

The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 24



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Report of the HILDA Survey

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Chapter 1

Introduction



The HILDA project

Commenced in 2001, the Household, Income and Labour Dynamics in Australia (HILDA) Survey is a nationally representative longitudinal study of Australian households. It follows the lives of more than 17,000 individuals in about 9,000 households each year. There are now 24 waves (years) of data available to researchers, while this year (2026) saw the collection of the 26th wave.

The study is funded by the Australian Government Department of Social Services (DSS) and is managed by the Melbourne Institute of Applied Economic and Social Research at the University of Melbourne. Roy Morgan Research has conducted the fieldwork since Wave 9 (2009), prior to which The Nielsen Company was the fieldwork provider.

The HILDA Survey seeks to provide longitudinal data on the lives of Australian residents. It collects information annually on a wide range of aspects of life in Australia, including household and family relationships, child care, employment, education, income, expenditure, health and wellbeing, attitudes and values on a variety of subjects, and various life events and experiences. Information is also collected at less frequent intervals on various topics, including household wealth, fertility-related behaviour and plans, relationships with non-resident family members and non-resident partners, health-care utilisation, eating habits, cognitive functioning and retirement.

The important distinguishing feature of the HILDA Survey is that the same households and individuals are interviewed every year, allowing us to see how their lives are changing over time. By design, the study can continue indefinitely, following not only the initial sample members for the remainder of their lives, but also their children and all subsequent descendants.

Household longitudinal data, known as panel data, provide a much more complete picture than cross-sectional data because they document the life-course each person takes. Panel data tell us about *dynamics*—family, health, income and labour dynamics—rather than *statics*. They tell us about *persistence* and *recurrence*, for example, of poverty, unemployment or reliance on income support payments.

Perhaps most importantly, panel data can tell us about the antecedents and consequences of life outcomes, such as poverty, unemployment, marital breakdown and poor health, because we can see the paths that individuals' lives took prior to those outcomes and the paths they take subsequently. Indeed, one of the valuable attributes of the HILDA panel is the wealth of information on a variety of life domains that it brings together in one dataset. This allows us to understand the many linkages between these life domains; to give but one example, we can examine how the risk of poor economic outcomes depends on an individual's health.

Panel data are furthermore valuable because, in many cases, they allow causal inferences that are more credible than those permitted by other types of data. In particular, statistical methods known as 'fixed-effects' regression models can be employed to examine the effects of various factors on life outcomes, such as earnings, unemployment, income and life satisfaction. These models can control for the effects of stable characteristics of individuals that are typically not observed—such as innate ability, motivation and optimism—that confound estimates of causal effects in cross-sectional settings.

With 24 waves of data now available, the HILDA Survey is also becoming a sufficiently long-running panel to enable very long-term analyses, including studies of intergenerational linkages. For example, it is possible to examine whether children who have poor parents when growing up are themselves more likely to be poor as adults, and to investigate the drivers of any such linkages.

This report

Topics in focus

This report presents brief statistical analyses of Waves 1 to 24 of the HILDA Survey, which were collected between 2001 and 2024. It offers a broad picture of how Australians are faring as the country faces sustained cost-of-living pressures and changing social and labour market conditions.

Chapter 2 provides a concise snapshot of trends in key social indicators across households and family life, income, the labour market and health. This brief overview is followed by nine in-depth spotlight chapters. The first two focus on families and intimate relationships: single parents (Chapter 3) and relationship quality within couples (Chapter 4). The next three centre on education, skills and abilities, which were the main themes of Wave 24: education and labour market outcomes (Chapter 5), cognitive abilities (Chapter 6) and skill mismatches in the labour market (Chapter 7).

The report then examines economic wellbeing in four chapters: economic disadvantage (Chapter 8), food insecurity (Chapter 9), financial wellbeing and literacy (Chapter 10), and housing affordability and adequacy (Chapter 11). The final chapter (Chapter 12) presents findings from new questions on social media use and cyber victimisation, which have been collected in Wave 24 for the first time.

