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# A snapshot of inequality in Australia

Research paper

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**

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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 1975 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.

This paper also uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The HILDA Project was initiated and is funded by the Australian Government Department of Social Services (DSS) and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute). The findings and views reported in this paper, however, are those of the author and should not be attributed to either DSS or the Melbourne Institute.

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# **Executive summary**

The years during and following the COVID-19 pandemic have seen significant swings in income and wealth (the value of assets such as houses).

The pandemic lockdowns drove significant temporary changes in employment and a vast increase in direct government assistance through programs such as JobKeeper and the Coronavirus Supplement. The economy and labour market have since recovered strongly from the COVID-19 induced recession, further affecting income and wealth.

Clearly, the economic tumult of this period could not have affected all Australians equally. Persistent concerns about inflation, housing affordability and other cost-of-living pressures in the community have led many to ask how economic inequality – the unequal distribution of resources – has changed in the wake of the pandemic.

This research explores how the distribution of wealth and incomes changed over the COVID-19 period, to assess the state of economic inequality in Australia. While there is no simple answer to the question of whether inequality has worsened or improved since the start of the pandemic, this paper examines the factors driving changes during and following the pandemic. It also examines the relative wealth and incomes of three cohorts in closer detail: older people, women, and Aboriginal and Torres Strait Islander people.

## The COVID-19 pandemic and inequality

Inequality in Australia was relatively stable in the decade leading up to the COVID-19 pandemic, but fluctuated significantly during the COVID-19 induced recession (in mid 2020) and recovery.

The initial period of the pandemic saw an unprecedented fall in income inequality. The incomes of lower-income households grew rapidly in relative terms as a result of the significant increase in support payments from the Australian Government (figure 1). This included the Coronavirus Supplement, which was paid to income support recipients, such as those receiving JobSeeker and Youth Allowance. JobKeeper payments to lower-income part-time workers also contributed to lower inequality early in the pandemic period. While these programs were critical during the pandemic to support the Australian community, they were also costly and not fiscally sustainable in the long term.

Income inequality subsequently increased as the economy recovered. Government support was phased out and the incomes of low income households fell. Business income and activity rose, benefiting people towards the top of the income distribution who owned businesses (figure 1). The recovery from the pandemic also benefited the unemployed, as Australia's unemployment rate fell to record lows. This tight job market meant that more people were able to find work, including some workers who had been unemployed for long periods of time and some who had earlier left the labour force.



#### Figure 1 – The effects of COVID-19 on households varied across the distribution

Annual change in equivalised household disposable income by decile, 2018-19 to 2021-22

Wealth inequality (the relative value of people's assets like their homes or superannuation) appeared to decline during the pandemic period. The income received over the period meant that households with lower wealth were able to increase their savings and reduce their debts, contributing to a reduction in wealth inequality. House price changes during the pandemic further reduced wealth inequality, as price growth was relatively higher in areas with lower prices, such as smaller capital cities and regional areas.

## Inequality across demographic groups

Measuring economic inequality in aggregate can mask disparities in individual outcomes across demographics such as gender and age. The Commission has therefore examined three cohorts in further detail: older people, women, and Aboriginal and Torres Strait Islander people.

Older Australians have relatively low incomes compared to working age cohorts, even though they receive higher average government transfer payments (largely due to the Age Pension). But many low-income older people have significant wealth they can draw on to fund their spending. Combining wealth and income into a single wealth-adjusted income measure shows that fewer older Australians are at the bottom of the income distribution and more are at the top (figure 2). This suggests income measures alone may understate the spending capacity of older Australians.

# Figure 2 – Wealth-adjusted income indicates that older age groups are better off than income suggests

Share of age groups in the bottom and top decile for equivalised disposable income and wealth-adjusted income (WAI), 2021-22



There are gender differences in income and wealth across the distribution. Women have lower income than men at all levels, but the share of women at the top is increasing, suggesting some improvement over the past decade. Men generally have more assets than women where these are owned individually, including superannuation and bank balances. While economic resources can be shared across a household, these individual gender differences can matter, especially for previously partnered women (or mothers) who become single when households dissolve.

While incomes rose for Aboriginal and Torres Strait Islander people during the pandemic, deeply entrenched disadvantages mean that inequalities persist. Where people live has a large bearing on incomes – many Aboriginal and Torres Strait Islander people in more remote locations have very low incomes, even as they face higher costs of living and reduced access to services.

It is important to recognise that economic measures provide only a partial indicator for overall wellbeing. This is a particularly significant consideration in the case of Aboriginal and Torres Strait Islander people, for whom wellbeing encompasses cultural identity, community connections and other measures of quality of life.

# 1. Why investigate economic inequality in Australia?

## Key points

Economic inequality is the uneven distribution of economic resources – income, wealth or consumption
 between individuals or different groups within a society.

We care about inequality because income and wealth (and the ability to use these for consumption) can be significant contributors to an individual's wellbeing and because inequality can be detrimental to the ongoing advancement of our economy and society.

• Economic inequality may matter less for the wellbeing of some individuals, depending on their personal and family characteristics, or environmental and social factors.

While economic inequality is not inherently negative, high economic inequality can have negative consequences.

- The potential consequences of high economic inequality include negative economic impacts (e.g. on growth and productivity) and detrimental social outcomes (e.g. health outcomes and social cohesion).
- But some economic inequality may reflect wellbeing-enhancing activities, such as rewards for people's effort or choices that support individual wellbeing in other ways.
- There are multiple ways to measure economic inequality, with each measure alone providing only a partial picture of the state of inequality.

This paper examines multiple inequality measures in the period during and shortly after the COVID-19 pandemic, to provide a holistic picture of how outcomes changed because of the pandemic-induced recession and recovery.

## **1.1** What is economic inequality and why examine it again?

Significant disruption to Australia's economy and society during the COVID-19 pandemic means that it is timely to re-examine how different cohorts within our community are faring in the distribution of our economy's resources.

This paper presents economic data on income, wealth and expenditure during and shortly after the COVID-19 pandemic, as an update to the comprehensive stocktake of inequality undertaken by the Commission in 2018. The aim is to better understand how inequality outcomes changed because of the pandemic-induced recession and recovery, when there were significant changes to economic conditions and

government policy responses. Who is affected by inequality matters greatly for a country that values a stable and efficient economy, the effective use of human capital in ways that enable a more creative and dynamic society, and the opportunities for all individuals to enjoy the benefits of economic growth.

In this paper the Commission has examined the distribution of income, wealth and expenditure within and between different groups to provide a more nuanced understanding of economic inequality. This paper uses administrative data to deep dive into three cohorts: women, older people and Aboriginal and Torres Strait Islander people.

This paper is centred around three questions:

- What has happened to economic inequality in Australia since 2018? (chapter 2)
- · How do people of different ages and genders experience economic inequality? (chapters 3 and 4)
- Are inequality patterns different for Aboriginal and Torres Strait Islander people? (chapter 5)

A future research paper will examine changes in inequality of opportunity in Australia, taking a more dynamic approach by examining people's economic outcomes and pathways over time.

#### High levels of inequality can be detrimental to wellbeing ...

Economic inequality is the uneven distribution of, or access to, resources that individuals or families can use. It is usually measured by income, wealth or consumption. In simple terms, economic inequality is the gap between outcomes of different people in terms of what they earn, own or consume.

That said, if individual and community wellbeing are the overarching objectives, it is generally acknowledged that economic inequality is only a partial indicator. For example, Sen's capability framework (1999) suggests that people create a range of potential outcomes from their economic resources, and then – depending on their individual and family characteristics and preferences, and societal and environmental influences – choose a mix of outcomes that increase their wellbeing. Economic resources are therefore not the sole determinant of wellbeing, but they are a significant contributor to wellbeing, expanding the range of ways in which individuals can experience improvements in their wellbeing. In this sense, 'wellbeing' can also mean 'living well', 'functioning well' and having a good quality of life.

The overall wellbeing of society can suffer when inequality is high. This is because inequality can lead to uneven access to social opportunities and services such as health and education, waste human capital potential, and increase vulnerabilities to economic shocks and the resources needed to recover from these. It also can reduce social justice and adversely perpetuate narrowly focused institutional arrangements and decision-making processes. Moreover, perceptions of inequality also matter, and some studies suggest that perceived inequality is more important for individual wellbeing than objective measures of how resources are distributed (Buttrick, Heintzelman and Oishi 2017).

Over the last 20 years, empirical evidence has emerged supporting the connection between inequality and economic outcomes. For instance, higher income inequality is correlated with lower economic growth, at least at current levels of inequality (OECD 2014). The gap between low-income households and the rest of the population appears to be particularly detrimental to growth. Recent analysis also suggests that lower inequality is correlated with faster and more durable growth (Berg et al. 2018).

Economic inequality may affect social factors, and therefore the outcomes an individual can achieve. For example, there is strong evidence that greater income inequality is related to worse average health outcomes (Pickett and Wilkinson 2015). There is also evidence that both the quality and quantity of education of individuals with parents that have relatively low education levels is negatively related to income disparities (OECD 2014).

A possible consequence of increasing inequality is that it could harm social cohesion. This could happen when different economic interests lead to social and political conflict. Although this aspect is subjective and hard to quantify, some research suggests that countries with more inequality also have more corruption and political instability (Policardo and Carrera 2018).

Economic inequality also determines the opportunities of the next generation – that is, the more unequal a society is, the more likely that children will have the same economic situation as their parents (Durlauf, Kourtellos and Tan 2022). Intergenerational inequality and mobility will be explored in a forthcoming paper.

#### ... but inequality is not always a bad thing

Economic inequality is not always bad for wellbeing. Some inequality may reflect that people's effort or risk-taking is being rewarded. For example, an entrepreneur may make substantial income developing and marketing new technology, which then creates new products and employment and generates tax income. This may technically increase economic inequality but also boost the economic resources of others.

In addition, some inequality may result from circumstances that appear as economic inequality but enhance overall wellbeing. For example, some people may choose jobs that are not typically well-paid but offer other benefits (e.g. more holidays or work satisfaction); some may have simply retired. Such choices may appear to increase economic inequality (which is measured by income, wealth and consumption outcomes) but also increase wellbeing (such as life satisfaction, which is not explicitly captured by these outcomes). Other people may work fewer hours (and earn less) to manage other responsibilities (e.g. parenting or caring), possibly to the detriment of their wellbeing (PC 2023a), but to the benefit of the wellbeing of those they care for.

This is why measuring inequality - and where possible, drilling down into the numbers - is so important.

## **1.2** How to measure inequality – a policymaker's toolkit

There are many ways to measure inequality. Different measures can provide different perspectives on inequality, even when using similar data. This can sometimes result in measures and methods being selected to fit a certain viewpoint or goal. A single measure may present only a partial picture of issues that are relevant for informed policy decisions.

Examining several methods or measurements together can provide a more holistic picture on the state of inequality. Table 1.1 summarises a practical set of tools to measure inequality, highlighting the intended purpose and potential limitations of each measure.

	Description	Purpose	Limitations
Average income (or wealth or consumption)	• The sum of all incomes divided by the number of people.	• Can provide a general overview of the economic wellbeing of a population and can be used to examine different dimensions within a society such as age or gender.	<ul> <li>Does not measure inequality within a group or population.</li> <li>Large outliers can skew the result (e.g. average income of \$100,000 could reflect 9 people with no income and</li> </ul>

#### Table 1.1 – Inequality measures toolkit

	Description	Purpose	Limitations
			1 person with \$1,000,000 income).
Median income (or wealth or consumption)	<ul> <li>The middle income, when all incomes are arranged in ascending order.</li> <li>For example, the income of the 5<sup>th</sup> person, if we were looking at 9 people.</li> </ul>	<ul> <li>A single overview measure that is not skewed by large outlier values.</li> </ul>	<ul> <li>Focus on the middle person masks situation of the remaining population.</li> <li>Less widely understood than average income.</li> </ul>
Percentiles, deciles and quartiles	<ul> <li>Like the median, these divide incomes into equal parts and present the income of each 'n-tile'.</li> <li>For example, the 9<sup>th</sup> decile is the income of the 90<sup>th</sup> person, if we were looking at 100 people.</li> </ul>	<ul> <li>Offers a more detailed view of the distribution of outcomes, allowing for a deeper analysis of inequality and social stratification.</li> </ul>	<ul> <li>Interpretation is more complex than a single number, and may require further understanding of underlying data and economic context.</li> </ul>
Interquartile range (IQR)	• The difference between the first- and third- income quartile, covering 50% of the distribution.	<ul> <li>Useful in conjunction with median in showing the range in which most people's income falls.</li> </ul>	<ul> <li>Does not reflect entire distribution as the measure deliberately excludes the tails.</li> <li>When comparing two or more distributions, the IQR alone may not be sufficient.</li> </ul>
Percentile ratios - p95/p5 - p99/p1 - p50/p10	<ul> <li>Ratio of two income percentiles, generally high and low incomes or median and low incomes.</li> </ul>	• Simple and intuitive method for highlighting the gap between the high and low ends of the income distribution (e.g. the median person earns X times more than someone in the 10 <sup>th</sup> percentile).	<ul> <li>Potentially hides full story of inequality as it does not examine the distribution of incomes between two points.</li> <li>Sensitive to changes at the extremes of the distribution.</li> </ul>
Gini coefficient <sup>1</sup>	<ul> <li>Calculated from the shape of the income distribution. Ranges from 0, representing</li> </ul>	<ul> <li>Widely used method of measuring and comparing inequality with and between</li> </ul>	• Technical measure with a narrow purpose and may be difficult to

<sup>1</sup> See figure 2.5 in the Commission's 2018 *Rising Inequality* report for further details on how Gini coefficients are calculated.

