 4.2 Who experiences poverty?

Not all people are equally at risk of poverty, with poverty rates among some groups of people much higher than others.

Administrative data, in combination with information from the 2021 Census, provides a rich source of information about the demographic and geographical spread of poverty across Australia. In this section, we

use the Person Level Integrated Data Asset (PLIDA) to identify groups at risk of poverty and pinpoint regions where poverty may be concentrated. The PLIDA dataset includes information about income reported through personal income tax returns as well as details about government payments. It includes Census data that provides information about self-reported housing costs, allowing the development of a near-population-level measure of poverty based on household equivalised income after housing costs (appendix D).

### **People at higher risk of poverty**

Using the after-housing costs poverty measure, poverty rates differ substantially across demographic groups (table 4.1). Personal characteristics that are associated with a higher risk of poverty include:

- age. People aged over 65 years many of whom are retirees have a relatively high poverty rate, though this income-based analysis does not account for the higher wealth levels that older people often possess.<sup>40</sup>
- **family type.** Single people face a higher risk of poverty, as do single-parent households. The high poverty rate for single-parent households also results in a higher poverty rate for children.
- **employment.** People who are unemployed or not in the labour force are more likely to be in poverty than those who are employed.
- education. Lower levels of education are associated with higher levels of poverty.
- **housing status.** Renters are much more likely to experience poverty than people with other home ownership arrangements.
- **migrant status.** People from a migrant background have a higher risk of poverty, particularly those who do not speak English at home.<sup>41</sup>
- **location.** Poverty rates are relatively high for people living in very remote Australia, though are relatively low for those living in remote Australia.<sup>42</sup>
- health. The risk of poverty is elevated for people with a disability and those with long-term health issues.
- **First Nations status.** People who identify as Aboriginal and Torres Strait Islanders have a higher poverty rate. However, as discussed below (figure 4.2), this is explained by differences in other factors such as employment, education and home ownership.

<sup>&</sup>lt;sup>40</sup> When looking at income alone, around 52% of people in the lowest income decile are aged 65 or over. This proportion halves when looking at combined measures of income and wealth (PC 2024, p. 40).

<sup>&</sup>lt;sup>41</sup> While some migrants arriving in Australia are highly skilled (PC 2016) and thus at low risk of poverty, other migrants may be at risk of poverty due to non-recognition of overseas qualifications, discrimination (Davidson et al. 2023, pp. 57–58) or their English-speaking ability (Islam and Parasnis 2016). Migrants from culturally and linguistically diverse backgrounds are particularly at risk of poverty.

<sup>&</sup>lt;sup>42</sup> This analysis does not account for the higher cost of goods in more remote areas. While no comprehensive data on these costs is available, it is estimated that basic food items cost 40% more in NT remote stores than district centre supermarkets (Northern Territory Government 2023). Poverty in remote and very remote Australia is likely to be higher once these costs are accounted for.

Table 4.1 – Poverty rates differ by demographic groups

Percent in poverty after housing costs<sup>a</sup>, by demographic groups, 2021-22

Characteristic	Group	Poverty rate	Group	Poverty rate
All Australians		14.4%		
	Under 15	16.6%	45 to 54 years	10.2%
	15 to 24 years	11.1%	55 to 64 years	12.2%
Age	25 to 34 years	9.4%	Over 65 years	25.2%
	35 to 44 years	11.6%		
Gender	Women	14.9%	Men	13.8%
	Couple	13.8%	Single parent	20.7%
Family type	Couple with dependents	12.0%	Other family type	9.4%
	Single person	24.3%		
Employment	Employed	6.8%	Not in the labour force	26.3%
(for people aged 25-64)	Unemployed	22.9%		
Education	Year 9 or less	22.4%	Diploma or Certificate	13.6%
(for people	Year 10 or 11	18.8%	Degree or higher	10.0%
aged 25+)	Year 12	15.7%		
Migrant status	Migrant background, speaks English at home	15.1%	Migrant background, does not speak English at home	18.0%
	Major cities	14.3%	Remote	12.1%
Location	Inner regional	14.9%	Very remote	15.6%
	Outer regional	14.2%		
	Renters	21.3%	Homeowners	13.3%
Housing status	Mortgage holders	10.2%		
	1 long-term health issue	15.4%	3 or more long-term health issues	23.5%
Health	2 long-term health issues	19.5%	Experiencing disability	20.0%
First Nations status <sup>b</sup>	Aboriginal and Torres Strait Islander people	18.4%		

**a.** The after-housing-costs poverty measure uses mortgage repayments or rental payments as recorded in the 2021 Census, which are linked to individual income data. **b.** The ABS identifies Aboriginal and Torres Strait Islander individuals in the PLIDA dataset using records from the Census, Centrelink, and death registrations. This approach may not identify all Aboriginal and Torres Strait Islander people; the Census offers the broadest coverage of the three but undercounts Aboriginal and Torres Strait Islander people (Williamson et al. 2021).

Source: Commission estimates using linked ATO Personal Income Tax, DSS government payment, Census data and ABS derived demographics data in the Person Level Integrated Data Asset (PLIDA)

### Which poverty risk factors are most important?

A person's risk of experiencing poverty is likely to be associated with multiple demographic factors. Regression analysis can be used to estimate an adjusted association between poverty risk and different demographic characteristics, effectively asking 'if we vary one characteristic while holding all other characteristics constant, how does this change poverty risk?'. This approach can aid in identifying the most important poverty risk factors.

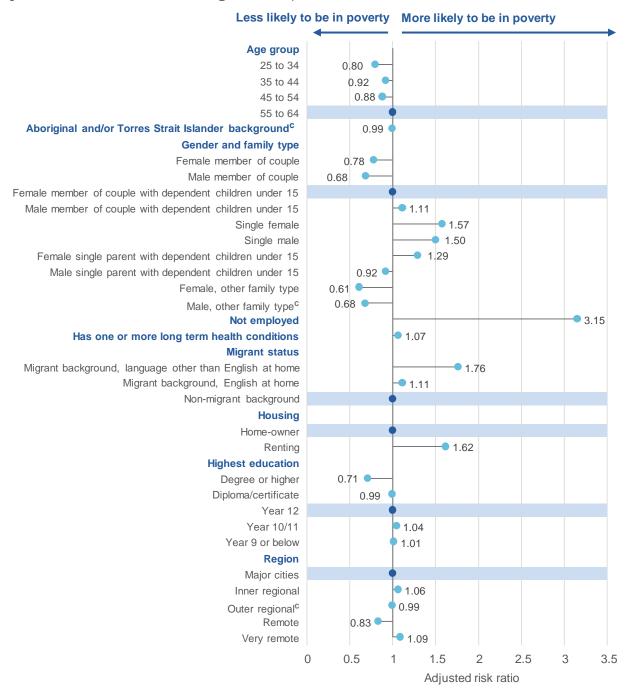
Adjusted risk ratios that show the relative risk of experiencing poverty for each characteristic, holding all else constant, are shown in figure 4.2. The risk factors that are more likely to be associated with poverty for those aged 25 to 64<sup>43</sup> are:

- **not being employed** (3.15 times the poverty risk of someone who is employed)
- being a migrant who does not speak English at home (1.8 times the poverty risk of a non-migrant)
- **being a single male or female without children** (1.5–1.6 times the poverty risk of a coupled female with dependent children)
- renting (1.6 times the poverty risk of non-renters)
- **having a low education level** (1.4–1.5 times the poverty risk of someone with a degree or higher qualification).

<sup>&</sup>lt;sup>43</sup> As risk factors may interact differently for children and older people, we omit them from this analysis. This does not detract from the fact that age is an important risk factor and there are high poverty rates among the elderly (table 4.1).

Figure 4.2 – Demographic factors associated with poverty risk<sup>a,b</sup>

Adjusted risk ratios for those aged 25-64, 2021-22



**a.** Each result is a relative risk ratio as compared to the reference group (the points in dark blue). Adjusted risk ratios are estimated using Poisson regression. **b.** The risk of poverty for those not employed is relative to those who are employed. For those with one or more long-term health conditions it is relative to those with no long-term health conditions. **c.** After adjusting for other factors, there is no statistically significant difference in poverty risk between people with an Aboriginal and/or Torres Strait Islander background and other Australians, between male and female people in 'other' family types and between people living in major cities and people living in outer regional areas.

Source: Commission estimates using linked ATO Personal Income Tax, DSS government payment, Census data and ABS derived demographics data in the Person Level Integrated Data Asset (PLIDA).

While Aboriginal and Torres Strait Islander people have a higher poverty rate than across Australia as a whole (table 4.1), after taking into account other factors, they do not have a higher likelihood of poverty than other Australians. This also suggests that if other Australians were to face similar barriers and challenges as many people of Aboriginal and Torres Strait Islander background, they would experience similar outcomes.<sup>44</sup>

### Place-based poverty: where is poverty highest?

### Poverty rates vary across Australia ...

Poverty, opportunity and disadvantage are not the same across Australia. Economic mobility varies by location (chapter 3; figure 3.7), and experiences of poverty also vary based on where someone lives.