About the methods

The report is based on longitudinal data from HILDA Waves 1 to 24 and reports population-weighted estimates, which ensures statistics are representative of the Australian population. Most analyses are descriptive; however, selected regression models are used where they provide additional insight. The Technical Appendix provides details on the sample, weighting and statistical methods. More information about the survey (questionnaires, topics, variables and survey methodology) is available on the HILDA Survey website: <https://melbourneinstitute.unimelb.edu.au/hilda>.

How to use this report

Chapters are written so that they can be read independently. Chapter 2 gives a compact overview of core topics; subsequent spotlight chapters can be read individually for detailed evidence on each topic. Each chapter opens with a set of highlights for quick access to some of the core findings. Throughout the report, boxes explain the most crucial concepts and measures used. Blue boxes contain official definitions of concepts, green boxes include HILDA-specific definitions and measures, and red boxes contain classifications used in this report. Technical notes and guidance for researchers can be found in the Technical Appendix.

If you would like to know more

This publication is the 21st edition of the HILDA Statistical Report, presenting selected findings on pressing contemporary issues. Yet, it provides only a cursory indication of the HILDA data's rich potential. All 20 prior reports—covering family life, the labour market, economic wellbeing, health and related topics—are available at <https://melbourneinstitute.unimelb.edu.au/hilda/publications/hilda-statistical-reports/past-reports>. Since Wave 1 data were first released in January 2003, researchers in Australia and overseas have published more than 2,200 journal articles using HILDA data, alongside many book chapters, research reports and policy documents. A full catalogue of HILDA-based publications is available on the HILDA publications page (<https://melbourneinstitute.unimelb.edu.au/hilda/publications/>) and on the DSS repository (<http://flosse.dss.gov.au/>).

We hope readers find this report informative and useful for their work. We welcome enquiries and feedback at hilda-inquiries@unimelb.edu.au.

Chapter 2

Trends in key social and economic indicators



2

Trends in key social and economic indicators

Inga Laß, Kyle Peyton and Roger Wilkins

Key findings

Household and family life

- Despite remaining the most common household type, couple households with children have declined notably over time (from 52.4% in 2001 to 49.3% in 2024). Meanwhile, single-person households and couple households without children have increased between 2001 and 2024.
- Median weekly child-care expenditure for families with children not yet in school rose markedly from \$74 in 2002 to \$190 in 2024 (in 2024 dollars), with the income share spent on child care increasing most for low-income families.
- About 80% of mothers and 60% of fathers of children born in 2023 took paid parental leave over two years, with mothers, on average, taking leave for significantly longer periods (about 13 to 15 weeks more) than fathers.

Household incomes

- Mean and median household equivalised disposable incomes grew significantly in real terms between 2003 and 2009, but growth was weaker from 2009 to 2018. A decline occurred between 2022 and 2023, with only modest recovery in 2024.
- The COVID-19 pandemic led to a temporary decline in income inequality in 2020, followed by a substantial increase in 2022, when inequality reached its highest level recorded in the HILDA Survey period. Inequality subsequently declined in 2023 and 2024.
- Short-term income mobility has decreased slightly over the 21st century, with a small increase in persistence in the bottom quintile, indicating reduced movement out of lower income brackets.

The labour market

- Employment rates reached record highs in 2024, with 84.4% of men and 76% of women aged 18 to 64 employed; however, women remained considerably more likely to work part-time than men.
- Both weekly and hourly earnings grew more rapidly among women than men between 2023 and 2024.
- The gender pay gap in hourly wages was 10.2% in 2024, which is the second-lowest level recorded since 2001 (after the 9.9% recorded in 2018).

Mental and physical health

- Self-reported mental health has deteriorated substantially since the early 2010s, with the decline concentrated among younger Australians and more pronounced for females than males.
- Both general and mental health have remained relatively stable among those aged 55 and over.
- Nearly half of females aged 15 to 24 were in psychological distress in 2023, up from 25% in 2007.