Des	scription	Purpose	Limitations
pr re in	erfect equality, to 1, epresenting perfect equality.	jurisdictions (e.g. countries, states). • Provides a single picture of the resources of a whole population that can be tracked across different periods to observe trends.	<ul> <li>understand without context.</li> <li>Hides detail on how economic resources are distributed.</li> <li>May not be applicable when comparing different populations as it measures inequality within subgroups of interest, rather than inequality between them.</li> <li>Not favoured by some because it only captures each person's share of income, not the level (e.g. if everyone's income doubled, those with high incomes would gain much more, but the Gini coefficient would be unchanged).</li> </ul>

An illustrative example of how inequality measures are calculated across a small group of individuals is provided in figure 1.1. It shows the income distribution of a simplified nine-person economy, and how each inequality measure can be calculated in this economy.



#### Figure 1.1 – Illustrative example of inequality measures<sup>a</sup>

**a.** The distribution is truncated between \$65,000 and \$150,000 for convenience. Other than that, the distribution is visually correct. The precise incomes and figures are fictitious. The Gini coefficient is estimated across the whole population.

### The Commission's approach in this paper

In this paper, the Commission has used the Gini coefficient to illustrate how income<sup>2</sup> and wealth vary across the whole distribution, and to analyse changes over time. As it is important to examine the reasons driving changes in the Gini, we have also looked at average measures and deciles to better understand how economic resources are distributed across Australia and how they vary between groups.

We look at equivalised measures of economic resources, which adjust individual income or wealth to account for household size and composition. This is appropriate for broad inequality analysis across the population (such as in chapter 2), as it recognises that economic resources are often shared across a household and contribute to the wellbeing of all household members. However, equivalised measures have limitations when examining disparities across demographics like gender or age, as they mask differences in individual outcomes. Therefore, we use non-equivalised measures for detailed analysis of inequality within and between demographic groups in chapters 3, 4 and 5.

Income and wealth are indicators of the economic resources available to people to spend on improving their wellbeing, but their actual expenditure on and consumption of goods and services may be different. In this paper, the Commission has also examined a combined measure of income and wealth resources (wealth-adjusted income) as a representation of the theoretical level that people could consume at, as well as actual private expenditure on goods and services.

Further details on the measurement of inequality and data sources are detailed in the appendix.

<sup>&</sup>lt;sup>2</sup> In this paper, individual income is taken to be after-tax disposable income, which includes wages and salaries from employment, business income, investment income and transfer income from government payments.

# 2. Recent changes to inequality in Australia

## **Key points**

Income inequality was stable prior to the COVID-19 pandemic, declined at the start of the pandemic, then subsequently increased as the economy recovered.

• It is inconclusive whether post-pandemic income inequality is higher or lower than pre-pandemic levels.

#### The effects of the pandemic varied across the income distribution.

- At the start of the pandemic, substantial government support in particular, the Coronavirus Supplement was provided to low-income households, who experienced the highest income growth. JobKeeper payments also resulted in increased income for some people, such as lower-income part-time workers.
- As the economy recovered, government support was reversed and the incomes of low-income households fell. The recovery benefited business owners towards the top of the distribution the most, as business income grew with improving economic conditions.
- The tight labour market during the recovery provided more employment opportunities, mainly benefiting
  households in the middle deciles. It also had broader social benefits by improving employment outcomes and
  wellbeing for the long-term unemployed and younger workers.
- Wealth increased significantly during the pandemic, but because it grew faster for the bottom half of the distribution, wealth inequality declined.
  - There were larger house price increases in regions with relatively lower prices, resulting in stronger growth for homeowners with lower housing wealth.
  - Superannuation inequality continues to decline as the superannuation system matures and workers with lower balances spend more time in the workforce accumulating funds.
  - Relatively high household savings rates during the pandemic meant lower-wealth households with less savings had a disproportionately greater increase in their deposits.

## 2.1 Income inequality

How income is distributed is important because while income is not the sole determinant of wellbeing, it plays an important role in supporting people's wellbeing (section 1.1). It affects people's capacity to afford basic needs and to enjoy the things they value, both now and in the future. The distribution of income also reflects the extent to which economic gains in Australia are being shared across the community, which can

affect community wellbeing. The Commission has focused on analysing how income inequality has changed in recent years, particularly in light of the COVID-19 pandemic.

## The pandemic had significant effects on income inequality

Incomes were relatively stagnant in the 2010s, but income growth accelerated leading up to the COVID-19 pandemic (figure 2.1).<sup>3</sup> Incomes also grew at the start of the pandemic because of a substantial increase in government support payments (discussed further below).



Equivalised household disposable income, 1988-89 to 2021-22



**a.** The 2019-20 value for SIH does not reflect the effects of the initial COVID-19 recession as only a minority of households were surveyed between March and June 2020. SIH/HES estimates use HES for the years 1988-89, 1993-94 and 1998-99, and SIH for all other years. **b.** The Commission has only presented equivalised income using PLIDA data from 2019-20 to 2021-22. This is because information on household size and composition is currently only available from one Census year at a time in the linked dataset. As such, we have assumed the 2021 Census data on household size and composition is applicable for the year before and after the Census year, but no further given the potential for household changes. But because the 2019-20 to 2021-22 period does not include a pre-pandemic year, PLIDA cannot be used to infer how income inequality has changed overall throughout the pandemic period.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22), ABS's Survey of Income and Housing/Household Expenditure Survey (SIH/HES), and linked ATO Personal Income Tax, DSS government payment, and ABS derived demographics data in the Person Level Integrated Data Asset (PLIDA).

Income inequality was stable throughout the 2010s according to both SIH and HILDA data, but shifted between 2018-19 and 2021-22. Based on the Gini coefficient calculated using HILDA and PLIDA data,

<sup>&</sup>lt;sup>3</sup> Throughout this chapter, the Commission has focused on equivalised household disposable income as its preferred measure of income to assess aggregate income inequality across Australia. Different inequality measures are described in section 1.2.

income inequality initially declined before increasing (figure 2.2).<sup>4</sup> This was a result of the COVID-19 pandemic, with the dynamics discussed further below.

# Figure 2.2 – Income inequality declined at the start of the pandemic, but then increased in the recovery $^{a,b,c}$

Gini coefficient for equivalised household disposable income, 1988-89 to 2021-22



**a.** Consistent with convention for calculating Gini coefficients, negative values are treated as zero. **b.** The 2019-20 value for SIH does not reflect the effects of the initial COVID-19 recession as only a minority of households were surveyed between March and June 2020. SIH/HES estimates use HES for the years 1988-89, 1993-94 and 1998-99, and SIH for all other years. **c.** The Commission has only presented equivalised income using PLIDA data from 2019-20 to 2021-22. This is because information on household size and composition is currently only available from one Census year at a time in the linked dataset. As such, we have assumed the 2021 Census data on household size and composition is applicable for the year before and after the Census year, but no further given the potential for household changes. But because the 2019-20 to 2021-22 period does not include a pre-pandemic year, PLIDA cannot be used to infer how income inequality has changed overall throughout the pandemic period.

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

Income percentile ratios (explained in table 1.1) show a similar story. The ratios were also fairly stable in the 2010s, before declining in 2019-20 and subsequently increasing. However, the P90/P50 ratio was relatively flat, suggesting that overall movements in the P90/P10 and P50/P10 ratio were primarily driven by changes in the bottom decile (figure 2.3).

<sup>&</sup>lt;sup>4</sup> It is difficult to determine whether this uptick has also occurred in other countries. The latest OECD data on Gini coefficients is only up to 2020 or 2021. In 2020, Australia's Gini coefficient was close to the OECD average (OECD 2024b).

# Figure 2.3 – Percentile ratios also suggest inequality decreased early in the pandemic, before increasing in the recovery<sup>a</sup>

Percentile ratios of equivalised household disposable income, 2000-01 to 2021-22



**a.** This figure uses HILDA data. Looking at alternative datasets, PLIDA estimates for P90/P50 are similar and also relatively flat. While HILDA estimates show the P90/P10 and P50/P10 ratios increasing in 2020-21, PLIDA estimates show them decreasing. Similar to HILDA, SIH estimates of the ratios are relatively stable during the 2010s.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

### The pandemic affected parts of the distribution differently

Between 2018-19 and 2021-22, there was negative or weak growth in incomes for the bottom few deciles, modest growth for most of the middle deciles and relatively strong growth for the top decile (figure 2.4).<sup>5</sup>





Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

The net change in income over the 2018-19 to 2021-22 period reflects several aspects of the rapidly changing economic circumstances during the pandemic (box 2.1).

#### Box 2.1 – Economic conditions changed rapidly throughout the pandemic

#### Pandemic restrictions caused widespread economic disruption

At the start of the COVID-19 pandemic, government-imposed lockdowns caused drastic declines in economic activity and significant job losses (Coates et al. 2020). The unemployment rate surged from 5.2% in March 2020 to a peak of 7.5% in July 2020 (ABS 2024d).

While the impacts of lockdowns were widespread, they particularly affected in-person service industries such as accommodation and food services (e.g. due to restaurant closures) and arts and recreation services (e.g. due to event cancellations). This led to a substantial loss of employment for many people on lower incomes. Moreover, many governments issued work-from-home directives for employees that

<sup>&</sup>lt;sup>5</sup> The Commission has used HILDA as the main dataset for the analysis of changes in aggregate income inequality, as it has more recent data up to 2021-22 and covers both the initial recession and recovery during the pandemic. Any differences between datasets are noted in chart footnotes.

#### Box 2.1 – Economic conditions changed rapidly throughout the pandemic

were able to do so. Jobs that could be done from home were much less likely to be lost, and the ability to work from home is strongly associated with higher incomes (Coates et al. 2020, pp. 20–21; PC 2021, pp. 14–15, 81).

In response, the Australian Government provided substantial support, which cushioned the economic harm across the community. In particular, the Australian Government increased income support payments significantly, such as the \$550 per fortnight Coronavirus Supplement to income support recipients, including those receiving JobSeeker and Youth Allowance. The Australian Government also provided JobKeeper payments of \$1,500 per fortnight to eligible businesses, which had to be paid to their employees, to minimise job losses and maintain employment and job attachment (AIHW 2021, pp. 84– 86). The flat payment of \$1,500 per fortnight meant some people – particularly part-time workers – received more than their usual salary, while others faced a reduction in their income (Treasury 2023a).<sup>a</sup>

#### The economy recovered rapidly leading to a tight labour market and high inflation

Australia's economy recovered quickly from the pandemic after vaccines were rolled out and lockdowns were eased. The improvement in economic conditions was enabled by a combination of significant fiscal and monetary policy support, pent-up consumer demand following COVID-19 restrictions, and large household savings during the pandemic.

As economic conditions improved, the substantial government support provided at the start of the pandemic was phased out throughout 2020-21 and 2021-22 (AIHW 2023a, p. 76; Commission analysis of HILDA). The Coronavirus Supplement was reduced from \$550 to \$250 per fortnight between 25 September 2020 and 31 December 2020, and reduced further to \$150 per fortnight from 1 January 2021 before ending on 31 March 2021. Similarly, JobKeeper payments were reduced and eligibility was tightened before ending in March 2021, with final payments made up to March 2022 (AIHW 2021, pp. 84–87).

However, the recovery also led to a very tight labour market with unemployment dropping significantly to 3.6% by June 2022 – the lowest rate since 1974 (ABS 2022b). At the same time, inflation also surged to 6.1% during 2021-22 (ABS 2024b). High inflation placed significant pressure on household incomes, with real wages declining during this period.

**a.** The Commission notes that while these programs were critical during the COVID-19 pandemic to support the Australian community during a time of crisis, they were also costly and not fiscally sustainable. In particular, an independent evaluation of JobKeeper found that while it was appropriate given the circumstances of the pandemic, any similar policy should be reserved for a temporary, macroeconomic crisis. The fiscal cost of JobKeeper alone was \$88.8 billion in nominal terms (Treasury 2023a, pp. 68, 73).