Looking at income alone, some of the highest concentrations of poverty are in regional and remote areas. <sup>45</sup> The Northern Territory, <sup>46</sup> South Australia and Tasmania are particularly affected, although there are also pockets of relatively high poverty rates in the northeast of Brisbane, in northern NSW and along the coast between Melbourne and Sydney (figure 4.3). But not all regional and remote areas have high poverty rates. For instance, poverty is lower in regions with strong mining industry activity – such as the Pilbara in Western Australia and the Isaac, Mackay, and Whitsunday region in Queensland.

While metropolitan areas have lower poverty rates, on average, they also contain a mix of outcomes. Most areas within cities have poverty rates before accounting for housing costs of between 10% and 15%, close to the national average of 13.7%. Canberra and Darwin, as well as areas of Sydney and Brisbane, have poverty rates mostly below 10%. But there are still pockets of poverty within most cities. Sydney, Melbourne, Brisbane and Adelaide all contain localised pockets of areas with poverty above 15%.

<sup>&</sup>lt;sup>44</sup> Barriers beyond those we account for may also be relevant. Analyses of the wage gap faced by First Nations Australians (Birch and Marshall 2018) or differences in labour force attachment (Kalb et al. 2014) have been unable to fully explain differences between First Australians and other Australians. This suggests that factors not usually captured within models, for instance direct discrimination in the workplace (Booth et al. 2012), are also important to understanding the disadvantage faced by Aboriginal and Torres Strait Islander people.

<sup>&</sup>lt;sup>45</sup> Analysis was conducted on 'Statistical Area Level 3s' (SA3s), which generally have populations of 30,000 to 130,000 people (ABS 2021b).

<sup>&</sup>lt;sup>46</sup> Effects of poverty in the Northern Territory may be worsened by local factors such as a lack of employment opportunities and a lack of investment in remote communities (Markham 2023).

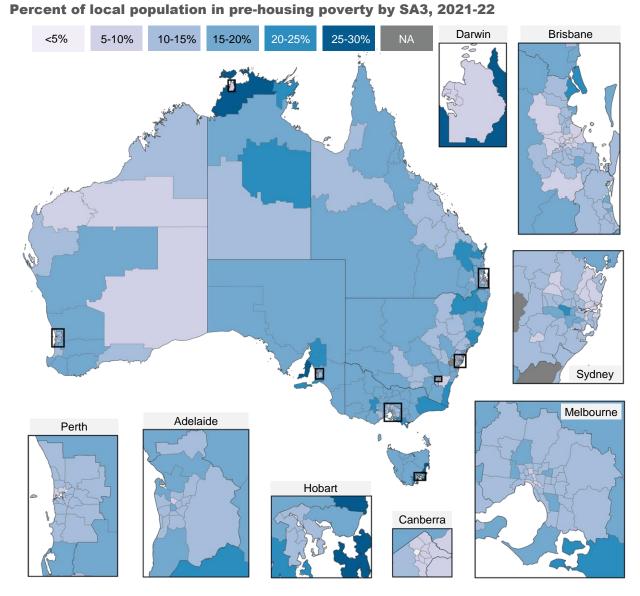


Figure 4.3 – Poverty rates vary substantially by geography<sup>a,b</sup>

**a.** Local poverty rates are calculated relative to the national poverty line. Further detail on this analysis is available in appendix D. **b.** This analysis does not account for differences in cost of living between regions. For instance, it is estimated that basic food items cost 40% more in NT remote stores than district centre supermarkets (Northern Territory Government 2023).

Source: Commission estimates using linked ATO Personal Income Tax, DSS government payment, Census data and ABS derived demographics data in the Person Level Integrated Data Asset (PLIDA).

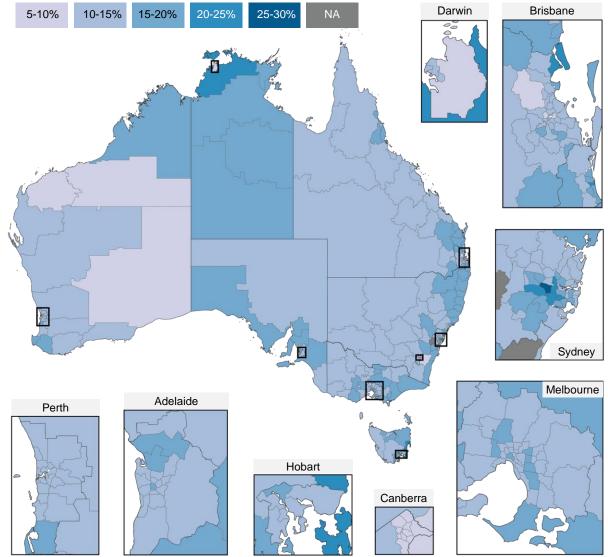
#### ... but are moderated by housing costs

Once housing costs are accounted for, there is less variance in poverty rates across different locations (figure 4.4). This is because areas with relatively high incomes frequently also have relatively high housing costs. Metropolitan areas, which typically have lower pre-housing poverty rates, often have higher poverty

rates once housing costs are accounted for. This was particularly the case in Sydney.<sup>47</sup> While this reflects Sydney's high housing costs in 2021-22, rising housing costs across most of the country (Owen 2023) are likely to put increasing financial strain on many Australians.

Figure 4.4 – After housing costs are accounted for, poverty is distributed more evenly across the  $country^{a,b}$ 





**a.** Local poverty rates are calculated relative to the national poverty line. Further detail on this analysis is available in appendix D. **b.** This analysis does not account for differences in cost of living between regions. For instance, it is estimated that basic food items cost 40% more in NT remote stores than district centre supermarkets (Northern Territory Government 2023).

Source: Commission estimates using linked ATO Personal Income Tax, DSS government payment, Census data and ABS derived demographics data in the Person Level Integrated Data Asset (PLIDA).

<sup>&</sup>lt;sup>47</sup> Of the 20 SA3 areas with the largest increase between pre- and post-housing poverty rates, 16 were in Greater Sydney.

Conversely, regional and remote areas that have high pre-housing poverty rates typically have less extreme rates of post-housing poverty. The incorporation of housing costs also results in lower poverty rates in local areas where the median age is higher.<sup>48</sup> Because the pension sits just below the pre-housing costs poverty line (box 4.1), older Australians are more likely to be in poverty if their housing (and other wealth) is not accounted for. Accounting for relatively high home ownership rates among the elderly leads to lower poverty rates in these areas.

Other costs besides housing impact people's economic security and their ability to meet basic needs. While differences in housing costs somewhat moderate poverty rates across Australia, regional price differences for groceries, energy and fuel, health and other services, and digital and telecommunications and other infrastructure may exacerbate inequality. There is consistent evidence that remote communities pay more for basic goods, <sup>49</sup> but the Commission was unable to adjust its poverty analysis for other costs of living due to a lack of comprehensive data on costs by local area. This is likely to understate the difficulties experienced by those living in remote Australia in meeting their basic needs.

### 4.3 How persistent is poverty?

Poverty and disadvantage are associated with a range of social and economic costs that are borne by the people, families and communities that experience them, including lower quality of life, difficulties with social cohesion and disaffection, and lower levels of social and economic participation (McLachlan et al. 2013). Persistent poverty increases these costs across the board, meaning that how long poverty lasts matters just as much as how many people it affects. In addition to the costs associated with ongoing disadvantage, the prospects of exiting poverty diminish as time spent in poverty increases.

Measuring poverty at a single point in time (sections 4.1 and 4.2) provides only a partial picture of people's experiences of poverty, because it does not distinguish between those who experience chronic poverty and those who transition into and then out of poverty. That is, it does not provide information about who is likely to remain in poverty over several years, and what may be keeping them there. Examining these dynamics allows a consideration of what people who experience persistent poverty are likely to go without, and what factors increase the time that people are likely to spend in poverty.

### A significant number of Australians experience persistent poverty

Poverty is often an impermanent state – over 60% of poverty spells observed in more than twenty years of HILDA data last less than two years (figure 4.8). But a significant proportion of Australians remain either in or around poverty over prolonged periods of time. The prevalence of persistent poverty can be measured by considering the amount of time people spend in poverty within a window of time. Using a similar approach to Vera-Toscano and Wilkins (2022), we find that:

 Over the five years between 2018 and 2022, the majority of the population do not experience poverty, but nearly one in three people experience at least one year of poverty, with 16% experiencing poverty in two or more of these years (table 4.2).