The longitudinal nature of the HILDA Survey provides a unique opportunity to track over time how Australians are faring in a range of different areas of life, such as family, work, finances and health. This chapter provides a snapshot of trends in these areas based on select indicators that are of high public and policy interest. The first section presents trends in household and family life, focusing on living arrangements, paid child care and paid parental leave. This is followed by a section on household income and income inequality. The third section presents trends in employment, with a focus on labour market participation and earnings. The final section presents trends in both mental and physical health.

Household and family life

Household dynamics

Table 2.1 presents the evolution of 11 different household types (as described in Box 2.3) over the 2001 to 2024 period, with about every fifth year displayed. It shows the proportion of individuals (both children and adults) in each household type classified according to the nature of the family resident in the household and whether other related and unrelated people reside in the household (see Boxes 2.1, 2.2 and 2.3).

The distribution of household types has been relatively stable across the 24 years. A household containing a couple with children (with or without others) remains the most common household type, with around half of all individuals living in such households across the period. Within this group, couples with dependent children (and no one else) are the most prevalent, with approximately 39% to 41% of individuals living in this household type each year. Households containing a couple (and no children) remain the second-most common household type, accounting for about 20% to 22% of individuals. Single-parent households (with dependent or non-dependent children) are the third most common household type, accounting for about 11% to 12% of individuals (for more details on single parents, see Chapter 3, page 39). The fourth position in the ranking is people living alone (the single-person household type), accounting for around 10% of individuals.



Box 2.1: Dependent children

The definition of a dependent child used in this report is based on the Australian Bureau of Statistics' (ABS) approach (see ABS, 2014). According to this definition, a dependent child is: (1) any child under 15 years of age; or (2) a child aged 15 to 24 who is engaged in full-time study, living with one or both parents, not living with a partner, and who does not have a resident child of their own. Note that the definition of a child is based on social rather than biological parenthood, and that, in couple families, it is sufficient to be a child of only one member of the couple to be classified as a dependent child of the couple.

For a child to be classified as a member of the household in the HILDA Survey, the child must reside in the household at least 50% of the time (unless the child resides in a facility such as a boarding school or hall of residence). In the event that a child resides exactly 50% of the time in two HILDA households, the child is assigned to the mother's household to avoid double-counting; it does not imply a judgement on actual caregiving responsibilities among the parents.

Box 2.2: Single parents

We adopt the Australian Bureau of Statistics' (ABS) definition of a single parent in this report (see ABS, 2014). Based on this definition, a single parent is a person who has no spouse or partner usually resident in the household, but who forms a parent-child relationship with at least one (dependent or non-dependent) child usually resident in the household. This does not preclude a single parent having a partner living in another household.

Table 2.1: Proportion of individuals in each household type, 2001 to 2024 (%)

	2001	2006	2011	2016	2019	2021	2024	Change 2001- 2024
Couple with dependent children	41.5	41.3	41.2	40.9	40.6	40.1	39.4	-2.1
Couple with dependent children and others ^a	2.4	1.9	2.6	1.8	1.7	2.5	2.2	-0.3
Couple with non-dependent children, with or without others ^a	8.5	9.8	7.8	8.1	8.1	8.6	7.8	-0.7
<i>All couples with children</i>	<i>52.4</i>	<i>52.9</i>	<i>51.6</i>	<i>50.8</i>	<i>50.4</i>	<i>51.2</i>	<i>49.3</i>	<i>-3.0</i>
Couple without children, with or without others ^a	20.4	20.6	21.1	21.1	20.7	21.2	22.1	1.6
Single parent with dependent children	6.9	6.7	6.1	6.7	6.5	6.0	6.2	-0.8
Single parent with dependent children and others ^a	1.5	1.0	1.3	1.3	1.1	1.2	0.8	-0.7
Single parent with non-dependent children, with or without others ^a	3.0	3.7	3.5	4.3	4.7	4.0	4.1	1.2
<i>All single parents</i>	<i>11.4</i>	<i>11.4</i>	<i>10.8</i>	<i>12.3</i>	<i>12.3</i>	<i>11.2</i>	<i>11.1</i>	<i>-0.3</i>
Single person	9.5	9.2	9.4	9.7	10.2	10.5	11.0	1.5
Other family household	1.1	1.1	1.5	1.1	1.2	1.3	1.7	0.6
Multiple-family household	2.7	3.5	3.8	4.1	4.3	3.9	3.4	0.7
Group household	2.5	1.2	1.9	0.9	1.0	0.8	1.5	-1.1
<i>All other household types (other family, multi-family, group)</i>	<i>6.3</i>	<i>5.9</i>	<i>7.1</i>	<i>6.2</i>	<i>6.5</i>	<i>5.9</i>	<i>6.6</i>	<i>0.2</i>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