These changing economic conditions affected households across the income distribution in different ways. Initially, income inequality decreased because income growth was much larger for the bottom half of the distribution compared to the top half. Income inequality subsequently increased during the economic recovery as income growth reversed for the lower deciles in the distribution (figure 2.5).<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> While figure 2.5 illustrates income changes using HILDA data, the Commission's analysis of PLIDA data supports this story. It is also consistent with the Commission's analysis of data from the ABS's (2022a) Australian National Accounts (ANA). The ANA income data uses a different methodology to the Commission's estimates using HILDA and PLIDA, as it



#### Figure 2.5 – The effects of COVID-19 on households varied across the distribution<sup>a</sup>

Annual change in equivalised household disposable income by decile, 2018-19 to 2021-22

**a.** This figure uses HILDA data. Looking at alternative datasets, PLIDA data from 2019-20 to 2021-22 also shows that income inequality declined before increasing.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

# Bottom-decile households initially benefited from government support, but this subsequently reversed

Job losses at the start of the pandemic meant that labour income for the bottom decile decreased significantly. Yet substantial government support payments led to large increases in the disposable incomes of low-income households relative to middle- and higher-income households, leading to an initial decline in overall income inequality (figure 2.5, 2018-19 to 2019-20). In particular, recipients of JobSeeker initially received an additional \$550 per fortnight under the Coronavirus Supplement, almost doubling the previous size of the payment (AIHW 2021, pp. 84–85).<sup>7</sup>

However, income growth for bottom-decile households was reversed as COVID-related government support payments were phased out (box 2.1; figure 2.5, 2019-20 to 2021-22). The composition of the bottom decile also changed during the recovery, as improving labour market conditions resulted in previously unemployed people finding jobs and moving up the income distribution, with more low-income retirees moving into the bottom decile (box 2.2). It should be noted that income measures alone may present an incomplete picture of the material wellbeing of older Australians, who may be able to draw on their wealth to fund consumption – this is discussed further in section 3.2.

is unequivalised and incorporates several deductions such as some interest and insurance premiums. However, it illustrates a similar pattern of increased income for lower quintiles early in the pandemic that is subsequently reversed during the economic recovery.

<sup>&</sup>lt;sup>7</sup> The base rate for JobSeeker was \$565.70 per fortnight in March 2020 (AIHW 2021, p. 85).

#### Box 2.2 – What happened to the bottom decile in the tightening labour market?

Analysing the incomes of households in different deciles over time partially reflects compositional changes in the decile. That is, households can move across the distribution over time, so each decile does not necessarily contain the same households in each year.

In the context of a tight labour market, a household that was in the bottom decile may have increased employment and hours worked, leading to higher labour income and moving up the income distribution. However, households further up the distribution that have not experienced a similar improvement in their income or have faced a decrease in their income will fall down to the bottom decile.

During the economic recovery from the COVID-19 pandemic, some households were able to start work or work more hours and moved out of the bottom decile, and they were replaced by retiree households who moved down to the bottom decile. This led to a significant compositional change in the bottom decile that was not observed prior to the pandemic (figure below, panel a). Labour force participation in the bottom decile declined, meaning overall employment and hours worked declined, and hence also labour income.

The incomes of the bottom two deciles are also predominantly comprised of income from government transfers rather than labour income (figure below, panel b), with most households being retiree or unemployed households. This means that changes in transfer income matter the most in determining overall income growth for these deciles.

Most of the income of bottom decile households come from transfers, not labour



b) Share of income type as a % of equivalised gross income, 2021-22



**a.** Retiree households refer to any households that only have people aged 65+ who are not employed.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

The Commission notes the social benefits of improved labour market conditions are broader than the effect on overall income inequality. In particular, Australia's tight labour market has substantially improved the employment outcomes and wellbeing of those who have experienced long-term unemployment and for 'cohorts that have tended to face above-average unemployment rates' such as young people (Treasury 2023b, p. 20). They can help people overcome significant 'scarring' associated with unemployment (Borland 2020), improving their wellbeing over the longer term.

The number of people who were long-term unemployed – those experiencing unemployment for at least one year – increased from 162,000 in March 2020 to a peak of 244,000 in April 2021 due to the pandemic. As the economy recovered, this decreased to 132,000 by June 2022 and 100,000 more recently in February 2024 – almost 40% lower than pre-pandemic levels (ABS 2024c).

As such, tight labour markets can support more inclusive economic growth by providing greater opportunities to people experiencing disadvantage (Coates and Ballantyne 2022; Treasury 2023b).

#### Middle-decile household incomes rose with a tightening labour market

Early in the pandemic, middle-income households experienced increased transfer income due to receiving some government support. They also benefited from JobKeeper payments, which cushioned job losses and supported labour income, particularly in the industries most affected by lockdowns. In some cases, JobKeeper represented an increase in labour income as the JobKeeper payment was higher than some workers' salaries (box 2.1). Overall, households in the middle-income deciles experienced strong income growth at the start of the pandemic, but at lower rates than the bottom deciles (figure 2.5, 2018-19 to 2019-20).

As government support was phased out, the tight labour market provided more employment opportunities that led to increased hours worked and therefore higher labour income (box 2.1). This meant that despite a reduction in transfer income and high inflation in 2021-22, the real incomes of middle-income households still grew modestly overall throughout the period (figure 2.4).

# High-decile households saw increased capital income as business activity recovered

High-income households had very little change in income at the start of the pandemic. They were less affected by the initial economic disruption and did not benefit much from the government support provided.

However, high-income households benefited significantly from the economic recovery. While their growth in labour income was more modest than middle-income households, high-income households still experienced the greatest income growth overall throughout the pandemic period (figure 2.4) because of strong growth in capital income.

Growth in capital income was primarily driven by higher business income as economic conditions improved, but investment income growth also contributed as financial markets improved (figure 2.5, 2020-21 to 2021-22). The large increase in business income was likely a short-term spike, driven by increases in demand from consumers who had accumulated significant savings during the pandemic (section 2.2). The increase in business income is likely to be eroded by more recent experiences of high inflation, rising interest rates and weakening household consumption (discussed below) (RBA 2024).

#### Household experiences have continued to change

The pandemic has had a significant effect on income inequality. Substantial government support helped to avoid widespread economic harm across the community and initially reduced income inequality by boosting the incomes of lower- to middle-income households.

This support was reversed, however, which mostly affected low-income households. Meanwhile, the recovery in labour and capital markets primarily benefited middle- to higher-income households, and particularly the top income decile.

Overall, HILDA data suggests income inequality has increased through the period 2018-19 to 2021-22, with the increase in inequality during the recovery more than reversing the initial reduction (figure 2.2). However, while other data sources suggest a similar initial decrease in inequality at the start of the pandemic followed by an increase, there are mixed results on the overall change in inequality over the pandemic period, which varies depending on the dataset and methodology used.

More importantly, economic conditions have continued to change since 2021-22 as the Australian economy further recovers from the effects of the pandemic. The Commission acknowledges this analysis does not reflect the more recent experiences of Australian households of continued high inflation, rising interest rates, declining real household disposable incomes (Beckers et al. 2024). This is likely to have further impacts on income inequality in Australia.

It is therefore inconclusive whether income inequality in Australia now is higher or lower than pre-pandemic levels. More data and analysis are needed to better capture the effects of the pandemic and more recent economic conditions on income inequality.

#### The impact of taxes and transfers on income inequality

Taxes and transfers significantly reduce inequality by equalising incomes across the distribution. Transfers increase the incomes of low-income households, and have a larger equalising effect compared to taxes, which reduce the incomes of higher-income households. The effect of transfers in reducing inequality has gradually declined over time (figure 2.6).

#### Figure 2.6 – Taxes and transfers significantly reduce income inequality<sup>a</sup>

Gini coefficient for equivalised household private, gross and disposable income, 2000-01 to 2021-22



**a.** Private income is equal to labour plus capital income. Gross income is equal to private income plus transfer income. Disposable income is equal to gross income less income taxes.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

transfer income by income decile, 2021-22

Importantly, transfers are well-targeted to lower-income households, with the bottom two deciles receiving almost half of all transfer income, and the bottom half receiving over 80% in 2021-22 (figure 2.7). In fact, the bottom two deciles receive most of their income from transfers (box 2.2).

a) Average equivalised household transfer b) % share of total equivalised household



#### Figure 2.7 – Most transfer payments go to lower-income households

income by income decile, 2021-22

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

There are several different types of payments that form total transfer income (figure 2.8).

#### Figure 2.8 – Disaggregating government cash transfers into categories<sup>a</sup>



**a.** There are a very small number of government transfers that do not easily fit into any of the above categories. However, these transfers make up a small proportion of overall transfer spending, and excluding them from our analysis of different transfer categories does not impact the results. The largest category by far is age-related payments – which is dominated by the Age Pension and trending up due to Australia's aging population – followed by family, disability and health, and JobSeeker/Newstart payments (figure 2.9).



Figure 2.9 – Aged-related transfers are the largest type of transfers<sup>a</sup>

Total government cash transfers by transfer category, 2010-11 to 2021-22

**a.** JobKeeper is not included as a transfer because it was paid to businesses that paid it to workers as part of their wages and salaries. Therefore, JobKeeper is captured in labour income rather than transfer income.

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

As discussed above, governments provided substantial support during the pandemic period, which led to greater volatility in some categories of transfers. This is mainly reflected in JobSeeker/Newstart transfers, which increased disproportionately compared to other categories early in the pandemic (figure 2.9). The number of JobSeeker recipients increased as unemployment rose at the start of the pandemic and eligibility requirements were loosened, combined with a large increase in transfers received due to the Coronavirus Supplement (AIHW 2021).

Other categories grew but not to the same extent as JobSeeker/Newstart transfers. In particular, the Coronavirus Supplement was also paid to recipients of Youth Allowance (AIHW 2021), resulting in a large increase in youth and student transfers (figure 2.9). Additional economic support payments, while one-off and smaller than the Coronavirus Supplement overall, were also provided to recipients of other types of transfers, such as Age Pension recipients (Services Australia 2023).

Transfer payments received by different age groups and genders are respectively discussed in chapters 3 and 4.

# 2.2 Wealth inequality

The distribution of wealth is important because a person's wealth is a stock of economic resources that they can draw down to consume goods and services that support their wellbeing (section 1.1), even when they have little income. Wealth also provides people with a sense of financial security as it provides a buffer for households to meet their material needs in hard times. As such, analysing the distribution of wealth complements the analysis of how income is distributed (section 2.1). Given the substantial economic impacts of COVID-19, the Commission has focused on how wealth inequality changed over the pandemic period.

#### Wealth has increased significantly in recent years

Since the mid-2010s, households have experienced relatively high growth in wealth with particularly strong growth during the COVID-19 pandemic (figure 2.10).<sup>8</sup>



Figure 2.10 – Wealth has increased significantly in recent years

Average and median equivalised household wealth, 2002-03 to 2022-23

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22) and ABS's Survey of Income and Housing (SIH).

This increase was seen across the distribution with all deciles in HILDA experiencing an increase in wealth between 2018-19 to 2022-23 (figure 2.11).

<sup>&</sup>lt;sup>8</sup> The Commission has used HILDA as the main dataset for the analysis of wealth inequality as it is the only dataset available for wealth with recent data up to 2022-23. The wealth module in HILDA is only available every four years so it is not possible to analyse wealth inequality over individual years during the pandemic.



#### Figure 2.11 – Average wealth increased for all deciles throughout the pandemic Average equivalised household wealth by wealth decile, 2018-19 to 2022-23

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

#### Wealth inequality declined during the pandemic

Both HILDA and SIH data suggests that wealth inequality – as measured by the Gini coefficient – was relatively stable for the 2010s prior to the COVID-19 pandemic. However, the most recent wealth data available from HILDA suggests wealth inequality declined between 2018-19 to 2022-23 (figure 2.12).



Gini coefficient for equivalised household wealth, 2002-03 to 2022-23



a. Consistent with convention for estimating Gini coefficients, negative values are treated as zero.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22) and ABS's Survey of Income and Housing.

Wealth inequality declined because wealth grew much faster for the bottom half of the distribution compared to the top half, in percentage terms (figure 2.13), albeit from a much lower base (figure 2.11).





Average annual % change in equivalised household wealth, 2018-19 to 2022-23

a. The average wealth of the bottom decile grew from -\$14,000 to -\$11,236.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

#### Many components of wealth grew, but at different rates

Most Australians hold the majority of their wealth in owner-occupied housing and superannuation, but the bottom two deciles hold relatively more wealth in financial and vehicle assets (figure 2.14, panel a). Between 2018-19 and 2022-23, the bottom half of the distribution experienced relatively stronger growth than the top half in their financial and housing wealth (figure 2.14, panel b).

Combining the relative shares of wealth across the deciles and their relative growth rates, housing and superannuation were the largest contributors to the decline in wealth inequality over the pandemic period, while financial wealth contributed more modestly.



a) Share of wealth by component, 2022-23<sup>b</sup>

#### Figure 2.14 - Wealth grew strongly across different components<sup>a</sup>

b) Growth by wealth component, 2018-19 to 2022-23



**a.** Financial wealth includes funds in bank accounts, cash and equity investments, trust funds, life insurance and loans made to others. **b.** Wealth components with negative values were excluded from the figure. These were personal wealth for all deciles, as well as other property equity and business equity for the bottom decile. Personal wealth includes collectibles, credit card debt, HECS debt, overdue household bills, and other personal debt such as car loans, personal loans, investment loans and hire purchases.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

#### House prices soared during the pandemic

Despite low population growth during the pandemic period due to closed international borders, house prices grew substantially because of strong demand, with CoreLogic reporting that national house prices increased 29% in nominal terms between September 2020 and April 2022 (Owen 2023, p. 1).<sup>9</sup>

- Rising incomes (section 2.1) and large household savings (discussed below) increased people's ability to pay down a house deposit.
- Record low interest rates increased the borrowing power of buyers (KPMG 2021).
- The average household size declined during the pandemic, resulting in an increase in the number of households (Agarwal, Bishop and Day 2023, pp. 21–22).
- Demand for larger homes increased as people wanted more space in their homes as well as more suitable homes for working from home (Rowley et al. 2023, pp. 52–53).