<sup>&</sup>lt;sup>48</sup> While the five areas with the largest decrease between pre- and post-housing poverty rates were all regional or remote, they also all had older populations. Four of the five SA3s had median ages of at least 50, compared to the national median of 38.5 (ABS 2023f).

<sup>&</sup>lt;sup>49</sup> This includes estimates of 39% higher prices for remote Aboriginal communities (NIAA 2020), 9–15% higher in the Kimberley and Pilbara than Perth (WA DPIRD 2023, p. 9) and 40% higher in remote parts of the Northern Territory (Northern Territory Government 2023).

Around one in ten people experienced poverty in three or more years – 'persistent poverty' – over this
time, despite overall poverty rates falling in the early stages of the pandemic before increasing in 2021
and 2022.

Table 4.2 – Rates of persistent poverty by demographic group<sup>a</sup>

Percent of people experiencing poverty in five-year window, 2018 to 2022

	1 year of poverty	2 years of poverty	3 or more years of poverty
All Australians	14.5	5.7	10.0
Gender			
Female	14.7	6.0	11.2
Male	14.2	5.4	8.6
Age			
15 to 24	19.0	7.2	12.8
25 to 34	15.5	7.2	8.1
35 to 44	9.9	3.1	7.6
45 to 54	8.4	4.2	7.3
55 to 64	12.0	4.0	10.0
65 plus	20.4	7.9	13.4
Family type			
Couple	15.9	4.7	7.9
Couple with dependent children	9.9	3.1	4.1
Couple with non-dependent children	12.2	3.1	3.3
Single person	19.1	10.3	19.2
Single parent with dependent children	12.6	12.8	33.5
Single parent with non-dependent children	14.5	7.6	12.6
Other family	20.7	6.1	19.8
Employment			
Employed	11.8	4.5	4.2
No one in house employed	20.9	8.6	23.7
Housing tenure			
Rent (or pay board)	18.7	9.9	24.4
Own/currently paying off mortgage	12.5	4.1	4.2
Live here rent free/Life tenure	21.9	5.5	10.8
Region			
Major city	14.0	5.5	9.5
Inner regional	15.6	5.5	10.6
Outer regional	15.4	8.1	11.5
Remote/very remote	14.2	3.0	14.9

**a.** People are considered as being in poverty if they are in a household with less than half median household equivalised income after housing costs. People's membership of different demographic groups may change over the five-year window between 2018 and 2022. Where this is the case, their initial status in 2018 is used.

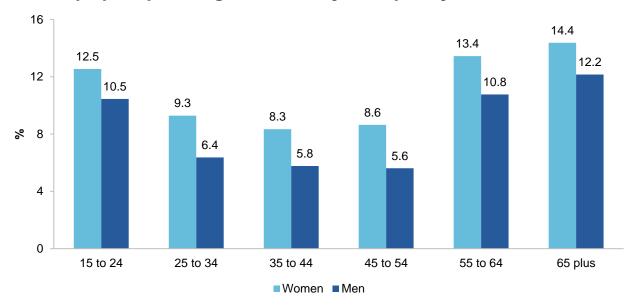
Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

Women experience more persistent poverty than men. This trend appears consistent over all age groups, with the greatest gender differences occurring between the ages of 35 and 54 (figure 4.5). This likely reflects the earlier ages at which women leave home, gender-related wage gaps and the higher proportion of women who are single parents (PC 2024; Vera-Toscano and Wilkins 2019). Single parents with dependent children

experience the highest rates of poverty persistence, with one in three of these families experiencing three or more years of poverty between 2018 and 2022 (table 4.2). This places children at increased risk of poverty themselves when they reach adulthood.

Figure 4.5 – Women experience more persistent poverty than men<sup>a</sup>

Percent of people experiencing three or more years in poverty between 2018 and 2022



**a.** Poverty line is defined as half median household equivalised income after housing costs. People's membership of age groups may change over the five-year window between 2018 and 2022. Where this is the case, their initial status in 2018 is used.

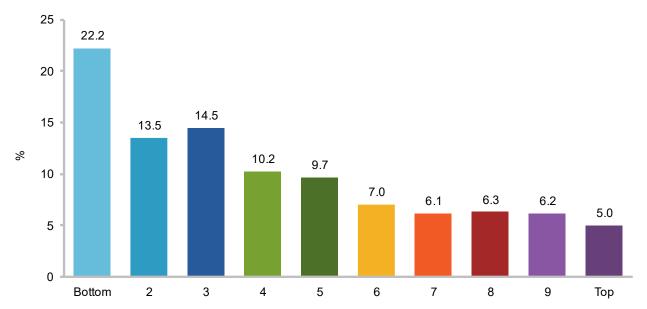
Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

### Persistent poverty is related to where people live

Persistent poverty rates vary by region, and there is a much higher share of people experiencing three or more years of poverty between 2018 and 2022 in remote and very remote Australia, compared to in major cities (table 4.2). This suggests that where people are born, live and work can confer economic disadvantage. This is supported by the concentration of persistent poverty in areas of disadvantage. People living in the most disadvantaged areas – as indicated by the bottom SEIFA quintile – are more than twice as likely to experience persistent poverty than the rest of the population (figure 4.6).

Figure 4.6 - Persistent poverty is concentrated in areas with higher disadvantage

Percent of people experiencing three or more years in poverty between 2018 and 2022, by SEIFA decile $^{a,b}$ 



a. SEIFA decile refers to the ABS' socioeconomic index for areas measure. The index used is the index of relative socioeconomic advantage/disadvantage which classifies areas according to their relative advantage and disadvantage.
b. People may relocate in the period between 2018 and 2022. They are all classified by the SEIFA decile in 2018.

Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

The association between location and poverty may reflect limited opportunities to gain education and to build a career in some regional areas – young people living in city areas are more likely to be engaged in full-time work or study than those who live in regional areas (Lamb et al. 2020). Poverty rates among people who have relocated from regional and remote areas are typically lower than those who do not move region (table 4.3).

Table 4.3 – Poverty rates differ by people who move region

Percent of people in poverty by current and previous region<sup>a</sup>

		Current	region of residen	ce	
Previous region of residence	Major city	Inner regional	Outer regional	Remote	Very remote
Major city	12.7%	13.2%	13.4%	6.9%	5.4%
Inner regional	10.1%	17.2%	14.1%	8.9%	8.1%
Outer regional	9.3%	13.8%	17.1%	8.4%	6.4%
Remote	9.0%	12.9%	12.1%	15.5%	8.8%
Very remote	10.4%	12.6%	12.7%	11.5%	23.1%

**a.** Previous region refers to the region in which people lived in 2016. Current region is the region in which people lived in 2021.

Source: Commission estimates using linked ATO Personal Income Tax, DSS government payment, Census data and ABS derived demographics data in the Person Level Integrated Data Asset (PLIDA).

### People in persistent poverty are likely to go without

Relying on income alone to identify people as having experienced poverty does not identify all people who are unable to meet their basic needs with their current level of resources. While people experiencing poverty have difficulty meeting basic needs, persistent poverty forces people to live on low incomes for longer, increasing the likelihood that they will go without essential items or services. This is referred to as 'material deprivation'. Material deprivation exists 'when people do not have and cannot afford to buy items or undertake activities that are widely regarded in society as things that everyone should have' (Saunders and Wilkins, in Wilkins 2016, p. 83).

People who experience persistent poverty are more likely to go without things that are regarded as essential by the majority of the population because they are unable to afford them (table 4.4)<sup>50</sup>. This leaves them exposed when things go wrong.

- Around 14% of people who have experienced persistent poverty are likely to go without dental treatment because they can't afford it, leaving them exposed to a range of other health conditions, as well as affecting their self-esteem and ability to participate in employment (WHO 2022).
- People in persistent poverty are also more likely to go without medical treatment because they cannot
  afford it. This is likely to have ongoing consequences for their health and has the potential to lead to
  more persistent poverty: poor health from any disease increases the risk of other health problems and
  has flow-on effects for people's social and economic participation (Manderson and Warren 2016).
- People in persistent poverty are also more than two times more likely than people experiencing transient
  poverty to forego heating when it is cold. This leaves them more susceptible to both cardiovascular
  disease and mental illness, such as depression or anxiety (Bentley et al. 2023). They are also potentially
  forced to choose between energy and food consumption, and may be exposed to poverty traps that
  require a reliance on payday loans to avoid energy disconnection (Fry et al. 2023).

The increase in material deprivation associated with poverty and persistent poverty is likely to have a compounding effect, with disadvantage leaving people exposed to further disadvantage (McLachlan et al. 2013). For example, people experiencing persistent poverty are also more likely to be excluded from social interactions – they are less likely to be able to afford to get together with friends or relatives for a meal and to have access to the internet at home. In turn, social exclusion increases susceptibility to mental illness and is associated with lower economic participation (PC 2020a). This compounding effect means that people experiencing poverty are at an increased risk of entering and remaining in a state of persistent poverty.