Notes: ^a 'Others' comprises related people and unrelated people. If dependent children are present, the household could (and often will) include non-dependent children. Cells may not add up to column totals due to rounding.

Nonetheless, some important trends are evident. Most notably, the proportion of people living alone or as a couple without children has increased. Specifically, between 2001 and 2024, the proportion of individuals living in single-person households increased by 1.5 percentage points, and that of individuals in couple households without children increased by 1.6 percentage points.

By contrast, there were marked declines in household types including (single or couple) parents with dependent children. Most notably, the proportion of people living in couple households with dependent children (and no others) had the largest percentage-point decrease of any household type, declining by 2.1 percentage points between 2001 and 2024. Similarly, the proportion of single parents with dependent children (and no others) declined by 0.8 percentage points and that of single parents with dependent children and others declined by 0.7 percentage points between 2001 and 2024. The proportion of people living in group households also saw a considerable decline of 1.1 percentage points.



Box 2.3: Classification of household types

The comprehensive information in the HILDA Survey data on the composition of each household and the relationships between all household members allows for complete flexibility in defining household types. In this chapter, the following 11 household types are distinguished:

- (1) Couple with dependent children
- (2) Couple with dependent children and others
- (3) Couple with non-dependent children, with or without others
- (4) Single parent with dependent children
- (5) Single parent with dependent children and others
- (6) Single parent with non-dependent children, with or without others
- (7) Couple, with or without others
- (8) Single person
- (9) Other-family household
- (10) Multiple-family household
- (11) Group household

In interpreting these categories, note the following:

- The classification system is hierarchical and gives primacy to dependent children: a couple or single parent with non-dependent children (categories 3 and 6) will not have any dependent children, whereas a couple or single parent with dependent children and others—categories 2 and 5—may have non-dependent children. Consequently, the definition of ‘others’ (in categories 2, 3, 5, 6 and 7) depends on the household type. For couples with dependent children and single parents with dependent children, ‘others’ can include non-dependent children, other related people of the couple or single parent (including siblings and parents) and unrelated people. For couples with non-dependent children and single parents with non-dependent children, ‘others’ can include other related people and unrelated people (but not dependent children). In a couple household, ‘others’ comprises related people other than children as well as unrelated people.
- A couple comprises a married or de facto married couple, whether opposite sex or same sex.
- A dependent child is as defined in Box 2.1. A non-dependent child is any other child who is living with one or both parents. Note, however, that a person will never be classified as a non-dependent child if they are living with a partner or a child of their own. (While a non-dependent child can in principle be of any age from 15 years upwards, in 2024, 51% are aged 15 to 24, and 88% are aged under 40.)
- An ‘other-family’ household is any other family not captured by categories 1 to 7, such as households with siblings living together (and not living with parents or any of their own children).
- A multiple-family household is one in which there are two or more of the family types itemised (categories 1 to 7 and 9).
- A group household consists of two or more unrelated people (none of whom is residing with a related person).