This led to a significant increase in housing wealth across the distribution (figure 2.14, panel b). Surprisingly, however, growth particularly favoured the lower to middle deciles<sup>10</sup> as house prices generally

<sup>&</sup>lt;sup>9</sup> House price growth partially reversed as the Reserve Bank of Australia began raising the cash rate from May 2022, but this is not fully captured in the HILDA data. However, house prices still increased significantly even accounting for this reversal and did not decline much in some regions (Owen 2023, pp. 1–2).

<sup>&</sup>lt;sup>10</sup> The strong growth in housing wealth for the bottom two deciles is off a very small base given their low rates of home ownership. This means the large percentage increase in housing wealth did not increase their overall wealth much, nor did it reflect the experience of the vast majority of households in the bottom two deciles that do not own their homes.

grew faster in states and territories with relatively lower prices, as well as in regional areas compared to metropolitan areas (Owen 2023, p. 2).

This was partly because during the pandemic, many people moved from inner city suburbs to regional areas, supported by people's ability to work from home. These regions experienced relatively higher population growth, leading to greater demand for regional homes (Rowley et al. 2023).

Over the last two decades, the distribution of housing wealth has become more unequal. However, relatively higher growth rates in the housing wealth of lower to middle deciles during the pandemic meant that housing wealth became more equally distributed (figure 2.15), contributing to the decline in overall wealth inequality (figure 2.12). Davidson and Bradbury (2022, p. 30) also found 'the predominance of owner-occupied housing in wealth accumulation through the pandemic moderated overall wealth inequality'.<sup>11</sup>

#### **Figure 2.15** – Housing wealth has become more equally distributed in recent years<sup>a,b</sup> **Gini coefficients for equivalised owner-occupied housing wealth, 2002-03 to 2022-23**



**a.** Consistent with convention for estimating Gini coefficients, negative values are treated as zero. **b.** SIH estimates and trend are similar up to 2019-20.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

However, not everyone in the community is better off. While the growth in house prices benefits existing homeowners, it can lock more people out of home ownership and reduce housing affordability for those seeking to enter the housing market. This highlights the importance of examining the underlying causes of changes in inequality, and how these drivers could affect an individual's economic circumstances and overall wellbeing.

<sup>11</sup> Their data and methodology differ to the Commission's approach in this paper. They used SIH data for 2017-18 projected forward using the ABS National Accounts and focused on unequivalised household wealth with households as the unit of analysis. Although their finding that wealth inequality declined during the pandemic is consistent with the Commission's, they also found wealth inequality increased leading up to the pandemic whereas the Commission found wealth inequality to be relatively stable, which reflects differences in data and methodology.

#### Superannuation inequality is high but continues to moderate

Relatively higher superannuation balances among the top wealth deciles have historically been a significant contributor to overall wealth inequality. However, superannuation inequality has been on a long-term decline (figure 2.16), as people with less superannuation spend more time in the workforce accumulating funds. This declining trend continued during the COVID-19 pandemic and contributed to the reduction in overall wealth inequality over this period. But superannuation inequality remains relatively high, as demonstrated by a larger Gini coefficient than for overall wealth (figure 2.12).

Figure 2.16 – Superannuation inequality has been declining<sup>a,b</sup>





**a.** Consistent with convention for estimating Gini coefficients, negative values are treated as zero. **b.** SIH estimates and trend are similar up to 2019-20.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

Over the pandemic period, the Australian Government allowed eligible individuals to withdraw \$10,000 from their superannuation in 2019-20 and another \$10,000 in 2020-21 (AIHW 2021, p. 125). However, the amount withdrawn by people in lower-wealth households was a much larger proportion of their overall superannuation balance (Commission analysis of HILDA). As a result, superannuation inequality may have been expected to increase during the pandemic period.

But superannuation inequality has continued to decline (figure 2.16) despite these withdrawals by lower-wealth households. The effect of early withdrawals on superannuation inequality was limited because only a relatively small proportion of people withdrew superannuation – about 12% of the population (ABS 2024e; ATO 2023a) – and this was spread across the wealth distribution.12 As such, the change in superannuation inequality over the pandemic period was dominated by the continued longer-term declining

<sup>&</sup>lt;sup>12</sup> The early withdrawal of superannuation had little effect on aggregate superannuation inequality, but the Commission acknowledges it may materially affect the future wealth and retirement of those who withdrew superannuation during the pandemic.

trend driven by the maturing superannuation system and the contributions made by the lower deciles, which are larger relative to their existing superannuation balance.

However, more superannuation assets owned by the bottom half of the distribution and lower superannuation inequality may not provide a complete picture of the material wellbeing of these individuals. This is because:

- the very bottom deciles have extremely low wealth levels (figure 2.11), and so a large percentage increase in their wealth may not represent a material improvement
- while superannuation supports households during retirement, the size of superannuation balance increases for households in the middle of the wealth distribution is likely to overstate the contribution of superannuation in supporting these households during retirement, because a higher balance reduces the amount of Age Pension the household can receive upon retirement
- wealth held in superannuation is not generally available to younger people at times where it may better support their wellbeing, such as to invest in human capital formation during working age.

Superannuation continues to play an important role in supporting households during retirement, and the maturing superannuation system means lower-income Australians will have relatively more assets in retirement than previous generations. However, more work is needed to understand how the superannuation system has impacted the wellbeing of lower-income Australians over time.

#### Strong growth in financial wealth mainly reflects large household savings

Most of the growth in financial wealth over the COVID-19 period is explained by larger bank balances, which reflects the high household savings rate during the pandemic as incomes grew while lockdown restrictions limited consumption (figure 2.17). Growth in asset values (such as share prices), supported by low interest rates, also contributed to increasing financial wealth.

Financial wealth grew especially strongly for households in the bottom to middle deciles (figure 2.14, panel b). This reflected the lower base of savings held by these households, which meant that the increase in the savings rate that occurred during the pandemic resulted in a disproportionately large increase in the size of their deposits. In addition to building their financial wealth through their bank deposits, higher income and savings also supported low-wealth households to improve their personal wealth by paying down their debts, such as credit card and other personal debts.



#### Figure 2.17 – The household savings rate rose during the pandemic

Household saving ratio, seasonally adjusted, 2015 to 2023

**a.** The household saving ratio refers to the percentage of household net disposable income that households save. It is calculated as household net saving as a percentage of household net disposable income, and household net saving is calculated as household net disposable income less household final consumption expenditure. Source: ABS (2024a).

#### Further data on wealth inequality is needed

The Commission has relied on HILDA to conduct its analysis of wealth inequality as it was the only available dataset on household wealth that covered the pandemic period. However, different datasets use different methodologies for measuring wealth and can therefore yield slightly different results on wealth inequality. For example, SIH suggested there was a slight increase in wealth inequality throughout the 2000s, while HILDA indicated wealth inequality was relatively stable (figure 2.12).

As discussed in section 2.1, economic conditions have continued to change as Australia recovers from the pandemic. For example, the high household savings ratio – which led to significant increases in financial wealth across the distribution – has since declined, as rising interest rates and costs of living have put significant pressure on households. The Commission's analysis therefore does not capture more recent experiences of households and the implications for wealth inequality.

Given current data limitations, analysis of wealth inequality should be revisited as more data becomes available. This will provide more clarity on the effects of the pandemic and subsequent recovery.

## 2.3 Measures of potential and actual consumption

#### Wealth-adjusted income provides an indication of ability to consume

While the analysis so far has examined income and wealth separately, in reality, an individual's ability to consume over their lifetime is jointly determined by their income and wealth. Individuals with low incomes can increase consumption by borrowing against assets, consuming their wealth stock directly or converting their wealth into income streams to finance consumption. The absence of wealth or presence of debts can make an otherwise high-income individual more vulnerable to income shocks.

Households with higher income tend to accumulate more wealth, but there are some exceptions (figure 2.18). For example, according to HILDA data:

- 13% of those in the lowest income quintile in 2021-22 were in the highest wealth quintile in 2022-23
- 5% of those in the highest income quintile in 2021-22 were in the lowest wealth quintile in 2022-23.

This indicates that there are certain groups of people who have high income and low wealth (e.g. young workers with student debt) or low income and high wealth (e.g. retiree homeowners), for whom separate income and wealth measures may be a poor representation of overall material wellbeing.



Figure 2.18 – Income and wealth are not perfectly correlated

Share of 2021-22 income quintiles in 2022-23 wealth quintiles

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22)

Looking at both income and wealth combined could help to get a better sense of people's ability to maintain a standard of living and ability to respond to a financial shock. One way to do this is through a 'wealth-adjusted income' measure. Wealth-adjusted income is calculated by converting net wealth to a series of yearly income payments (known as annuitised wealth), which is then is added to annual disposable income. Any income from assets is excluded from disposable income to avoid double counting when annuitised wealth is added (figure 2.19).





a. All income and wealth values are at the equivalised household level.

Measures of wealth-adjusted income do not predict how people actually consume, but rather look at the theoretical level they could consume at, given their income and wealth resources. The two methods for estimating wealth-adjusted income vary on the extent to which people are assumed to draw down their wealth over time, thereby producing upper and lower bounds for this measure.

- The lifetime annuity method provides an upper bound for the level of consumption a household could support using their income and wealth. It assumes they consume the entirety of their wealth at a constant rate over the remainder of their lives, leaving behind no inheritance. The value of annuitised wealth will differ depending on the expected lifetime of the household responding person, type of assets and debts held and the value of these assets and debts.<sup>13</sup>
- The fixed rate method, which provides a lower bound, assumes that households receive a fixed return on their assets and debt that can be used to fund consumption, but that they do not deplete their stock of wealth at the end of their expected lifetime. The value of annuitised wealth will not be affected by the age of the household responding person, but will be affected by the type and value of assets and debts held.

Regardless of the method used, estimates of the Gini coefficient for equivalised wealth-adjusted income measures have remained relatively constant between 2017-18 and 2021-22. The wealth-adjusted income Gini coefficients are slightly higher than estimates of the Gini for equivalised disposable income (figure 2.20). This partly reflects the fact that wealth is more unequally distributed than income. Moreover, the gap between income and wealth-adjusted income is particularly pronounced for cohorts that sit in different positions on the income and wealth distributions (for example, people with relatively low income and relatively high wealth, as described above). This is discussed further in chapter 3's analysis on inequality across different age groups.

<sup>&</sup>lt;sup>13</sup> Annuitised value of a class of assets or liabilities using the lifetime annuity method is given by the following term:  $\left[\frac{r}{1-(1+r)^{-n}}\right]A_t$  where *r* is the real rate of return for the group of assets or liabilities, *n* is the length of annuity (expected age of death of household responding person minus their current age) and  $A_t$  is the equivalised value of the group of assets or liabilities at time *t*. Annuitised wealth of a household is the sum of the annuitised assets, less annuitised liabilities. The lifetime annuity approach is based on Weisbrod and Hansen (1968).
### Figure 2.20 – Wealth-adjusted income is distributed more unequally than disposable income<sup>a,b,c</sup>

0.6 Wealth 0.5 **Bini coefficient** Wealth-adjusted income 0.4 (lifetime annuity) Wealth-adjusted income (fixed rate) 0.3 **Disposable income** 0.2 2001-02 2005-06 2009-10 2013-14 2017-18 2021-22 Year

Gini coefficients for equivalised disposable income, wealth and wealth-adjusted income

**a.** Consistent with convention for Gini coefficients, negative values are treated as zero. **b.** Analysis excludes individuals who are 92 or older since the lifetime annuity method of calculating wealth-adjusted income assumes the age of death to be 92. This is based on ABS (2023d) life expectancy figures, which estimate that the average life expectancy of people aged 85 is 6.5 years for women and 7.5 years for men. **c**. Estimates of wealth-adjusted income for a given year are calculated using yearly income from the preceding financial year and current value of wealth in the following financial year.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

## Expenditure captures the actual decisions of individuals, given their economic resources

Private expenditure provides a measure of how people spend their income and wealth on goods and services, which in turn impacts their wellbeing.<sup>14</sup> This means it is important to look at expenditure to understand economic inequality, as there is typically a gap between people's income and consumption in any given period (PC 2018, p. 26).

While HILDA covers the majority of private expenditure on goods and services, some types of expenditure are omitted.<sup>15</sup> The HILDA data shows that differences in expenditure, which reflect goods and services

<sup>&</sup>lt;sup>14</sup> Some goods and services are also directly distributed by government (e.g. public health and education, also known as 'in-kind transfers') and thus not captured in private expenditure. These goods have an equalising effect on consumption because while there are disparities in private expenditure, government services like health and education are broadly accessible. A complete measure of final consumption would also include these in-kind transfers, but this paper is only able to analyse private expenditure (using HILDA data) because expenditure data including in-kind transfers is only available up to 2015-16 (from the ABS's Household Expenditure Survey).