<sup>&</sup>lt;sup>50</sup> Key to this is identifying what the community regards as essential. HILDA includes questions that identify whether survey participants regard a number of items as being necessary or essential. Using these questions, there are 23 items that are considered as essential by the majority of the population (table 4.4). As well as asking if items are essential, the survey also asks about whether they possess or are able to access the services and items that are deemed necessary, and if not, if this is because they cannot afford them, or if it is due to personal choice.

Table 4.4 – People in persistent poverty are likely to go without<sup>a,b</sup>
Rates of item-specific material deprivation by poverty status, 2022

	Not in p	poverty	In po	verty	In persistent	poverty
Mean deprivation score	0.4	1	1.3	7	1.7	6
Essential item	Do have	Don't have & can't afford	Do have	Don't have & can't	:	Don't have & can't afford
Access to the internet at home	97.8%	0.4%	93.2%	1.9%	88.7%	3.8%
New school clothes for school-age children every year <sup>C</sup>	66.8%	0.8%	67.3%	2.1%	61.6%	1.4%
A yearly dental check-up for each child <sup>C</sup>	87.5%	0.4%	88.9%	0.8%	89.8%	0.3%
A hobby or a regular leisure activity for children	86.0%	0.8%	75.5%	2.6%	73.8%	2.0%
A separate bed for each child <sup>C</sup>	98.2%	0.1%	94.4%	0.9%	92.2%	0.5%
Children being able to participate in school trips and school events that cost money <sup>C</sup>	98.9%	0.1%	94.5%	0.5%	92.5%	0.3%
Dental treatment when needed	95.3%	3.6%	87.8%	9.8%	83.2%	14.0%
Furniture in reasonable condition	99.3%	0.2%	98.5%	1.3%	97.7%	1.9%
Getting together with friends or relatives for a drink or meal at least once a month	87.7%	2.4%	79.2%	5.2%	75.3%	8.0%
When it is cold, able to keep at least one room of the house adequately warm	99.0%	0.5%	96.9%	2.5%	94.8%	4.1%
Home contents insurance	80.2%	5.8%	53.5%	22.8%	45.5%	29.8%
A telephone (landline or mobile)	98.6%	0.3%	97.6%	0.8%	95.6%	2.1%
Medical treatment when needed	98.6%	0.7%	96.7%	2.6%	94.7%	4.4%
A motor vehicle	97.1%	0.8%	82.6%	6.6%	74.3%	10.9%
Comprehensive motor vehicle insurance <sup>d</sup>	89.1%	3.3%	64.8%	11.7%	54.5%	13.1%
Medicines when prescribed by a doctor	99.4%	0.3%	98.9%	0.5%	98.5%	1.0%
A roof and gutters that do not leak	93.6%	1.5%	91.2%	2.8%	88.2%	2.7%
At least \$500 in savings for an emergency	93.0%	5.8%	73.2%	23.4%	68.8%	27.5%
A decent and secure home	99.4%	0.2%	98.1%	1.5%	97.0%	1.4%
A home with doors and windows that are secure	98.7%	0.4%	97.4%	1.1%	96.6%	1.4%
A substantial meal at least once a day	99.7%	0.1%	98.7%	1.1%	98.8%	0.7%
Warm clothes and bedding, if it is cold	99.7%	0.1%	99.7%	0.3%	99.7%	0.3%
A washing machine	99.3%	0.2%	98.1%	0.5%	97.6%	1.0%

**a.** Poverty is measured after housing costs. 'In poverty' also includes those in persistent poverty. People are considered to be in persistent poverty if they are in income poverty in three of the five years between 2018 and 2022.

Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

**b.** Material deprivation is defined as being when a household does not have an item because they 'can't afford' it. Mean deprivation score measures the number of items that a household goes without because they are unable to afford.

**c.** Households with children aged under 15. **d.** Households that have a motor vehicle.

### Financial stress is closely related to material deprivation

Material deprivation and poverty are both closely related to a broader concept of financial stress, which can be thought of as a difficulty that an individual or household may have in meeting basic financial commitments due to a shortage of money (Nicol 2010).<sup>51</sup> The prevalence of financial stress is much greater than material deprivation and poverty, with around 30% of households estimated to be in some form of financial stress (Phillips 2022). Single parents, younger households, households that include people with a disability or long-term health condition, renter households and households headed by an unemployed person are more likely to experience financial stress.

Financial stress is particularly high for people relying on social security or transfer payments. Phillips (2022) finds that:

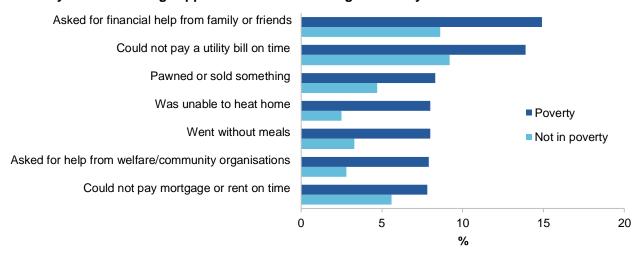
- around 80% of people receiving unemployment benefits (JobSeeker) and just under 80% of people receiving Disability Support Payment, or Carers and Parenting Payment Single are under some form of financial stress.
- lower income households have much higher rates of stress but there is considerable variation due to the impact of other factors such as wealth, disability status and education level. However, households with less than \$2,000 in net wealth almost invariably had high rates of expected financial stress.

Not surprisingly, financial stress is higher among people identified as being in poverty. In looking at seven different financial stress indicators in the HILDA survey, Bray (2024) finds that people in poverty were more likely to report being unable to heat their home, seek the help of a welfare agency or miss meals (figure 4.7).

Figure 4.7 – Financial stress is related but not exclusive to poverty<sup>a</sup>

Percent of people in financial stress by poverty status, 2022

#### Did any of the following happen because of a shortage of money:



**a.** People in poverty are defined as having income less than half median equivalised household disposable income. Bray's (2024) analysis does not take into account housing costs before determining poverty status.

Source: Bray (2024) using Household, Income and Labour Dynamics in Australia survey, release 22.

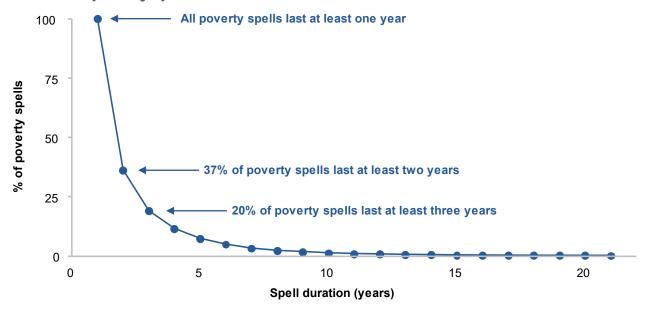
<sup>&</sup>lt;sup>51</sup> Financial stress is not defined by people's position in the income distribution (as with poverty), but other difficulties that people may face due to a shortage of money. This includes whether they have difficulty meeting different obligations, such as paying bills, rent or mortgages, or whether people went without meals or asked for financial help from friends or family (Bray 2024).

### Who remains in poverty?

Poverty is a relatively common experience, but most people spend a relatively short time in poverty. While just under one in three Australians may have spent some time in poverty between 2018-19 and 2021-22, the majority of these poverty 'spells' were one year or less. Of the 33,000 distinct 'spells' of poverty<sup>52</sup> identified over the 22 years of the HILDA survey, around 17,000 lasted one year or less, while nearly 80% of spells lasted less than three years (figure 4.8).

However, while most poverty experiences are relatively short, a significant number last for a long time – after five years more than 8% of poverty spells are continuing. Average spell length increases with age, with women having a slightly longer (2.07 years) observed average spell length than men (1.93 years). People who have previously experienced poverty are around 2.5 times more likely to enter poverty than those who have not.

Figure 4.8 – Most poverty spells are relatively short, but some last for several years Percent of spells by spell duration



Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

<sup>&</sup>lt;sup>52</sup> Poverty spell length is defined the number of consecutive years in which household equivalised disposable income was less than 50% of the median for that year.