In some of the analysis presented in this report, individuals are classified according to family type (see Box 2.9) rather than household type. Family type and household type are in many cases the same but diverge when households contain people who are not all part of the same nuclear family.

Paid child care for children under 5 years

The Australian Government provides substantial subsidies for child care for many families, but it is nonetheless clear that access to affordable and high-quality child care remains a key issue for many parents with young children. In recent years, there has also been increasing public focus on child-care safety and quality.

Since Wave 1, the HILDA Survey has collected annual household-level data on child-care use and access among households with children under 15 years. Due to questionnaire changes between Waves 1 and 2, only data collected from Wave 2 onwards is comparable.¹

This section focuses on child-care arrangements for young children who are not yet attending school.² The analysis covers both single- and couple-parent families but excludes multi-family households that have multiple families with children under 5 years old, as it is not possible to attribute child-care arrangements to a specific family in such cases.

¹ Child-care questions are administered to only one household member, who is usually a parent or guardian of the child(ren). All questions concern ‘usual’ use of child care, with respondents left to decide for themselves what constitutes ‘usual’.

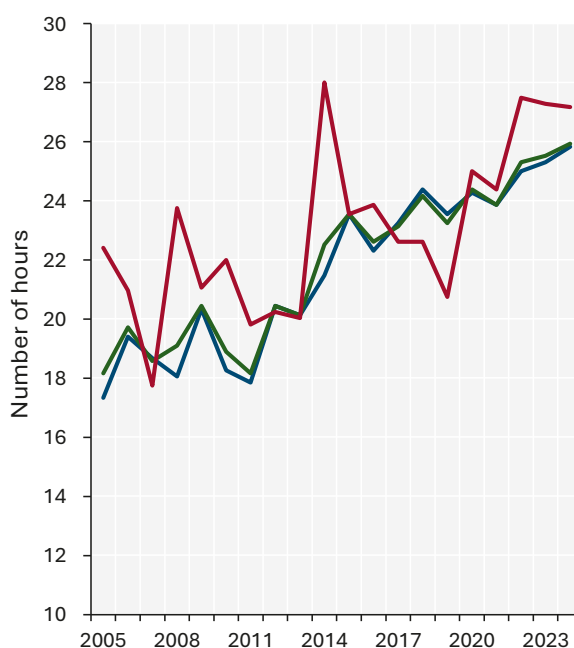
² For some children, it is not known whether they are in school. To focus on families genuinely ‘at risk’ of using child care for a child not yet at school, we restrict the sample to families whose youngest child was under 5 years old on 30 June of the survey year. Including families with a youngest child aged 5 would risk biasing the estimated proportion of child-care users downward because non-users may include families with children already enrolled in school.

Figure 2.1 presents the proportion of parents using child care for children aged under 5 over the 2002 to 2024 period, overall and separately for couple and single parents. In this context, paid care comprises formal child care (i.e., family day care, long day care and kindergarten/pre-school) and informal paid child care (i.e., care by a paid sitter or nanny). The figure shows that the percentage of families using paid care remained relatively stable between 2002 and 2014, ranging between 42% and 45%. Since 2014, use of paid care has increased considerably. Whereas in 2014, 44% of families used paid care, by 2024, this share had risen to 55.4%. This upward trend was only briefly interrupted by the COVID-19 pandemic, when the proportion of families using paid care dropped from 52.7% in 2019 to 50.4% in 2020.

Figure 2.1: Proportion of families using paid child care for children under 5



Figure 2.2: Mean weekly hours of paid care per child not yet at school—Families using paid care



— Couple parents — Single parents — All families

Figure 2.1 also shows notable differences in the utilisation of paid care between single and couple parents. In 2002, the proportion of families using paid care was greater among single-parent than among couple-parent families, at 50.6% and 43.1% respectively. However, over the 2002 to 2024 period, this situation reversed as the proportion of couple parents using paid child care increased significantly, by 12.9 percentage points to 56%. For single parents, the estimated proportion using paid care has been more volatile (likely at least partly due to a relatively small number of single parents in the survey), ranging from as high as 53.2% in 2016 to as low as 37.2% in 2018. Since 2018, the broad pattern has been an upwards trend, so that in 2024, the proportion of single parents using paid care again reached a similar level to that at the beginning of the period, 50.7%.