<sup>&</sup>lt;sup>15</sup> Expenditure data in HILDA consists of a range of categories such as food, clothing and healthcare. Imputed rent is also included as 5% of home value for non-renters, following Yates (1994) and Saunders and Siminski (2005). However, HILDA does not capture expenditure on consumer durables, travel and a number of other miscellaneous items such as animal expenses, sporting fees and gardening products (Summerfield et al. 2023; Wilkins and Sun 2010). This means

consumed, are lower than differences in income (figure 2.21). This suggests that people on lower incomes spend a higher proportion of their income meeting basic needs, while people on higher incomes might be able to save more for retirement and the future.



Gini: 0.32 Gini: 0.28 \$150,000 \$150,000 Expenditure Income \$100,000 \$100,000 \$50,000 \$50,000 \$0 \$0 2 3 5 6 7 8 9 10 1 2 3 4 5 6 7 8 9 10 1 4 **Expenditure decile Income decile** 

Income and expenditure by decile, 2021-22<sup>a,b</sup>

**a.** Private expenditure is underestimated as HILDA does not capture all expenditure categories. However, these findings are broadly consistent with analysis conducted in the Commission's 2018 *Rising Inequality* report, which was able to examine final consumption using more complete data from the HES (PC 2018, p. 65). **b.** Dollars are indexed to 2022-23.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

private expenditure is underestimated and expenditure inequality is also likely to be underestimated because those on higher incomes are more able to spend on luxuries such as consumer durables and travel. Despite these missing components of private expenditure in HILDA, the results of our analysis are broadly consistent with earlier findings in the Commission's 2018 *Rising Inequality* report, which was able to undertake analysis of final consumption using more complete data from the HES (PC 2018, p. 65).

# 3. Income, transfers and consumption capacity by age

#### Key points

- Income measures alone may overstate inequality between age groups. Combining income and wealth as a measure of total economic resources available for consumption indicates higher levels of economic wellbeing for older Australians than is suggested by income comparisons.
  - Average disposable income for those under 25 and over 65 are lower than other age groups. However, average levels of wealth tend to increase with age, and wealth can be used to smooth consumption over time. Measures of wealth-adjusted income are higher for older cohorts.
- People over 65 are over-represented in low-income deciles but maintain high expenditure relative to other age groups.
- People over 65 receive the highest level of average government transfers out of any age group, while those aged between 15 and 24 receive the lowest.
  - People over 65 mainly receive age-related payments such as the Age Pension, while those under 25 mainly receive youth and student-related payments such as Youth Allowance.
- Other age groups receive similar levels of average transfers, despite spanning different life stages. The likelihood of receiving different types of government transfers changes over an individual's life cycle.
  - Family-related payments, such as the Family Tax Benefit and Parenting Payments, make up the majority of average transfers received by those aged between 25 and 44.
  - Average disability and health-related transfers as well as carer payments tend to increase with age.

#### 3.1 Variations in income and transfers across age groups

Economic needs and challenges vary considerably across different age cohorts. Exploring how economic resources are distributed across age groups helps improve our understanding of whether these different needs are being met, how policy settings influence variations between age groups, and how different sources of income – such as labour income and government support – change over the life cycle.

#### Incomes rise throughout working age, then fall into retirement ...

Most people enter the workforce at a relatively young age, gain work experience and receive new job opportunities over their adult life, before reducing hours or retiring at an older age. This leads to predictable income differences across age groups.<sup>16</sup> Those aged between 45 and 54 have the highest average incomes and pay the most in tax, while the youngest and oldest cohorts have the lowest (figure 3.1). On average, disposable income for those aged between 45 and 54 was around \$74,500 in 2021-22, compared to \$35,000 for those between 15 and 24<sup>17</sup> and \$33,000 for those over 65.



#### Figure 3.1 – Disposable income is highest for those aged between 45 and 54<sup>a</sup>

Average disposable income before and after tax, by age group, 2021-22

a. Black dot represents unequivalised individual disposable income (after taxes and transfers).

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

## ... but those over 65 receive higher average government transfers than any other age cohort

People aged 65 years and over received almost \$14,000 in government transfers on average per person in 2021-22, around three times more than other age groups (figure 3.2).<sup>18</sup> Most age cohorts below 65 received

<sup>16</sup> Chapters 3, 4 and 5 compare income and other measures between and within groups. Unlike chapter 2, these chapters use unequivalised income instead of equivalised income (see section 1.2). This is because we do not want to mask gaps that exist between groups by attributing one group's income to another.

<sup>17</sup> These disposable income averages do not include individuals who do not file a tax return or receive government transfers. Many young people studying full-time might fall into this category and earn little to no income. Therefore, if we were to include all full-time students including those earning little to no income, this average would be lower for those aged between 15 and 24.

<sup>18</sup> Here, we use population data as the denominator for average transfers. When examining average government transfers between groups, we want to include people with average transfers equal to zero to get a sense of total government payments received by that group.

relatively similar levels of average transfers, despite spanning various different life stages. Those aged between 15 and 24 received the lowest average transfers.

Many demographic factors help explain why some age groups are receiving similar or higher levels of average transfers, such as what types of payments the different groups receive (see figure 2.8 for definitions of transfer payment categories).

- The vast majority of transfers received by those over 65 are from age-related payments, in particular the Age Pension.<sup>19</sup>
- Family-related payments make up the majority of average transfers received by those aged between 25 and 44. Family-related payments are highest for this age group as they tend to be received by people with young children in their household.
- Youth and student payments (mainly Youth Allowance) is the largest transfer category for those under 25. The amount paid depends on various factors such as whether a young person lives at home with their parents and potentially relies on other household members for income.
- Average disability and health-related payments as well as carer payments increase across age groups, with the exception of those over 65. People over 65 typically roll off other transfer types onto the Age Pension; for example, because the Age Pension potentially offers a higher rate of payment and no requirement for specific eligibility checks (e.g. medical reviews) that other payments may need (Cai, Vu and Wilkins 2007; Services Australia 2022).

## Figure 3.2 – People over 65 receive far more government transfers than any other age group<sup>a,b</sup>



Average transfers by transfer type and age group, 2021-22

**a.** Average government transfers out of the entire population for each age group (including people that did not receive any government transfers). **b.** In-kind transfers are not captured.

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

<sup>19</sup> Age-related payments do not include government support for residential aged care or home care packages.

#### **3.2 Measures of potential and actual consumption suggest less inequality between age groups**

The above analysis focuses on only income and not wealth. But individuals can use changes in wealth to smooth consumption over their lifetime, which may involve borrowing when income is low (for example, taking on study debt to invest in their education) and saving when income is high (for example, building savings for retirement throughout their working life).

Variations in wealth by age group differ from variations in income, as average wealth tends to increase with age and wealth levels are at their highest for older Australians in their pre-retirement and retirement years (figure 3.3, panel a). Moreover, the wealth of people aged 65 and over has tended to grow at a higher rate than younger groups over the past two decades (figure 3.3, panel b). As such, wealth-adjusted income (introduced in section 2.3) provides an alternate method of assessing economic wellbeing for different age groups.<sup>20</sup>

#### Figure 3.3 – Older people have higher wealth levels

Average equivalised household wealth by age group, 2022-23, and average annual % change in wealth, 2002-03 to 2022-23ª



**a.** Change in wealth by age group in 2022-23 is calculated relative to people of the same age group in 2002-03. It does not track changes in wealth experienced by the same set of people over time.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

Economic wellbeing as measured by wealth-adjusted income is generally higher for older cohorts, depending on the extent to which individuals are assumed to deplete their wealth by the end of their lifetimes (figure 3.4; refer to chapter 2 for a more detailed explanation on assumptions made under different methods for estimating wealth-adjusted income).

<sup>&</sup>lt;sup>20</sup> Unlike earlier analysis in this chapter that used unequivalised individual income, measures of income and wealth-adjusted income used in this section are based on equivalised household measures since total wealth is only available at the household level in the HILDA survey.

- A reasonable lower bound estimate of consumption possibilities is represented by the fixed rate method of calculating wealth-adjusted income, which assumes that people convert wealth to income using fixed rates of returns for different assets.
- The lifetime annuity method of calculating wealth-adjusted income represents the theoretical upper bound at which individuals could potentially consume, if they left behind no inheritance. Economic wellbeing is particularly higher for people aged 65 and over under the lifetime annuity method, due to their relatively high wealth levels and the fact that older people have fewer years of consumption left to finance.

### Figure 3.4 – Economic wellbeing of older cohorts depends on how much wealth people are assumed to deplete by the end of their lifetime<sup>a,b,c</sup>

Mean equivalised household wealth-adjusted income (lifetime annuity method and fixed rate method) by age group, 2021-22



**a.** Results are only presented for those between the ages of 25 and 91. **b.** All measures are at the equivalised household level. **c.** Yearly disposable income between 2021-2022 and the current value of wealth in 2022-23 are used to calculated wealth-adjusted income.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

In this context, income measures that do not also account for wealth tend to underestimate the material wellbeing of older people, especially those who are aged 65 and over (figure 3.5). People above the age of 65 make up 52% of the bottom income decile but only 26% of the bottom wealth-adjusted income decile.<sup>21</sup> Since people above the age of 65 make up around 25% of the sample<sup>22</sup>, the elderly are not disproportionately represented at the bottom of the wealth-adjusted income distribution. At the other end of the distribution, while people above 65 make up only 11% of the top income decile, they represent close to a third of the top wealth-adjusted income decile.

<sup>&</sup>lt;sup>21</sup> Wealth-adjusted income deciles are calculated using the average of the life annuity and fixed rate methods of calculating wealth-adjusted income.

<sup>&</sup>lt;sup>22</sup> People who are 92 or above, or under the age of 25 are excluded from the sample used to calculate wealth-adjusted income deciles.

## Figure 3.5 – Wealth-adjusted income indicates that older age groups are better off than income suggests $^{\rm a,b,c}$

Share of age groups in the bottom and top decile for equivalised disposable income and wealth-adjusted income, 2021-22



**a.** Results are only presented for those between the ages of 25 and 91. **b.** Wealth-adjusted income (WAI) deciles are calculated using the average of the life annuity and fixed rate methods of calculating wealth-adjusted income. **c.** Income deciles are calculated using equivalised disposable income data from 2021-22. Wealth-adjusted income deciles are calculated using equivalised disposable income data from 2021-22 and equivalised wealth data from 2022-23.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

Comparing income and private expenditure (as defined in section 2.3) by age provides evidence that older people use some of their wealth to fund consumption in retirement, despite having lower incomes. Those aged 65 plus are over-represented in low income quintiles but also over-represented in high expenditure quintiles (figure 3.6).<sup>23</sup> This suggests that those aged 65 plus have more resources at their disposal than their incomes suggest. Some may use some of their wealth to maintain private expenditure levels, despite having relatively low income in retirement. There is also additional government support in the form of goods and services for older Australians, primarily residential aged care support and home-based aged care packages.

<sup>&</sup>lt;sup>23</sup> While this analysis has only been undertaken for private expenditure as measured using HILDA, which is missing data on a small share of expenditure (see section 2.3 for details), it is broadly consistent with earlier findings on final consumption in the Commission's 2018 *Rising inequality* report (PC 2018, p. 66).



#### Figure 3.6 – Across age groups, expenditure does not always track income

Proportion of age group in each income or expenditure quintile, 2021-22<sup>a</sup>

#### Expenditure



**a.** In a world without differences between age groups, 20% of each age group would fall into each income or expenditure quintile. Where more or less than 20% fall into a specific quintile, that age group is over- or under-represented.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

#### 4. Income, transfers and wealth components by gender

#### **Key points**

- 🛞 Women have lower disposable income than men, with the largest gaps at the top of the income distribution.
  - · Income differences between genders are influenced by many factors, including that women take on relatively more caring responsibilities than men, as well as occupational and industry segregation.
- Although women are under-represented at the top of the income distribution, the proportion of women in the top three income deciles has increased over the last decade.

Women receive more government transfers than men, mainly driven by higher family, age and carer payments.

- · However, the proportion of women receiving government transfers has reduced over time. This has been largely driven by a decrease in the proportion of women receiving family-related payments.
- 🛞 Men tend to have higher assets and debts than women. For example, men tend to have higher superannuation balances than women, with this gap opening at an early age.
  - · The superannuation gender gap reflects women's lower average lifetime earnings and increased likelihood of working part time or spending time out of work due to caring responsibilities.

#### 4.1 Income snapshot by gender

Breaking down measures of economic resources by gender helps improve our understanding of the differences that exist between cohorts, what could be driving such differences, and how they have changed over time. It is also important to understand who will be impacted most by changes in government policy; for example, changes to the levels of or eligibility for particular types of government transfers.

#### Women earn less than men, particularly at the top of the income distribution ...

There are well-documented differences in income between men and women in Australia. The gender pay gap in Australia based on full-time salaries was 12% in February 2024. This goes up to around 22% once other sources of income are accounted for, such as overtime and bonuses (but not transfer income from government payments), as well as annualised full-time equivalent salaries of part-time and casual workers (WGEA 2024). While these estimates of the gender pay gap control for differences in working hours, they may reflect other factors such as differences in occupational patterns and working patterns across the lifecycle. Other countries also experience clear income gaps between genders, with Australia's gender pay gap lower than the OECD average (OECD 2024a).