Survival analysis<sup>53</sup> suggests that longer periods of poverty are harder to exit, and that people who do exit poverty are more likely to re-enter. This varies across different demographic groups (figure 4.9); in particular:

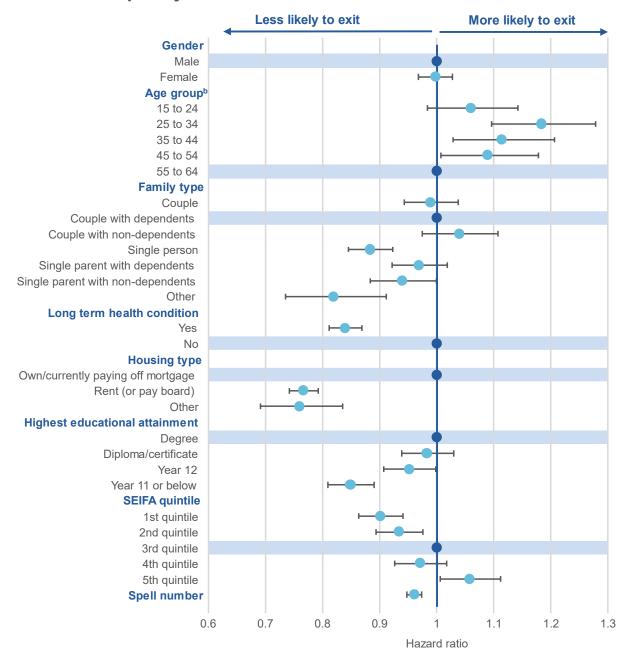
- people under the age of 45 are more likely to exit poverty than those over the age of 45. This increases
  over time, as shown by the time varying covariates in appendix D
- homeowners experiencing poverty are 1.3 times more likely to exit a poverty spell than people who rent
- people with lower levels of education (year 11 or below) are around 10% less likely to exit a spell of poverty than people who have completed year 12
- people with long-term health conditions are more likely to remain in poverty for longer periods of time
- people who live in disadvantaged neighbourhoods are also less likely to exit poverty, even after other characteristics are considered.

While single parents have a higher incidence of persistent poverty, the analysis suggests that single parent status does not restrict their likelihood of exiting a poverty spell – suggesting that single parents may exit poverty but are likely to re-enter a state of poverty again in future. The experience of multiple spells of poverty makes it less likely that people will make an exit from poverty, with the probability of exit diminishing with each poverty spell.

<sup>&</sup>lt;sup>53</sup> Survival analysis is a statistical approach used to examine the time taken until an event occurs, that allows use of incomplete or 'censored' spells of poverty – where it not known when a spell will end or when it began. These methods can be used to examine factors associated with exit from poverty, to get a better picture of who is likely to remain in prolonged poverty, and who has better prospects for exiting poverty status. The model used in this analysis is a proportional hazards model, allowing for time-varying covariates. Further details about the model specification and results can be found in appendix D.

Figure 4.9 – What affects people's likelihood of exiting poverty?<sup>a</sup>

Hazard ratios of poverty exit<sup>b,c</sup>



a. Dark blue dots indicate 'reference' category against which the hazard rate for other categories is to be compared.
b. Hazard ratios for age groups are not constant over time, with hazards for all age groups increasing with spell length relative to the reference category for people aged 55 to 64. Time varying coefficients are included in appendix D. c. Error bars indicate 95% confidence intervals.

Source: Commission estimates using Household, Income and Labour Dynamics in Australia survey, release 22.

### **Poverty can persist across generations**

Poverty can affect people at different times in their lives and span generations, with people who experience poverty during childhood more likely to be poor as adults (Nolan 2024).

Using HILDA data, Vera-Toscano and Wilkins (2020) found that the experience of poverty as a child is associated with an increased likelihood of poverty as an adult. In particular, people aged between 26 and 32 who grew up in a 'frequently poor' household were more than three times as likely to experience poverty as adults, compared to those who were never poor as children.<sup>54</sup> Additionally, Parolin et al. (2023, p. 29) – also using HILDA data – estimated that people who experience all of their childhood in poverty will experience an additional 21% of their early adulthood in poverty. Such an outcome indicates a lack of opportunity available for these people to escape poverty and improve their outcomes relative to their parents.

The experience of poverty as a young adult is associated with an increased risk of poverty in adulthood. People who have low income – defined as being less than half median disposable income – between the ages of 15 and 17 are more than 30% more likely to have low incomes when they are between the ages of 25 and 32 (table 4.5). This increased likelihood of poverty remains after the effects of tax and transfers, which reduce differences in income.

### Table 4.5 – People experiencing low incomes as young adults are more likely to have low incomes when adults<sup>a</sup>

Percent of people with low income between 2018 and 2020, by parental income at ages 15–17

	Proportion with low income as adults
Low income families between ages 15 and 17	21.7%
Higher income families between ages 15 and 17	16.4%

**a.** Income is measured after tax (disposable income), with low income defined as being less than half median disposable income. This analysis uses linked father-son data to ensure best comparability. People come from low-income families if parental income is less than half median disposable income for any of the years when they are between the ages of 15 and 17.

Source: Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife-Family) dataset.

The intergenerational persistence of poverty is caused by a number of factors. For example, households experiencing poverty have fewer resources to invest in their child's education, leading to poorer skills and labour market outcomes, which makes them more exposed to poverty as adults (Vera-Toscano and Wilkins 2020). Similarly, Parolin et al. (2023, pp. 36–37) found the experience of childhood poverty adversely affects a person's labour market outcomes, which increases the likelihood of experiencing poverty as an adult. They also found that a child's family background – such as their parent's education and employment – had the biggest effect on the persistence of poverty. However, these factors were somewhat mitigated by Australia's tax and transfer system, which plays a significant role in reducing the extent of poverty persistence.

#### Reliance on government support payments can persist across generations

The transmission of disadvantage from parents to children may be reflected in the receipt of government support payments. Cobb-Clark et al. (2022) found that young adults are 1.8 times more likely to receive social assistance if their parents have a history of receiving social assistance.

<sup>&</sup>lt;sup>54</sup> Around 14.7% of people who were frequently poor as children were in poverty as adults aged 26-32, compared to just under 5% of those who were never poor.

Similarly, the Commission finds that children who grew up in a family that received government support payments are twice as likely to receive such payments as adults, compared with children who grew up in a family that never received any type of government support payments (table 4.6).

### Table 4.6 – People who grew up in a family receiving government support payments are more likely to be recipients of such payments as an adult<sup>a,b</sup>

Rate of government support payment receipt

	Person received government support payments	Person did not receive government support payments
	(as an adult)	(as an adult)
Family received government support payments (as a child)	33.1%	66.9%
Family did not receive government support payments (as a child)	16.3%	83.7%

a. Government support payments include the Disability Support Pension, unemployment payments and carer payments.
b. Whether a person's family received government support payments when they were a child is measured when the child was between 9 and 15 years of age and whether a person received government support payments as an adult is measured when they are between 20 and 25 years old.

Source: Commission estimates using the preliminary version of the ATO Longitudinal Information Files Family (ALife-Family) dataset.

This level of persistence in the receipt of government support payments across generations is relatively low compared to other countries. For example, women in the US are 2.8 times more likely to receive government support payments if their mothers received such payments, and people in Sweden are 2.5 times more likely to receive government support payments if their families received such payments (Page 2004; Stenberg 2000).

The relatively low persistence in the receipt of any type of government support payment *overall* reflects the high intergenerational income mobility that Australians experience, and the fact that some payments – such as the Disability Support Pension – are received (in a tapered form) up to middle income levels. However, there is a much higher level of persistence for certain types of government support payments.

Children who, while teenagers, had parents who received unemployment benefits were 1.7 times more likely to receive JobSeeker payments than those who did not. This suggests poor labour market outcomes of parents are to some extent passed on to their children, potentially reflecting fewer resources to invest in the child's education and human capital (section 2.2).

Parental disability is associated with receipt of disability and carer payments among their children. Young people are 3.1 times more likely to be receiving disability support or carer payments if their parents received either of these payments, compared with those whose parents had no history of receiving any such payments. This is qualitatively consistent with that of Cobb-Clark et al. (2022) who found parental disability is 'strongly linked to a broad spectrum of adult disadvantage' for their children. This may come about due to a number of mechanisms, including:

- parents sharing a disability with their children
- children needing to care for their parent
- parents with disability may not be able to invest as much in their children's human capital leading to higher receipt of unemployment payments (Cobb-Clark et al. 2022, p. 26).

Importantly, this highlights the broad nature of parental disadvantage as one form of disadvantage can lead to other forms of disadvantage being passed on to their children (Cobb-Clark et al. 2022, p. 27).

### References

ABS (Australian Bureau of Statistics) 2021a, Remoteness Areas (National) (UR) by State/Territory (UR) and Age (AGEP) [Census TableBuilder].

---- 2021b, Statistical Area Level 3,

https://www.abs.gov.au/statistics/standards/australian-statistical-geography-standard-asgs-edition-3/jul2021-jun2026/main-structure-and-greater-capital-city-statistical-areas/statistical-area-level-3 (accessed 19 June 2024).

—— 2021c, Work-Related Training and Adult Learning, Australia [TableBuilder],

https://www.abs.gov.au/statistics/people/education/work-related-training-and-adult-learning-australia/latest-release (accessed 18 June 2024).