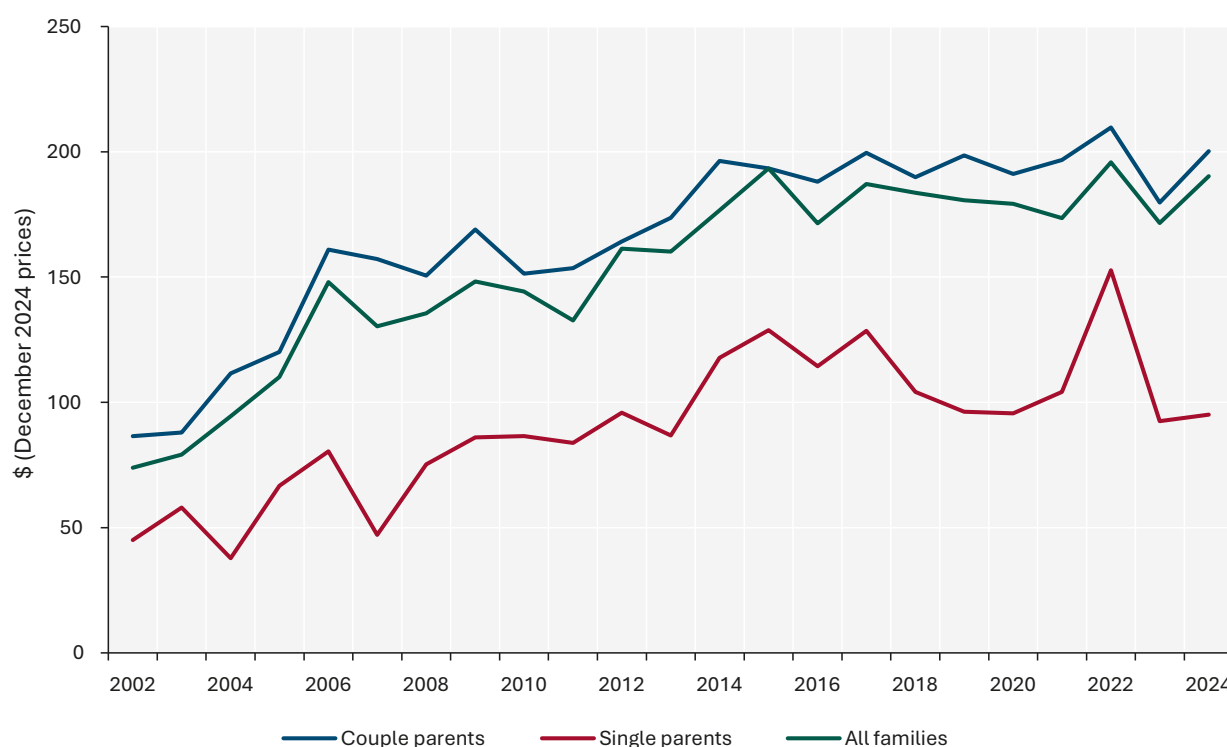
Figure 2.2 presents the average number of hours of care used per week for each child not yet at school, for all families using paid care and separately for couple and single parents. The figure focuses on the period since 2005 since full information on the number of children not yet at school per household has only been available since then. It shows that families have considerably increased the number of hours of paid care per child over the 2005 to 2024 period. Whereas an average of 18.5 hours per week was used for each child in 2005, the average increased by 40% to 26 hours in 2024.