Once taxes and government transfers are taken into account, average disposable income<sup>24</sup> for women over the age of 15 in Australia was around \$49,000 in 2021-22, compared to \$62,000 for men. Note that these estimates are not a like-for-like comparison with the above statistics on the gender pay gap, as they include government payments and do not control for differences in hours worked between genders.<sup>25</sup>

Men have higher disposable income than women across each income decile, with the highest gaps (in level terms) in the top income decile (figure 4.1). Average income in the top decile of the male income distribution was \$193,000 in 2021-22, compared to \$137,000 in the top decile for women.

#### Figure 4.1 – Women have less disposable income than men across all income deciles<sup>a,b</sup> Average disposable income by gender and income decile, 2021-22



**a.** Unequivalised individual disposable income (after taxes and transfers). **b.** Income deciles calculated separately for men and women.

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

A significant driver of gender income differences that has been established in the literature is that women take on relatively more caring responsibilities than men (ABS 2022d; Kleven, Landais and Søgaard 2019). Mothers have lower labour force participation than fathers (particularly when the child is under five years old)

<sup>24</sup> Chapters 3, 4 and 5 compare income and other measures between and within groups. Unlike chapter 2, these chapters use unequivalised income instead of equivalised income (see section 1.2). This is because we do not want to mask gaps that exist between groups by attributing one group's income to another.

<sup>25</sup> These estimates are based on administrative data covering women and men who received disposable income (after-tax and counting government cash transfers) in 2021-22, including those receiving government transfers only, as recorded in the Person Level Integrated Data Asset (PLIDA). Unlike some other income comparisons by gender, this data is not filtered to full-time workers and does not adjust for hours worked by part-time and casual workers. Due to small sample sizes, data for people identifying as non-binary or other genders has not been included in this analysis.

and 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). Women also experience a larger and more persistent drop in earnings after the arrival of a child compared to men, even if they are the higher income earner (Bahar et al. 2023). Furthermore, 83% of one-parent families are single mother families (ABS 2023c), who are less likely to be employed (AIFS 2023) and more likely to rely on certain types of government support such as the Parenting Payment Single.

Another driver of income differences between women and men is segregation into different occupations and industries (Cortis et al. 2023; KPMG 2022). Female-dominated industries, such as health care and education, typically attract lower pay than male-dominated industries. Occupations with limited flexibility that reward long hours are disproportionately worked by men and have large gender wage gaps (Sobeck 2022). That said, recent research has found that men and women choosing to work in different occupations with different pay rates accounts for about one-fifth of the gender wage gap, with the majority of the gap explained by pay differences within the same occupation (Dwyer and Griselda 2024).

## ... however, the share of women in top deciles has increased over time

Women are over-represented in the low- and middle-income deciles, while men are over-represented in the top deciles.<sup>26</sup> However, the proportion of women in the top income deciles has trended upwards over time (figure 4.2). Only 5.4% of women were in the top income decile in 2010-11, and this gradually increased to 6.1% in 2021-22. This is consistent with broader economic trends by gender: women's labour force participation has increased over the last 40 years (Australian Government 2023) and the gender pay gap has also declined over time, from 28.6% in November 2014 to 21.7% in November 2023 (WGEA 2024).

<sup>&</sup>lt;sup>26</sup> Here, income deciles are calculated using the entire population of Australians receiving disposable income over the age of 15 (both men and women together), so as to compare how each gender is represented in the deciles compared to the population. In a world without income differences between genders, 10% of women and 10% of men would be in each decile. Note that this method for calculating deciles is different to the income deciles used in figure 4.1, which calculates deciles separately for each gender.

## Figure 4.2 – Women are under-represented in the top income deciles, although there has been some improvement over time<sup>a</sup>

% of women in each income decile<sup>b</sup>



**a.** Income deciles calculated using unequivalised individual disposable income (after taxes and transfers) for the whole population (including both women and men). **b.** In a world without income differences between genders, 10% of women and 10% of men would be in each decile. Where more or less than 10% fall into a specific decile, that gender is over- or under-represented.

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

#### 4.2 Gender differences in transfer payments

#### Women receive more government transfers than men ...

In 2021-22, average transfers to women were around \$7,800 compared to around \$5,000 for men (figure 4.3).<sup>27</sup> This difference is mainly driven by higher family, age, and carer transfer payments received by women compared to men (see figure 2.8 for definitions of transfer payment categories). Higher transfers to women reduce the disposable income gap between genders. On average, pre-transfer income for men is around 30% higher than for women, with this disposable income gap reducing to around 22% once government transfers are included.<sup>28</sup>

<sup>&</sup>lt;sup>27</sup> Here, we use population data as the denominator for average transfers. When examining average government transfers between groups, we want to include people with average transfers equal to zero to get a sense of total government payments received by that group.

<sup>&</sup>lt;sup>28</sup> Unlike other measures of income gaps between genders, these statistics focus on all individuals that receive disposable income (not just full-time workers) and do not control for differences in hours worked.



## Figure 4.3 – Women receive more government transfers than men, particularly family-related payments<sup>a,b</sup>

Average transfers by gender and transfer type, 2021-22

**a.** Average government transfers are calculated across the entire population for each gender (including people that did not receive any government transfers). **b.** In-kind transfers are not captured.

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

The largest difference in average transfers received between the two genders is from family payments. On average, women received \$2,300 in family-related government transfers in 2021-22, eight times more than men.<sup>29</sup> This gap is likely influenced by the disproportionately high level of caring responsibilities undertaken by women, as discussed above (section 4.1).

It is important to note that for some family-related payments such as the Family Tax Benefit, only one member of a couple is eligible at a time (DSS 2021). So, for some families that redistribute income within the household, this gap may not have a material impact on the disposable income of individual household members.

However, research has shown that who receives income within a household matters, impacting various individual outcomes such as time spent doing housework (Lyonette and Crompton 2015; Magda, Cukrowska-Torzewska and Palczyńska 2024) and involvement in financial decisions (Hitczenko 2016). Who receives income within a household is also important in the case of separation. Women have much higher decreases in income and a higher chance of being in poverty after a divorce compared to men (Leopold 2018).

Women are more likely to receive the Age Pension and other transfers in retirement than men. Around 44% of women over 55 receive age-related transfers, compared to 40% of men in this age group. For these women that do receive age-related payments, the dollar amounts are typically higher: the average age-related transfer to women receiving such payments was around \$18,300 in 2021-22, compared to \$16,400 for men receiving such payments.<sup>30</sup>

<sup>&</sup>lt;sup>29</sup> This gap between women and men is mainly driven by differences in Family Tax Benefits and Single Parenting Payments.

<sup>&</sup>lt;sup>30</sup> These averages differ from the orange bars in figure 4.3 since they focus only on those receiving age-related payments as opposed to the entire population of women and men.

The difference in age-related transfers likely reflects the accumulated impact of income disparities between genders, leading to large differences in retirement savings and superannuation balances. On average, men have far higher superannuation balances than women (figure 4.6 in section 4.3). Lower average superannuation balances and retirement savings increases the likelihood of women requiring the Age Pension in retirement. Demographic factors, such as longer life expectancy for women, play less of a role in explaining Age Pension differences between genders.

#### ... but fewer women are now receiving transfers

The proportion of women receiving government transfers declined from 51% in 2010-11 to 42% in 2021-22 (for men, the shares were 32% in 2010-11 and 30% in 2021-22) (figure 4.4). This trend partly reflects higher employment leading to a decreased reliance on government transfers: the employment-to-population ratio<sup>31</sup> for women increased from 56% in January 2011, to 60% in January 2024 (ABS 2024d). Higher employment and earnings likely reduce the amount of government transfer payments received by some women.

### Figure 4.4 – The proportion of women who receive government transfers has declined over time<sup>a</sup>



% of women and men who receive government transfers, 2010-11 to 2021-22

a. In-kind transfers are not captured.

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

Changes in eligibility for certain types of government transfers have also contributed to a lower share of women receiving transfer payments over time. In particular, the proportion of women receiving family payments has declined over the past decade (figure 4.5). This could reflect:

<sup>&</sup>lt;sup>31</sup> The employment-to-population ratio provides a measure of employment relative to the size of the population. Ratios used here are seasonally adjusted. There was a large drop in this ratio over the COVID-19 pandemic period, but it has since returned to its pre-COVID-19 trend.

- changes to parenting payments (both the Parenting Payment Single and Parenting Payment Partnered) in 2013 where, regardless of when payment commenced, recipients could only receive parenting payments until their youngest child turned 8 years old for single recipients and 6 for partnered recipients
  - however, in 2023 the Australian Government expanded eligibility to single parents, increasing the maximum age from 8 to 14 years old (Australian Government 2023). This policy change could reverse some of the declining trend in family payments over the coming years
- changes to the eligibility requirements for Family Tax Benefits over the last 15 years, such as changes to the upper age limit for a young person to qualify as a dependent child.

Consistent with this, the Australian Institute of Health and Welfare has reported a decline in parenting payments received by women over time,<sup>32</sup> likely impacted by labour market conditions and changes in eligibility (AIHW 2023c).

## Figure 4.5 – A lower share of women receive family payments now compared to 10 years ago<sup>a,b</sup>



% of people receiving transfers, by transfer type and gender

**a.** In-kind transfers are not captured. **b.** Shaded region represents years affected by COVID-19. Source: Commission estimates using linked ATO Personal Income Tax, DSS government payment, and ABS derived demographics data in the Person Level Integrated Data Asset (PLIDA).

#### 4.3 Men tend to have more assets and debts than women

The difference in total wealth between men and women is challenging to measure as it is difficult to individually allocate assets and debts that are jointly held within a household (such as property and mortgages). However, examining assets and debts that are individually owned illustrates gender differences for some components of wealth.

<sup>&</sup>lt;sup>32</sup> Parenting payments to men have also marginally decreased over time, although women make up the vast majority of all people receiving parenting payments (in level terms, the decrease for women is far larger).

Average superannuation balances for men are 44% higher than the average for women. This gap is already pronounced for people of prime working age, between 35 and 44 years old, and widens further (in level terms) approaching retirement (figure 4.6). In essence, the superannuation gap never closes. The superannuation gender gap reflects women's lower average lifetime earnings and increased likelihood of working part time or spending time out of work due to caring responsibilities. Women with lower superannuation balances are likely to receive higher Age Pension transfer payments from the government in retirement (section 4.2).

The factors that underpin the superannuation gender gap also likely contribute to men having higher bank deposit balances than women. Men's average bank balances are 15% higher than women's (Commission analysis of HILDA). However, it is worth noting that many assets, including bank balances, can be jointly owned by people of different genders, such as married couples or those in a relationship. Couples can hold cash in individual or joint bank accounts and, on average, around 45% of total bank balances in couple households are held in a joint account.



#### Figure 4.6 – The superannuation gender gap opens early, and never closes Average individual superannuation balance, by age and gender, 2022-23

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

Average levels of personal debt tend to be higher for men than women. Excluding credit card and study debt, men's average other personal debt is 2.2 times higher than women's (figure 4.7).<sup>33</sup> This could reflect various factors, such as how income disparities impact individuals' borrowing capacity, differences in financial literacy and confidence, and behavioural differences in risk preferences and spending priorities.

Conversely, average study debt for women is 36% higher than for men (figure 4.7). This potentially reflects greater participation by women in higher education: in 2023, 36% of women aged 15-74 held a Bachelor

<sup>&</sup>lt;sup>33</sup> Other individual debt includes car loans, hire purchase agreements, investment loans, personal loans from a bank/financial institution, loans from other lenders, loans from friends/relatives and overdue personal bills. However, these components are not disaggregated in HILDA, so it is not possible to separately identify which is driving higher other debt levels for men compared to women.

degree or above, compared to 28% of men (ABS 2023a). Another contributing factor is that lower average incomes for women (section 4.1) would lead to slower repayment of study debt, since repayment rates rise with income (ATO 2023b).



#### Figure 4.7 – Men have more personal debt than women<sup>a</sup>

Average individual debts by type and gender, 2022-23

**a.** Other individual debt includes car loans, hire purchase agreements, investment loans, personal loans from a bank/financial institution, loans from other lenders, loans from friends/relatives and overdue personal bills.

Source: Productivity Commission estimates using Melbourne Institute data (Household, Income and Labour Dynamics in Australia (HILDA) Survey, Release 22).

## 5. Inequality for Aboriginal and Torres Strait Islander people

#### **Key points**

- Income is a narrow measure of access to resources, and only one component of wellbeing. Current patterns of income inequality in relation to Aboriginal and Torres Strait Islander people originate in broader historical inequities, and should always be read in this context.
  - Aboriginal and Torres Strait Islander perspectives on wellbeing emphasise cultural determinants such as family and community, Country and place, cultural identity, language and self-determination.
- Aboriginal and Torres Strait Islander people's incomes improved early in the pandemic, then fell, partly due to the rise and fall in COVID-19 income support transfer payments.
- Remoteness is one determinant of Aboriginal and Torres Strait Islander incomes the more remote the location, the lower the average income. But there are also important differences in incomes depending on the state or territory.

\* The gender income gap is small for Aboriginal and Torres Strait Islander people.

Xounger working-age Aboriginal and Torres Strait Islander people are earning more than older people.

 This is likely to be driven by multiple factors, including higher education among younger Aboriginal and Torres Strait Islander people.