—— 2022, How Australians Use Their Time, https://www.abs.gov.au/statistics/people/people-andcommunities/how-australians-use-their-time/latest-release (accessed 4 April 2024).

—— 2023a, Education and Work, Australia, https://www.abs.gov.au/statistics/people/education/education-and-work-australia/latest-release (accessed 6 April 2024).

—— 2023b, Health conditions prevalence, https://www.abs.gov.au/statistics/health/health-conditions-andrisks/health-conditions-prevalence/latest-release (accessed 31 May 2024).

—— 2023c, *Job mobility, February 2023*, https://www.abs.gov.au/statistics/labour/jobs/job-mobility/latest-release (accessed 31 May 2024).

— 2023d, Labour Force Status of Families, https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-status-families/latest-release (accessed 4 April 2024).

—— 2023e, Marriages and Divorces, Australia, 2022, https://www.abs.gov.au/statistics/people/people-and-communities/marriages-and-divorces-australia/latest-release (accessed 20 June 2024).

— 2023f, *Population Projections, Australia*, https://www.abs.gov.au/statistics/people/population/population-projections-australia/2022-base-2071 (accessed 19 June 2024).

ACARA (Australian Curriculum Assessment and Reporting Authority) 2010, National Report on Schooling in Australia 2010.

—— 2023, National Report on Schooling in Australia: Student attendance.

Acciari, P, Polo, A and Violante, GL 2022, 'And Yet It Moves: Intergenerational Mobility in Italy', *American Economic Journal: Applied Economics*, vol. 14, no. 3, pp. 118–163.

AIHW (Australian Institute of Health and Welfare) 2022, Health across socioeconomic groups,

https://www.aihw.gov.au/reports/australias-health/health-across-socioeconomic-groups (accessed 20 June 2024).

Ananyev, M, Payne, A, Wilkins, R and Zilio, F 2023, Prevalence of, and Recovery from, Negative Earnings Shocks, Melbourne Institute: Applied Economic & Social Research. Andrews, D and Leigh, A 2009, 'More inequality, less social mobility', *Applied Economics Letters*, vol. 16, no. 15, pp. 1489–1492

Australian Government 2023, Women's Budget Statement.

Bahar, E, Bradshaw, N, Deutscher, N and Montaigne, M 2023, Children and the Gender Earnings Gap: Evidence for Australia, Treasury Working Paper.

Barón, JD, Cobb-Clark, DA and Erkal, N 2015, 'Welfare receipt and the intergenerational transmission of work-welfare norms', *Southern Economic Journal*, vol. 82, no. 1, pp. 208–234.

Baum, S and Gleeson, B 2010, 'Space and Place: Social Exclusion in Australia's Suburban Heartlands', Routledge, *Urban Policy and Research*, vol. 28, no. 2, pp. 135–159.

Baxter, J, Qu, L, Weston, R, Moloney, L and Hayes, A 2012, 'Experiences and effects of life events', *Family Matters*, no. 90.

Becker, GS and Tomes, N 1979, 'An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility', University of Chicago Press, *Journal of Political Economy*, vol. 87, no. 6, pp. 1153–1189.

Bentley, R, Daniel, L, Li, Y, Baker, E and Li, A 2023, 'The effect of energy poverty on mental health, cardiovascular disease and respiratory health: a longitudinal analysis', *The Lancet Regional Health–Western Pacific*, vol. 35, pp. 1–23.

Berman, Y 2022, 'The long-run evolution of absolute intergenerational mobility', *American Economic Journal: Applied Economics*, vol. 14, no. 3, pp. 61–83.

Birch, E and Marshall, D 2018, 'Revisiting the earned income gap for Indigenous and non-Indigenous Australian workers: Evidence from a selection bias corrected model', *Journal of Industrial Relations*, vol. 60, no. 1, pp. 3–29.

Booth, AL, Leigh, A and Varganova, E 2012, 'Does ethnic discrimination vary across minority groups? Evidence from a field experiment', *Oxford Bulletin of Economics and Statistics*, vol. 74, no. 4, pp. 547–573.

Bradbury, B and Saunders, P 2022, 'Housing costs and poverty: Analysing recent Australian trends', *Journal of Housing and the Built Environment*, no. 37, pp. 1073–1091.

——, —— and Wong, M 2018, Poverty in Australia 2018, Research Methodology.

Bratberg, E, Davis, J, Mazumder, B, Nybom, M, Schnitzlein, DD and Vaage, K 2017, 'A comparison of intergenerational mobility curves in Germany, Norway, Sweden, and the US', *The Scandinavian Journal of Economics*, vol. 119, no. 1, pp. 72–101.

Bray, JR 2024, 'Relative income poverty: levels, trends, context and issues HILDA Wave 22'.

Breunig, R and Sainsbury, T 2023, 'Too much of a good thing? Australian cash transfer replacement rates during the pandemic', *Australian Economic Review*, vol. 56, no. 1, pp. 70–90.

Britto, DGC, Fonseca, A de A, Pinotti, P, Sampaio, B and Warwar, L 2022, *Intergenerational mobility in the land of inequality*, CESifo Working Paper No. 10004.

Broadway, B, Kalb, G and Maheswaran, D 2022, 'From Partnered to Single: Financial Security Over a Lifetime', *Melbourne Institute: Applied Economic and Social Research*, no. 5.

Buddelmeyer, H and Verick, S 2008, 'Understanding the Drivers of Poverty Dynamics in Australian Households\*', *Economic Record*, vol. 84, no. 266, pp. 310–321.

Bui, AT, Dungey, M, Nguyen, CV and Pham, TP 2014, 'The impact of natural disasters on household income, expenditure, poverty and inequality: evidence from Vietnam', *Applied Economics*, vol. 46, no. 15, pp. 1751–1766.

Cassidy, N, Chan, I, Gao, A and Penrose, G 2020, 'Long-term unemployment in Australia', *RBA Bulletin, December*, pp. 45–56.

Chesters, J 2015, 'Within-generation social mobility in Australia: The effect of returning to education on occupational status and earnings', SAGE Publications Ltd, *Journal of Sociology*, vol. 51, no. 2, pp. 385–400.

——, Cuervo, H and Fu, J 2020, 'Re-engagement with education over the life course: motivations and barriers', Routledge, *International Journal of Lifelong Education*, vol. 39, no. 2, pp. 154–167.

Chetty, R, Grusky, D, Hell, M, Hendren, N, Manduca, R and Narang, J 2017, 'The fading American dream: Trends in absolute income mobility since 1940', American Association for the Advancement of Science, *Science*, vol. 356, no. 6336, pp. 398–406.

——, Hendren, N, Kline, P and Saez, E 2014, 'Where is the land of opportunity? The geography of intergenerational mobility in the United States', *The Quarterly Journal of Economics*, vol. 129, no. 4, pp. 1553–1623.

Chuard, P and Grassi, V 2020, *Switzer-land of opportunity: Intergenerational income mobility in the land of vocational education*, Economics Working Paper Series 2011, University of St. Gallen, School of Economics and Political Science.

Cigdem, M and Whelan, S 2017, 'Intergenerational transfers and housing tenure – Australian evidence', Routledge, *International Journal of Housing Policy*, vol. 17, no. 2, pp. 227–248.

CLC (Central Land Council) 2023, Submission to the Senate Standing Committee on Community Affairs, Senate Standing Committee on Community Affairs Inquiry into the Extent and Nature of Poverty in Australia.

Cobb-Clark, DA, Dahmann, SC, Salamanca, N and Zhu, A 2022, 'Intergenerational disadvantage: Learning about equal opportunity from social assistance receipt', *Labour Economics*, vol. 79, p. 102276.

Coelli, M and Tabasso, D 2019, 'Where Are the Returns to Lifelong Learning?', *Empirical Economics*, vol. 57, no. 1, pp. 205–237.

Connolly, M, Corak, M and Haeck, C 2019a, 'Intergenerational Mobility Between and Within Canada and the United States', The University of Chicago Press, *Journal of Labor Economics*, vol. 37, no. S2, pp. S595–S641.

——, Haeck, C and Lapierre, D 2019b, Social mobility trends in Canada: Going up the Great Gatsby Curve, Working Paper, 19–03, Research Group on Human Capital - Working Paper Series.

Corak, M 2013, 'Income Inequality, Equality of Opportunity, and Intergenerational Mobility', *Journal of Economic Perspectives*, vol. 27, no. 3, pp. 79–102.

Davidson, P, Bradbury, B and Wong 2023, *Poverty in Australia* 2023: Who is affected, 20, Poverty and Inequality Partnership, Australian Council of Social Service and UNSW Sydney.

De Breij, S, Mäcken, J, Qvist, JY, Holman, D, Hess, M, Huisman, M and Deeg, DJH 2020, 'Educational differences in the influence of health on early work exit among older workers', *Occupational and Environmental Medicine*, vol. 77, no. 8, pp. 568–575.