Looking at the utilisation of care by family type shows an upward trend in the number of hours of paid care among both couple and single-parent families. For couple parents who used paid care, an average of 17.7 hours per week was used for each child in 2005, which increased by 46% to 25.9 hours in 2024. Among single parents using paid care, mean hours per child were higher in most years, amounting to 22.6 hours in 2002 and 27.2 hours in 2024. Most notable here is the recent increase in child-care utilisation among single parents since 2019.

In every wave of the HILDA Survey, households that use child care are also asked to report their usual weekly expenditure on child care for each child 'after any regular child-care benefit you may receive has been deducted'. This includes expenditure arising from both formal and informal care arrangements.³ For families with expenditure on child care for children not yet at school, Figure 2.3 presents the median weekly child-care expenditure (at December 2024 prices) on these children. Child-care expenditure rose markedly between 2002 and 2022, from a median of \$74 to \$196 per week. After a notable decline in 2023, likely reflecting the expansion of the child-care subsidy that came into effect in July 2023, median expenditure saw another rise in 2024 to \$190. As outlined in a prior issue of this report (Wilkins et al., 2024, p. 16ff), the rise in child-care costs since 2001 was a consequence of both the use of more hours of paid care and an increase in hourly child-care costs.

Differentiating by family type shows that child-care expenditure has consistently been lower for single-parent families than for couple families. In 2024, median expenditure was \$200 among couple families and \$95 among single-parent families. However, the increase in child-care expenditure over recent decades was stronger in relative terms among single parents. Over the 2002 to 2022 period, expenditure for single parents more than tripled, from \$45 in 2002 to \$153 in 2022 (a 3.4-fold increase), compared to more than doubling from \$87 in 2002 to \$210 in 2022 for couple parents (a 2.4-fold increase). Nevertheless, the recent drop in expenditure since 2022 has also been more pronounced among single-parent families.

Figure 2.3: Median weekly expenditure on child care for children under 5



³ Child-care costs mainly arise from formal care (e.g., family day care) and informal paid care (e.g., by a paid sitter or nanny). However, a minority (around 4%) of parents with child-care costs for children not yet at school report child-care costs incurred by paying relatives, friends or other people for informal child care. This section of the report includes all types of child-care costs.

The burden of child-care costs for a household can be better understood by comparing child-care expenditure to the income of the household. This is done in Table 2.2, which presents the median share of annual household disposable equivalised income spent on child care for children not yet at school. To show how this measure of the burden of child-care costs depends on the level of household income, the estimates are presented separately for each third of the income distribution (see Box 2.6 for an explanation of how income is measured in the HILDA Survey).

Table 2.2: Median proportion of household disposable income spent on child care—Families with expenditure on child care, 2002 to 2024 (%)

Tercile (third) of the income distribution	2002	2008	2014	2020	2021	2022	2023	2024	Percentage change 2002–2024	Percentage change 2022–2024
Bottom third	3.9	5.1	5.9	5.9	6.9	7.5	6.8	6.4	64.1	-14.7
Middle third	4.3	6.8	7.6	7.1	6.3	7.0	6.1	6.5	51.2	-7.1
Top third	5.7	6.8	7.3	7.2	7.7	6.3	6.6	7.1	24.6	12.7
All families	4.5	6.2	7.1	6.9	6.8	6.9	6.4	6.5	44.4	-5.8

Despite year-to-year volatility, the clear trend is that the share of income families spent on child care for children under 5 rose between 2002 and 2024. Furthermore, this increase is most pronounced for families in the lowest third of the income distribution. Among this group, the median proportion of income spent on child care rose from 3.9% in 2002 to 7.5% in 2022 before decreasing to 6.4% in 2024. Overall, this constitutes a 64.1% increase in the proportion of income spent on child care for low-income households. By contrast, for those in the middle third and top third, the shares rose by 51.2% and 24.6% respectively. Unlike families in the bottom third and middle third, families in the top third did not see a decline in the share spent on child care after 2022.