#### 5.1 Wellbeing encompasses more than income

Income is only one component of wellbeing. Wellbeing is a wider concept that encompasses interconnected aspects of health, cultural identity, quality of life and community connections. Aboriginal and Torres Strait Islander perspectives on wellbeing, in particular, emphasise cultural determinants such as family and community, Country and place, cultural identity, language and self-determination (Australian Indigenous HealthInfoNet 2024, p. 64).

A narrow focus on income inequality cannot account for the vital protective factor of connection to culture, which 'helps to alleviate the risk factors contributing to poverty and its impact on lives of Aboriginal and Torres Strait Islander people' (VACCA 2023, p. 42). According to Aboriginal Peak Organisations Northern Territory (2023), culture is 'everything', and restoration and preservation of Aboriginal languages, kinship,

cultural practices, ceremonies, laws/lore, and Country is vital to Aboriginal people enjoying the same rights as other Australians.

Income inequality, whether within Aboriginal and Torres Strait Islander communities or between Aboriginal and Torres Strait Islander and non-Indigenous people, is a single measure of relative access to resources. Income should be read as a partial measure<sup>34</sup> contributing to relative socioeconomic advantage or disadvantage, and in historical context. Income inequality between Aboriginal and Torres Strait Islander people and non-Indigenous people is due to inequility and a range of other dimensions of inequality, the drivers of which are not explored in this paper. While this paper focuses on the topic of income inequality and therefore presents a narrow measure, other work by the Commission such as on Closing the Gap (PC 2023b, 2024) and *Overcoming Indigenous Disadvantage* (SCRGSP 2020) provides a broader view.

Aboriginal and Torres Strait Islander-led research highlights the importance of understanding Indigenous wellbeing holistically, considering cultural factors alongside socioeconomic ones. Mayi Kuwayu, the National Study of Aboriginal and Torres Strait Islander Wellbeing, developed a new survey tool based on the priorities and perceptions of Aboriginal and Torres Strait Islander people (Bourke et al. 2022). Extensive community engagement in the Mayi Kuwayu study allowed six cultural domains to emerge and be tested for validity: connection to Country; beliefs and knowledge; language; family, kinship, and community; cultural expression and continuity; and self-determination and leadership (Bourke et al. 2022). By contrast, defining economic outcomes such as income inequality and poverty through Eurocentric lenses tend to 'sideline the immense richness of relationships, connection to nature and Country, culture and spirituality' (QAIHC 2023, p. 6). As such, while it is important that people have access to adequate resources, this is insufficient for ensuring wellbeing.

Aboriginal and Torres Strait Islander organisations identify the process of colonisation and subsequent policies of dispossession, protectionism and assimilation as the cause of complex disadvantage experienced by Aboriginal and Torres Strait Islander people (NACCHO 2023; VACCA 2023). Among these are disruption and denial of traditional economies, land stewardship and trade practices (QAIHC 2023, p. 7), historical wage theft which removed opportunities for wealth-building for Aboriginal and Torres Strait Islander people (QAIHC 2023, p. 7), and enduring economic exclusion due to racism and discrimination (IBA 2023, p. 7).

An integrated and systemic understanding of income inequality takes into account social determinants of health, education and employment outcomes, supply of affordable and suitable housing, systemic issues in child protection and justice systems, and unequal exposure to climate change impacts. Income inequality is both a *cause* of socioeconomic disadvantage across these domains, and the *effect* of current and past policies and practices (not least institutional racism). The National Agreement on Closing the Gap's socioeconomic targets are designed to track progress on factors that have an impact on life outcomes for Aboriginal and Torres Strait Islander people.

Self-determination is the foundation for Aboriginal and Torres Strait Islander people to pursue cultural, social, and economic rights (Verbunt et al. 2021). Several submissions by Aboriginal and Torres Strait Islander organisations to the Senate Community Affairs References Committee on the extent and nature of poverty in Australia concluded that improvements to outcomes for Aboriginal and Torres Strait Islander people will rely on self-determination (NACCHO 2023), shared decision-making with Aboriginal and Torres Strait Islander peoples (IBA 2023; QAIHC 2023, p. 17), Voice and empowerment (APO NT 2023), and healing and truth-telling to address intergenerational trauma (QAIHC 2023).

<sup>&</sup>lt;sup>34</sup> Income (median equivalised gross household income and median personal income) has been identified in the *National Agreement on Closing the Gap* as a contextual supporting indicator (still under development) for one of the 17 socioeconomic outcomes, strong economic participation and development of people and communities (Outcome Area 8).

The four Priority Reforms under the National Agreement on Closing the Gap are consistently identified by Aboriginal and Torres Strait Islander organisations and communities as the way to address structural drivers of poverty and create positive outcomes for Aboriginal and Torres Strait Islander people (NACCHO 2023, p. 8). Yet governments are not adequately delivering on this commitment (PC 2024). The Commission's 2024 review of progress under Closing the Gap and reporting on 17 socioeconomic outcomes under Closing the Gap should be read alongside this chapter.

#### 5.2 Changes in income during the pandemic

Census and survey data show Aboriginal and Torres Strait Islander people have lower incomes on average, and higher poverty rates, than other Australians<sup>35</sup>, reflecting the context of colonialism, dispossession and ongoing systemic issues discussed above. This chapter uses administrative data<sup>36</sup> on personal incomes to explore how the incomes of Aboriginal and Torres Strait Islander people changed during the COVID-19 pandemic, as well as a snapshot of income inequality among Aboriginal and Torres Strait Islander men and women, people of different ages, and people residing in different locations.<sup>37</sup>

This paper does not identify drivers of income inequality within Aboriginal and Torres Strait Islander populations or between Aboriginal and Torres Strait Islander people and other Australians. However, studies using survey<sup>38</sup> and Census<sup>39</sup> data show that income is associated with employment and formal educational attainment. Administrative data in other studies indicates that employment outcomes for Aboriginal and Torres Strait Islander people tend to be more linked to their education background compared to non-Indigenous people (Jobs and Skills Australia 2023, p. 20), emphasising the importance of accessible secondary and tertiary education in broadening employment opportunities.

In line with the significance of education and employment, the National Agreement on Closing the Gap outlines four outcome areas that are directly connected to these domains.<sup>40</sup>

<sup>40</sup> Outcome area 5 – Aboriginal and Torres Strait Islander students achieve their full learning potential; Outcome area 6 – Aboriginal and Torres Strait Islander students reach their full potential through further education pathways; Outcome area 7 – Aboriginal and Torres Strait Islander youth are engaged in employment or education; Outcome area 8 – Strong

<sup>&</sup>lt;sup>35</sup> For example, AIHW (2024) and Markham (2023) using Census data and Venn and Hunter (2018) using survey data from HILDA.

<sup>&</sup>lt;sup>36</sup> The administrative data used for this analysis in the ABS's Person Level Integrated Data Asset (PLIDA) includes ATO Personal Income Tax, DSS government payment and ABS derived demographics data. The ABS has derived an indicator for people identifying as Aboriginal and/or Torres Strait Islander using Medicare administrative data from Services Australia, Centrelink administrative data from DSS, and the Census.

<sup>&</sup>lt;sup>37</sup> As in the deep dives in chapters 3 and 4, this chapter presents findings for unequivalised disposable income in order to draw out the differences between ages and genders, and so cannot be directly compared to the equivalised household incomes presented in Chapter 2. Throughout this chapter, 'income' means the income that a person receives from a job, business or investment, plus any social security transfers they receive and less any income taxes they pay.

<sup>&</sup>lt;sup>38</sup> The 2018-19 National Aboriginal and Torres Strait Islander Health survey showed that income is associated with employment and educational attainment, with Aboriginal and Torres Strait Islander adults living in households in the lowest income quintile less likely than those in households in the two highest quintiles to be employed, have completed Year 12, and have a non-school qualification (AIHW 2024).

<sup>&</sup>lt;sup>39</sup> The employment rate of Aboriginal and Torres Strait Islander people consistently increases with higher levels of education. In 2021, Census data showed that Aboriginal and Torres Strait Islander people with a Bachelor degree or higher had the highest full-time employment rate (58%), while those with a year 9 education or below had the lowest (9%) (AIHW 2023b).

In addition to formal education and training, many Aboriginal and Torres Strait Islander people receive important skills not yet captured in large-scale data, including cultural education and specific skills and attributes taught in many Aboriginal and Torres Strait Islander communities such as resilience, systems thinking and conflict resolution (Jobs and Skills Australia 2023, p. 20).

Income does not record the significance and value of unpaid care work. Not only is this a valuable skill that has the potential to be remunerated, but devoting time to unpaid care may also contribute to fewer hours in paid work. Aboriginal and Torres Strait Islander women in particular provide significant unpaid childcare and disability care within families and communities. Across Australia, Aboriginal and Torres Strait Islander women do higher rates of unpaid work than any other group (Klein et al. 2023, p. 25).

According to the Centre for Indigenous Policy Research's work supporting *Wiyi Yani U Thangani* (Women's Voices), in women's stories, care repeatedly emerges as a source of personal and cultural strength. However, women's care loads are exacerbated by a number of social and historical factors. Their analysis found that care activities accounted for, on average, about 62% of women's time on a usual weekday (nearly 15 hours per day on average), with 48% of their time (11.5 hours) taken caring for others and/or caring for Country and culture (Klein et al. 2023).

## Aboriginal and Torres Strait Islander people's incomes improved early in the pandemic

The incomes of Aboriginal and Torres Strait Islander people rose early on during the COVID-19 pandemic. As was the case for all Australians (chapter 2), the increase in transfer payments provided as pandemic income support explains part of this rise. The subsequent fall in Aboriginal and Torres Strait Islander incomes observed later in the pandemic period partly reflects the withdrawal of these income supports as the economy recovered.

Average incomes of Aboriginal and Torres Strait Islander people were consistently lower than the Australian average between 2016 and 2022 (figure 5.1, panel a). The gap narrowed slightly during the COVID-19 years, but widened again in 2022. This was because income growth around the start of the pandemic period was relatively high for Aboriginal and Torres Strait Islander people on average – as was the fall in incomes in 2022 (figure 5.1, panel b).

The narrowing gap may be partly explained by changes in government transfer payments. While the proportion of Aboriginal and Torres Strait Islander people receiving payments remained largely unchanged through the pandemic period, income support rose more for Aboriginal and Torres Strait Islander people than the Australian average, particularly income support from JobSeeker/Newstart and youth or student payments. Another potential contributing factor to the narrowing income gap was the faster rebound of Aboriginal and Torres Strait Islander employment after an initial fall early in the COVID-19 period, helped by a lower reliance on hospitality jobs (Jobs and Skills Australia 2023, p. 38).

economic participation and development of Aboriginal and Torres Strait Islander people and communities. The Closing the Gap dashboard at www.pc.gov.au/closing-the-gap-data/dashboard shows the targets for each outcome area and how much progress has been made towards them.





a. Unequivalised individual disposable income (after taxes and transfers).

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

#### 5.3 Geography matters for Aboriginal and Torres Strait Islander incomes

#### **Remoteness contributes to lower incomes for Aboriginal and Torres Strait Islander people ...**

Where people live has a large bearing on income inequality. But the 'remoteness gradient' – the more remote the location, the lower the average income – is only seen for Aboriginal and Torres Strait Islander people.

Previous studies using Census data found a remoteness gradient for poverty among Aboriginal and Torres Strait Islander people. That is, Aboriginal and Torres Strait Islander poverty rates are lowest in major cities (22.9%) and increase consistently with remoteness, with the highest rates in remote (41.0%) and very remote (57.1%) areas (Markham 2023, p. 2). Census data shows no comparable remoteness gradient for poverty among non-Indigenous Australians (Markham 2023, p. 2).

Socioeconomic inequality – which includes employment, education and housing – is also spatially patterned. Within Aboriginal and Torres Strait Islander communities, where people live affects their relative socioeconomic advantage or disadvantage (Biddle and Markham 2023). Research using the Indigenous Relative Socioeconomic Outcomes Index between the 2016 and 2021 Censuses found worsening outcomes in much of remote Australia – especially in the Northern Territory, the Mount Isa region of Queensland, and West Kimberley (Biddle and Markham 2023, p. 11). Disparities in income between different states and locations, and potential reasons for these differences, are discussed further below.

Using administrative data on personal incomes, we find that the remoteness gradient holds for Aboriginal and Torres Strait Islander people's incomes in 2022: average incomes are lower for more remote locations (figure 5.2).





Low remote incomes reflect historical and ongoing policies, lack of government services and supports, and more limited access to jobs (CLC 2023, p. 7) and education (House of Representatives Standing Committee on Employment, Education and Training 2020) in remote parts of Australia.

**a.** Average unequivalised individual disposable incomes (after taxes and transfers). **b.** Locations are defined by the ABS. Source: Commission estimates using linked ATO Personal Income Tax, DSS government payment, and ABS derived

demographics data in the Person Level Integrated Data Asset (PLIDA).

For example, Jobs and Skills Australia (2023, p. 4) found employment among Aboriginal and Torres Strait Islander people in the labour force follows the remoteness gradient: the employment rate was 74% in major cities, 68% in inner and outer regional areas, 60% in remote areas and 51% in very remote areas. This remoteness gradient was not evident for non-Indigenous employment in very remote areas. And in Census data, more remote areas have a lower proportion of Aboriginal and Torres Strait Islander people in the labour force (39% in very remote areas compared to 65% in major cities in 2021) (AIHW 2023b). The Commission heard in our engagement that non-Indigenous workers were being flown into remote areas to do jobs or provide services that should be delivered in partnership with local communities.