Deutscher, N 2019, 'Job-to-job transitions and the wages of Australian workers', *Treasury Working Paper*.

—— 2020a, 'Place, Peers, and the Teenage Years: Long-Run Neighborhood Effects in Australia', *American Economic Journal: Applied Economics*, vol. 12, no. 2, pp. 220–249.

—— 2020b, 'What Drives Second Generation Success? The Roles of Education, Culture, and Context', *Economic Inquiry*, vol. 58, no. 4, pp. 1707–1730.

—— and Mazumder, B 2020, 'Intergenerational mobility across Australia and the stability of regional estimates', *Labour Economics*, vol. 66, p. 101861.

— and — 2023, 'Measuring Intergenerational Income Mobility: A Synthesis of Approaches', *Journal of Economic Literature*, vol. 61, no. 3, pp. 988–1036.

DHA (Australian Government Department of Home Affairs) 2020, Life in Australia: Australian values and principles.

Dinisman, T and Moroz, A 2017, 'Understanding victims of crime: the impact of the crime and support needs', *Victim Support*.

Doko Tchatoka, F and Varvaris, V 2021, 'Neighbourhood, school zoning and the housing market: Evidence from New South Wales', *Journal of Housing Economics*, vol. 54, p. 101790.

Durlauf, SN, Kourtellos, A and Tan, CM 2022, 'The Great Gatsby Curve', *Annual Review of Economics*, vol. 14, no. 1, pp. 571–605.

— and Seshadri, A 2018, 'Understanding the Great Gatsby Curve':, *NBER Macroeconomics Annual*, vol. 32, no. 1, pp. 333–393.

EIAC (Economic Inclusion Advisory Committee) 2024, 2024 Report to Government.

Fairbrother, D and Mahadevan, R 2016, 'Do education and sex matter for intergenerational earnings mobility? Some evidence from Australia', *Australian Economic Papers*, vol. 55, no. 3, pp. 212–226.

Fan, Y, Yi, J and Zhang, J 2021, 'Rising Intergenerational Income Persistence in China', *American Economic Journal: Economic Policy*, vol. 13, no. 1, pp. 202–230.

Fishkin, J 2014, Bottlenecks: A new theory of equal opportunity, Oxford University Press.

Fry, JM, Farrell, L and Temple, JB 2023, 'Energy poverty and food insecurity: Is there an energy or food trade-off among low-income Australians?', *Energy Economics*, vol. 123, p. 106731.

Fujita, M and Thisse, J-F 1996, 'Economics of Agglomeration', *Journal of the Japanese and International Economies*, vol. 10, no. 4, pp. 339–378.

García-Gómez, P, Kippersluis, H van, O'Donnell, O and Doorslaer, E van 2013, 'Long-Term and Spillover Effects of Health Shocks on Employment and Income', University of Wisconsin Press, *Journal of Human Resources*, vol. 48, no. 4, pp. 873–909.

Groen, J, Kutzbach, M and Polivka, A 2020, 'Storms and Jobs: The Effect of Hurricanes on Individuals' Employment and Earnings over the Long Term', *Journal of Labor Economics*, vol. 38, no. 3.

Heidrich, S 2017, 'Intergenerational mobility in Sweden: a regional perspective', *Journal of Population Economics*, vol. 30, no. 4, pp. 1241–1280.

Helsø, A-L 2021, 'Intergenerational Income Mobility in Denmark and the United States\*', *The Scandinavian Journal of Economics*, vol. 123, no. 2, pp. 508–531.

Houghton, K, Barwick, A and Pregellio, S 2023, *Regional Jobs* 2022: The Big Skills Challenge, Regional Institute Australia, Canberra

Huang, X, Huang, S and Shui, A 2021, 'Government spending and intergenerational income mobility: Evidence from China', *Journal of Economic Behavior & Organization*, vol. 191, pp. 387–414.

Huang, Y, Perales, F and Western, M 2016, 'A land of the "fair go"? Intergenerational earnings elasticity in Australia', *Australian Journal of Social Issues*, vol. 51, no. 3, pp. 361–381.

IBA (Indigenous Business Australia) 2023, Submission to the Senate Standing Committee on Community Affairs, Senate Standing Committee on Community Affairs Inquiry into the Extent and Nature of Poverty in Australia.

Islam, A and Parasnis, J 2016, 'Native-migrant wage differential across occupations: Evidence from Australia', *International Migration*, vol. 54, no. 3, pp. 89–109.

Jäntti, M and Jenkins, SP 2015, 'Income Mobility', in Atkinson, A and Bourguignon, F (eds), *Handbook of Income Distribution*, vol 2, Elsevier, pp. 807–935.

Jobs and Skills Australia 2023, First Nations People Workforce Analysis.

Johar, M, Johnston, DW, Shields, MA, Siminski, P and Stavrunova, O 2022, 'The economic impacts of direct natural disaster exposure', *Journal of Economic Behavior & Organization*, vol. 196, pp. 26–39.

Johnson, P and Webb, S 1992, 'The treatment of housing in official low income statistics', *Journal of the Royal Statistical Society Series A: Statistics in Society*, vol. 155, no. 2, pp. 273–290.

Jones, AM, Rice, N and Roberts, J 2010, 'Sick of work or too sick to work? Evidence on self-reported health shocks and early retirement from the BHPS', *Economic Modelling*, vol. 27, no. 4, pp. 866–880.

Kalb, G, Le, T, Hunter, B and Leung, F 2014, 'Identifying Important Factors for Closing the Gap in Labour Force Status between Indigenous and Non-Indigenous Australians', *Economic Record*, vol. 90, no. 291, pp. 536–550.

Kalil, A and Ryan, R 2020, 'Parenting Practices and Socioeconomic Gaps in Childhood Outcomes', Princeton University, *The Future of Children*, vol. 30, no. 1, pp. 29–54.

Karmel, T 2004, 'Australia's approach to lifelong learning', *National Centre for Vocational Education Research*.

Kenedi, G and Sirugue, L 2023, 'Intergenerational income mobility in France: A comparative and geographic analysis', *Journal of Public Economics*, vol. 226, p. 104974.

Kennedy, T and Siminski, P 2022, 'Are we richer than our parents were? Absolute income mobility in Australia', *Economic Record*, vol. 98, no. 320, pp. 22–41.

Kleven, H, Landais, C and Søgaard, JE 2019, 'Children and Gender Inequality: Evidence from Denmark', *American Economic Journal: Applied Economics*, vol. 11, no. 4, pp. 181–209.

Krueger, AB 2012, The Rise and Consequences of Inequality in the United States.

Kwon, B and Jeon, G 2020, *Does the Great Gatsby Curve exist in South Korea?*, Working paper, Hannam University, Daejeon, South Korea.

Lamb, S, Huo, S, Walstab, A, Wade, A, Maire, Q, Doecke, E, Jackson, J and Endekov, Z 2020, 'Educational opportunity in Australia 2020: Who succeeds and who misses out'.

Lancaster, D 2021, 'The Financial Cost of Job Loss in Australia', *RBA Bulletin, September.* 

Leigh, A 2007, 'Intergenerational mobility in Australia', *The B.E. Journal of Economic Analysis & Policy*, vol. 7, no. 2.

—— 2024, 'Returns to Education in Australia 2001-2022'.

— and Ryan, C 2008, 'Estimating returns to education using different natural experiment techniques', *Economics of Education Review*, vol. 27, no. 2, pp. 149–160.

Leites, M, Ramos, X, Rodríguez, C and Joan, V 2022, 'Intergenerational mobility along the income distribution: estimates using administrative data for a developing country', Documentos de Trabajo (working papers).

Letki, N and Mieriņa, I 2015, 'Getting support in polarized societies: Income, social networks, and socioeconomic context', *Social Science Research*, vol. 49, pp. 217–233.

Loury, GC 1981, 'Intergenerational Transfers and the Distribution of Earnings', *Econometrica*, vol. 49, no. 4, pp. 843–867.

Manderson, L and Warren, N 2016, "Just one thing after another": Recursive cascades and chronic conditions', *Medical Anthropology Quarterly*, vol. 30, no. 4, pp. 479–497.

Mani, A and Riley, E 2019, Social networks, role models, peer effects, and aspirations, WIDER Working Paper 2019/120.

Markham, F 2023, Submission to the Senate Standing Committee on Community Affairs, Senate Standing Committee on Community Affairs Inquiry into the Extent and Nature of Poverty in Australia.

Marti, IH, Yang, S, La Cava, G and Nolan, M 2023, 'Wage Scarring: The Wage Impact of Mass Layoffs, Evidence from the Global Financial Crisis', *e61 Micro Note*.