People living in remote areas for personal and cultural connections to Country and community also face substantially higher costs of living and reduced access to services. In our engagement with Aboriginal and Torres Strait Islander people and organisations, the Commission heard that the Remote Area Allowance in particular has not kept pace with rising living costs. In a previous study, the Commission found that the Remote Area Allowance should be better targeted, and that this allowance can help to alleviate the higher living costs and less ready access to services that many income support recipients in very remote communities face (PC 2020).

Across many diverse regions, cultures and communities, Aboriginal and Torres Strait Islander people and organisations in remote areas are taking holistic approaches to improving living standards that consider health, employment, education, community development, language and social inclusion.

It is also important to keep in mind that there are significant numbers of people in poverty in major cities. The five locations in figure 5.2 have very different population counts – many more Aboriginal and Torres Strait Islander people live in major cities than remote areas.<sup>41</sup> And while average incomes are higher in major cities, there is also a wider range of incomes for Aboriginal and Torres Strait Islander people in major cities compared to very remote areas.

## ... but incomes vary by jurisdiction, even for remote and very remote locations

A more nuanced picture emerges when remoteness and jurisdictions are combined (figure 5.3). Not all remote and very remote locations are the same. In some jurisdictions, Aboriginal and Torres Strait Islander people living in remote and very remote locations have higher average incomes than Aboriginal and Torres Strait Islander people living remotely in other jurisdictions (with the Northern Territory and South Australia having the lowest average incomes for very remote locations).



Figure 5.3 – Not all remote areas fare the same

Aboriginal and Torres Strait Islander incomes by jurisdiction and location, 2021-22<sup>a,b,c</sup>

**a.** Some location types are not present in some states and territories. **b.** Unequivalised individual disposable income (after taxes and transfers). **c.** Locations are defined by the ABS.

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

There is considerable regional diversity across Australia, including among regions classified as 'remote' and 'very remote', as well as diverse communities and needs, and local histories. But differences between jurisdictions in income (along with jurisdictional differences in the 17 Closing the Gap socioeconomic outcomes) also reveal that state and territory policies matter, and implementation of governments' commitments under the Closing the Gap is essential.

<sup>&</sup>lt;sup>41</sup> Over a third (41%) of the Aboriginal and Torres Strait Islander population lived in major cities of Australia in the 2021 Census. One quarter (25%) lived in inner regional areas, 19% in outer regional areas, 6% in remote areas, and 9% in very remote areas (ABS 2023b).

## Incomes grew – and then fell – most sharply in very remote locations during COVID-19

The incomes of Aboriginal and Torres Strait Islander people remained relatively stable between 2016 and 2019. In this period, there were no significant differences in income changes between Aboriginal and Torres Strait Islander people living in major cities, regional or remote areas (figure 5.4).

However, during the COVID-19 years, incomes rose much more dramatically in very remote areas, before falling just as sharply in 2021-22 (figure 5.4). This could be due to pandemic income supports – there is a positive correlation between the remoteness of a region and the amount of transfers received by Aboriginal and Torres Strait Islander people in that region.

## Figure 5.4 – Aboriginal and Torres Strait Islander incomes rose and fell sharply in the COVID-19 period, especially in very remote areas

Change in disposable income for Aboriginal and Torres Strait Islander people, by location<sup>a,b</sup>



**a.** Unequivalised average individual disposable income (after tax and government transfers). **b.** Locations are defined by the ABS. Source: Commission estimates using linked ATO Personal Income Tax, DSS government payment, and ABS derived demographics data in the Person Level Integrated Data Asset (PLIDA).

#### 5.4 Age and gender inequality within Aboriginal and Torres Strait Islander incomes

## Aboriginal and Torres Strait Islander women earn almost as much as Aboriginal and Torres Strait Islander men

As for all Australians, Aboriginal and Torres Strait Islander men tend to earn higher incomes than Aboriginal and Torres Strait Islander women (figure 5.5). However, for Aboriginal and Torres Strait Islander people, the income gap between men and women is much narrower than it is across Australia as a whole. The incomes of Aboriginal and Torres Strait Islander men and women converged at the peak of COVID-19.

This finding is consistent with Jobs and Skills Australia's (2023, p. 1) finding that Aboriginal and Torres Strait Islander women were more likely to be employed than men, though their employment was more likely to be on a part time basis.

The data also shows that the income difference between Aboriginal and Torres Strait Islander incomes and the Australian average is much greater for men than for women (figure 5.5).

### Figure 5.5 – The Aboriginal and Torres Strait Islander gender income gap is lower than the gender income gap for all Australians

Aboriginal and Torres Strait Islander incomes and Australian incomes by gender<sup>a</sup>



a. Unequivalised average individual disposable income (after tax and government transfers).

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

## Younger working-age Aboriginal and Torres Strait Islander people have higher incomes than older working-age people

As for all Australians, Aboriginal and Torres Strait Islander people's incomes tend to rise sharply in early adulthood as more people join the workforce, peak for people of working age, and decline for people in their late 50s and 60s (presumably because they are exiting the workforce or working fewer hours). However, the highest average incomes for Aboriginal and Torres Strait Islander people occur at a younger age than the Australian average (figure 5.6). The largest difference is at 48 years of age.

### Figure 5.6 – Younger Aboriginal and Torres Strait Islander people are earning more than older people



Incomes by age, Aboriginal and Torres Strait Islander people and Australian averages, 2021-22 <sup>a</sup>

a. Unequivalised average individual disposable income (after tax and government transfers).

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

This pattern likely reflects a complex combination of socioeconomic factors and historical policy decisions, which have contributed to relative differences between younger and older Aboriginal and Torres Strait Islander people on a range of outcomes that affect incomes. These include differences in education levels, employment opportunities and health outcomes across Aboriginal and Torres Strait Islander people of different ages.

Educational attainment (Certificate III level certification or higher) is higher for 35 to 44 year olds compared with 45 to 65 year olds (Jobs and Skills Australia 2023, p. 21). Both the level and field of education are strongly linked with employment outcomes. Employment rates for Aboriginal and Torres Strait Islander people are highest for those with a Bachelor degree and above (Productivity Commission 2024). Linked administrative data also shows that the field of education studied is more important in determining employment outcomes for Aboriginal and Torres Strait Islander people than non-Indigenous people (Jobs and Skills Australia 2023, p. 38).

Another factor to consider is the higher disability rate for older Aboriginal and Torres Strait Islander people. The proportion of Aboriginal and Torres Strait Islander people with any type of disability increases with age, ranging from 33% of those between 15 and 24 years, to 79% of those aged 65 and over, according to the 2018-19 National Aboriginal and Torres Strait Islander Health Survey (AIHW 2024, p. 1.14). A shortage of suitable and affordable supports (such as allied health professionals, culturally responsive diagnostic tools, National Disability Insurance Scheme supports and the Disability Support Pension) (Griffis, 2023) contributes to reduced earnings of people with disability.

Further research on the drivers of different outcomes for different age groups would enable a deeper understanding of how these factors, and their interactions, lead to income variation across the age distribution for Aboriginal and Torres Strait Islander people.

# Appendix: Inequality measures and data sources

This appendix provides further detail about the inequality measures and data sources used in this paper.

#### A.1 Equivalised measures

Equivalised measures of economic resources adjust individual income or wealth to account for household size and composition (box A.1). This approach acknowledges that larger households require more resources to achieve a comparable standard of living to smaller households. For example, a family of two adults and four children need more resources to each achieve the same level of wellbeing as a family of two adults and one child.

#### Box A.1 – How to calculate equivalised measures

The process of equivalisation involves adjusting household-level variables for differences in household composition. The formula used for equivalisation is the ABS's 'OECD-modified equivalence scale' (ABS 2022c). It involves allocating points to each household member:

- 1 point for the first adult
- · 0.5 points for each additional person aged 15 years or older
- 0.3 points for each child aged under 15 years.

Total household income is divided by the sum of these points to yield the equivalised income. Each person in a household is then allocated the same level of equivalised income.

For example, Deepak and Mary live with their four-year-old son Joe. This equates to 1.8 equivalising points (1 plus 0.5 plus 0.3). Deepak earns \$100,000 and Mary works part-time and earns \$40,000 for a total household income of \$140,000. Under the OECD method, each household member, including Joe, has access to \$77,778 of equivalised income (i.e. \$140,000 / 1.8 = \$77,778).

This approach also allows for economies of scale in shared living costs. For example, two friends renting a house together would be cheaper than the friends renting two separate houses. Moreover, this method recognises that while some people might not have income or wealth of their own, they may still have access to economic resources through a household member, like a spouse or parent. This recognition that economic resources are often shared across a household and contribute to the material wellbeing of all household members means that equivalised measures are well suited for broad inequality analysis, such as the estimation of Gini coefficients for whole populations. We therefore use equivalised measures for the population-wide analysis in chapter 2.

However, equivalised measures have limitations when examining disparities across demographics like gender or age. This is because the method aggregates all household resources and spreads them evenly across household members. When this occurs, the financial contributions of individual household members

can be obscured, along with the disparities between them. For instance, if a male partner earns \$60,000 and his female partner earns \$40,000, the equivalised income would appear as \$50,000 for each, masking income inequality by gender. Therefore, we use non-equivalised measures for detailed analysis of inequality within and between demographic groups in chapters 3, 4 and 5. Equivalisation may also have limitations when considering friends who share a house, and are unlikely to pool their income.

While the concept of equivalised measures is generally valid, some researchers have indicated that the standard method of equivalisation (box A.1) was somewhat arbitrarily decided upon and does not account for variation in factors like different economies of scale across regions (Mysikova et al. 2022). The standard approach also contains inherent assumptions about household structure and how resources are shared across household members, which will not reflect the economic realities of all people. (For instance, unrelated housemates in a share house are unlikely to pool their incomes.)

#### A.2 Calculating income

A person's income includes several different components. This paper focuses on after-tax disposable income, which includes wages and salaries from employment, business income, investment income and transfer income from government payments.

This measure may differ from analysis in other studies, which might focus on specific components of income before tax (such as wages and salaries from employment) or exclude government transfers. Furthermore, other analysis sometimes focuses on only full-time workers or adjusts for hours worked by casual and part-time workers, which we have not done in our income measure.

This paper also adjusts dollar amounts to a fixed 'base' year, also called measuring 'real' resources. All statistics and charts of income and other variables used in this paper are in 2022-23 dollars, so that changes between years reflect actual changes in a person's access to economic resources, rather than inflation.

#### A.3 Data sources

Various data sources can be used to calculate the measures of economic inequality described in table 1.1, and each source has its own advantages and disadvantages (table A.1). This paper draws on several different data sources for its analysis of economic inequality. The Household Income and Labour Dynamics in Australia (HILDA) survey is predominantly used for aggregate measures of income and wealth inequality, while the Person Level Integrated Data Asset (PLIDA) is used for deeper dives into the incomes of particular cohorts.

#### Table A.1 – Datasets used to measure economic inequality

	Description	Limitations
Survey of Income and Housing (SIH)	• Survey conducted every two years on sources of income, household net wealth, housing, household and	<ul> <li>Survey is not longitudinal (i.e. different individuals are surveyed each year) so changes in an</li> </ul>
	<ul><li>personal characteristics.</li><li>Specifically designed for analysis of social and economic wellbeing.</li></ul>	<ul><li>individual's circumstances cannot be tracked over time.</li><li>Relies on survey participants reporting their economic resources correctly.</li></ul>

	Description	Limitations
		<ul> <li>Subject to non-sampling and sampling errors as per all surveys – errors relatively small for SIH (ABS 2022e).</li> </ul>
Household Income and Labour Dynamics in Australia (HILDA) survey	<ul> <li>Ongoing annual longitudinal survey about economic and personal wellbeing, labour market dynamics and family life.</li> <li>Longitudinal nature (i.e. the same individuals are surveyed each year) allows tracking of individuals and their outcomes over time.</li> </ul>	<ul> <li>Relies on survey participants reporting their economic resources correctly.</li> <li>Subject to other known issues including non-random patterns of participants not responding or dropping out between years (Summerfield et al. 2023).</li> </ul>
Person Level Integrated Data Asset (PLIDA)	<ul> <li>Extensive linked dataset on health, education, government payments, income and taxation, employment, and population demographics over time.</li> <li>Includes information on all income reported through tax returns and/or received via government payments.</li> </ul>	<ul> <li>Not yet widely used as a data source for economic analysis – its benefits are still being determined.</li> <li>While the data is a more accurate source for income recorded for administrative purposes, it does not measure all economic resources like wealth or income that is not reported (e.g. cash payments).</li> <li>Computationally intensive to use.</li> </ul>
Household Expenditure Survey (HES)	<ul> <li>Survey that is usually held every six years covering income, wealth, housing and expenditure from residents in private dwellings in Australia.</li> <li>A relatively complete source for data on consumer spending, including different types of private expenditures and in-kind transfers.</li> </ul>	<ul> <li>Relies on survey participants reporting their economic resources correctly.</li> <li>No survey has been done since 2015-16, which leaves current data too old to produce new insights.</li> </ul>

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