Mazumder, B 2016, 'Estimating the intergenerational elasticity and rank association in the United States: Overcoming the current limitations of tax data', *Inequality: Causes and Consequences*, vol 43, Research in Labor Economics, Emerald Group Publishing Limited.

McLachlan, R, Gilfillan, G and Gordon, J 2013, *Deep and Persistent Disadvantage in Australia*, Productivity Commission Staff Working Paper, Canberra.

Mendolia, S and Siminski, P 2016, 'New Estimates of Intergenerational Mobility in Australia', *Economic Record*, vol. 92, no. 298, pp. 361–373.

Moloney, L, Weston, R, Qu, L and Hayes, A 2012, 'Families, life events and family service delivery: A literature review', Australian Institute of Family Studies Research Report, no. 20.

Munnell, A, Rutledge, M and Sanzenbacher, G 2019, 'Retiring earlier than planned: what matters most?', *Centre for Retirement Research*.

Murray, C, Clark, R, Mendolia, S and Siminski, P 2018, 'Direct Measures of Intergenerational Income Mobility for Australia', Faculty of Business - Papers (Archive), pp. 445–468.

Narayan, A, van der Weide, R, Cojocaru, A, Redaelli, S, Mahler, D, Ramasubbaiah, R and Thewissen, S 2018, *Fair progress? Economic mobility across generations around the world*, The World Bank Group.

NASEM (National Academies of Sciences, Engineering, and Medicine) 2023, An updated measure of poverty: (re)drawing the line, National Academies Press, Washington, D.C.

NIAA (National Indigenous Australians Agency) 2020, Submission to the Senate Standing Committee on Indigenous Affairs: Supplement 1, Senate Standing Committee on Indigenous Affairs Inquiry into Food Pricing and Food Security in Remote Indigenous Communities.

Nicol, A 2010, *The experience of financial stress in Australia:* the role of life events and prior stress, Department of Families, Housing, Community Services and Indigenous Affairs.

Nolan, B 2024, 'Intergenerational persistence of poverty', *Research Handbook on Intergenerational Inequality*, Edward Elgard Publishing, pp. 73–85.

Northern Territory Government 2023, NT Market Basket - Summary.

Nybom, M and Stuhler, J 2017, 'Biases in Standard Measures of Intergenerational Income Dependence', [University of Wisconsin Press, Board of Regents of the University of Wisconsin System], *The Journal of Human Resources*, vol. 52, no. 3, pp. 800–825.

OECD (Organisation for Economic Co-operation and Development) 2018, *A Broken Social Elevator? How to Promote Social Mobility*, OECD Publishing, Paris.

—— 2020, Education at a Glance 2020: OECD Indicators, OECD Publishing, Paris.

Owen, E 2023, Three years on from the pandemic: is the housing market going 'back to normal'?, CoreLogic.

Oxford Economics Australia 2023, Higher Education Qualification Demand: Report Produced for Department of Education.

Page, M 2004, 'New evidence on the intergenerational correlation in welfare participation', in Corak, M (ed), *Generational income mobility in North America and Europe*, Cambridge University Press, Cambridge, pp. 226–244.

Parolin, Z, Schmitt, R, Esping-Andersen, G and Fallesen, P 2023, *The Intergenerational Persistence of Poverty in High-Income Countries*, IZA Discussion Paper No. 16194, Rochester, NY.

Payne, A and Samarage, R 2020, *Spatial and Community Dimensions of Income Poverty*, Melbourne Institute: Applied Economic & Social Research, University of Melbourne.

PC (Productivity Commission) 2016, *Migrant Intake into Australia*, Report no. 77, Canberra.

- —— 2018, Rising inequality? A stocktake of the evidence, Commission Research Paper, Canberra.
- —— 2019, Expenditure on Children in the Northern Territory, Issues Paper, Melbourne.
- —— 2020a, Mental Health, Report no. 95, Canberra.
- —— 2020b, Remote area tax concessions and payments, Study report, Canberra.
- —— 2020c, Why Did Young People's Incomes Decline?, Commission Research Paper, Canberra.
- —— 2021a, Housing and Homelessness Agreement Review, Issues Paper.
- —— 2021b, Wealth transfers and their economic effects, Research Paper, Canberra.
- —— 2023, 5-year Productivity Inquiry: Advancing Prosperity, Inquiry Report no. 100, Vol. 1, Canberra.
- —— 2024, A snapshot of inequality in Australia, Research paper, Canberra.

Phillips, B 2022, Household financial stress and financial wellbeing in Australia, CSRM Research Note 2/22, Centre for Social Research and Methods, Australia.

QAIHC (Queensland Aboriginal and Islander Health Council) 2023, Submission to the Senate Standing Committee on Community Affairs, Senate Standing Committee on Community Affairs Inquiry into the Extent and Nature of Poverty in Australia.

Qu, L and Baxter, J 2023, *Divorces in Australia*, Australian Institute of Family Studies.

Rauscher, E 2016, 'Passing it on: Parent-to-adult child financial transfers for school and socioeconomic attainment', Russell Sage Foundation, RSF: The Russell Sage Foundation Journal of the Social Sciences, vol. 2, no. 6, pp. 172–196.

Rawls, J 1971, A Theory of Justice, Harvard University Press.

Roemer, JE 2002, 'Equality of opportunity: A progress report', Springer, Social Choice and Welfare, vol. 19, no. 2, pp. 455–471.

Rohenkohl, B 2023, 'Intergenerational income mobility: New evidence from the UK', *The Journal of Economic Inequality*, vol. 21, no. 4, pp. 789–814.

Sen, A 1999, *Development as Freedom*, Oxford University Press. Siminski, P and Yu, SH (Timothy) 2022, 'The correlation of

wealth between parents and children in Australia', *The Australian Economic Record*, vol. 55, no. 2, pp. 195–214.

Sobeck, K 2022, 'Greedy jobs, labour market institutions, and the gender pay gap', *Australian National University, Tax and Transfer Policy Institue Working Paper.* 

Soria, J 2022, Intergenerational mobility, gender differences and the role of out-migration: New evidence from Spain, SSRN Scholarly paper 4110960.

Stenberg, S-A 2000, 'Inheritance of welfare recipiency: An intergenerational study of social assistance recipiency in postwar Sweden', *Journal of Marriage and Family*, vol. 62, no. 1, pp. 228–239.

Torche, F 2015, 'Intergenerational Mobility and Equality of Opportunity', Cambridge University Press, *European Journal of Sociology / Archives Européennes de Sociologie / Europäisches Archiv für Soziologie*, vol. 56, no. 3, pp. 343–371.

Treasury 2023, Working future: The Australian Government's White Paper on jobs and opportunities, Final Report.

VACCHO (Victorian Aboriginal Community Controlled Health Organisation) 2023, *Submission to the Senate Standing Committee on Community Affairs*, Senate Standing Committee on Community Affairs Inquiry into the Extent and Nature of Poverty in Australia.

de Vaus, D, Gray, M, Qu, L and Stanton, D 2015, 'The economic consequences of divorce in six OECD countries', Australian Institute of Family Studies Research Report.

Vera-Toscano, DE and Wilkins, PR 2020, Does poverty in childhood beget poverty in adulthood in Australia?, Melbourne Institute: Applied Economic & Social Research, Melbourne.

Vera-Toscano, E and Wilkins, R 2019, Over 50% of young Australian adults still live with their parents – and the numbers are climbing faster for women, The Conversation, http://theconversation.com/over-50-of-young-australian-adults-still-live-with-their-parents-and-the-numbers-are-climbing-faster-for-women-120587 (accessed 14 June 2024).

—— and —— 2022, *Dynamics of Income Poverty in Australia*, Melbourne Institute: Applied Economic & Social Research.

WA DPIRD (Western Australia Department of Primary Industries and Regional Development) 2023, *Regional Price Index* 2023.

Watson, N 2021, 'Finding Your Way Around the HILDA Survey Data', Australian Economic Review, vol. 54, no. 4, pp. 554–564.

Western, B 2002, 'The Impact of Incarceration on Wage Mobility and Inequality', *American Sociological Review*, vol. 67, no. 4. WHO (World Health Organization) 2022, *Global oral health status report: towards universal health coverage for oral health by 2030*, World Health Organization.

Wilkins, R 2016, *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 14*, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.

Williamson, B, Prehn, J, Walter, M, Lovett, R, Bodkin-Andrews, G, Maher, B, Lee-Ah Mat, V and Jones, R 2021, 'Indigenous peoples and the Australian census: value, trust, and participation', *Australian Population Studies*, vol. 5, no. 2, pp. 1–14.

World Bank 2023, *Gini index - World Development Indicators*. Zucchelli, E, Jones, AM, Rice, N and Harris, A 2010, 'The effects of health shocks on labour market exits: evidence from the hilda survey', *Australian Journal of Labour Economics*, vol. 13, no. 2, pp. 191–218.