Paid parental leave

Paid parental leave is a crucial policy offered by the Australian Government and many employers that financially supports parents in taking time off work to care for their newborn or recently adopted child. Figure 2.4 presents the proportion of mothers and fathers who took some form of paid parental leave after the birth of a child (see Box 2.4 for an explanation of the construction of this measure and Box 2.5 for the measurement of sex and gender in the HILDA Survey). It shows that the proportion of mothers taking paid parental leave is substantially higher than that of fathers. For children born in 2020,⁴ 66.9% of mothers and 49.5% of fathers took such leave over the next two years. There appears to be an upward trend in leave-taking among parents of both sexes: for children born in 2023, 81% of mothers and 58.8% of fathers took some paid parental leave. However, this trend needs to be interpreted with caution given there was a change in the way information on parental leave was collected between 2022 and 2023 (see Box 2.4).

Box 2.4: HILDA Survey measures of paid parental leave-taking

The HILDA Survey has collected information on parental leave-taking since 2005, but the question format has changed:

- Between Waves 5 and 19, respondents who were employed in any job in the previous 12 months were given a list of paid-leave types (including maternity, paternity, parental, long-service, bereavement, family, carer and other leave) and asked whether they had taken any of those forms of leave during that 12-month period. Respondents could only answer yes/no for the whole list. A follow-up question on leave duration likewise required a single response covering the whole list.
- Between Waves 20 and 22, respondents were asked about each leave type separately, allowing 'maternity or paternity or parental leave' to be distinguished from other leave types. The leave-duration question, however, remained joint for the whole list.
- In Waves 23 and 24, respondents were asked explicitly whether they had taken any paid parental leave in the previous 12 months; those who answered yes were then asked how long they had spent on paid parental leave. The change to a more direct parental-leave question in 2023 may have contributed to the observed increase in reported leave-taking.

Because parental leave can be separated out only from Wave 20, the analysis of leave uptake focuses on 2020 to 2024. Parental-leave duration is analysed for 2023 to 2024.

Most parents take leave around the birth of their child; however, some parents (and especially some fathers) only take leave when the child is already a few months or a year old. Therefore, we pool responses across two waves after the birth of a child to capture all leave-taking associated with that child. For example, for a child aged 0 at the parent's interview in 2020, we count parental leave reported in either 2020 or 2021. This means this measure cannot be calculated yet for children aged 0 in 2024 since we do not have information on later leave-taking for these children. Furthermore, we focus on resident children only.

Box 2.5: Identification of sex and gender in the HILDA Survey

Information on the (biological) sex of HILDA Survey respondents is collected in the 'household form', which in each wave establishes the members of the household and, in addition to their sex, their date of birth and their relationship to each other household member. Typically, the information is provided by only one household member and, since Wave 2, has been 'pre-filled' with the previous wave's data. The household form therefore generally only requires updates each wave to reflect changes in household membership (i.e., adding people who have joined the household and removing people who have left the household). Note also that, prior to Wave 22, the question on sex did not allow for responses other than 'male' or 'female'.

Since Wave 22, the self-completion questionnaire (SCQ) has contained questions on both the respondent's sex recorded at birth and how they describe their gender, the latter of which contains the response options 'man or male', 'woman or female', 'non-binary' and 'I use a different term (please specify)'.

Noting that gender has only been measured since Wave 22, in this report we classify individuals by sex, based on the household form information. We use the terms 'men' and 'women' when the group of individuals referred to contains adults only and we use the terms 'males' and 'females' when the group includes individuals aged under 18.

Note that the HILDA Survey measure of sex may misclassify some individuals, both because the household form did not allow for responses other than 'male' or 'female' until Wave 22, and because the information is not always provided by the respondent themselves.

⁴ Birth year denotes the year in which the child was aged 0 at the parent interview. Because fieldwork runs from late July of the survey year through to February of the following year, most children will have been born in the survey year; a minority may have been born late in the previous year or, rarely, early in the following year.

Figure 2.4: Proportion of parents taking paid parental leave, by the child's birth year

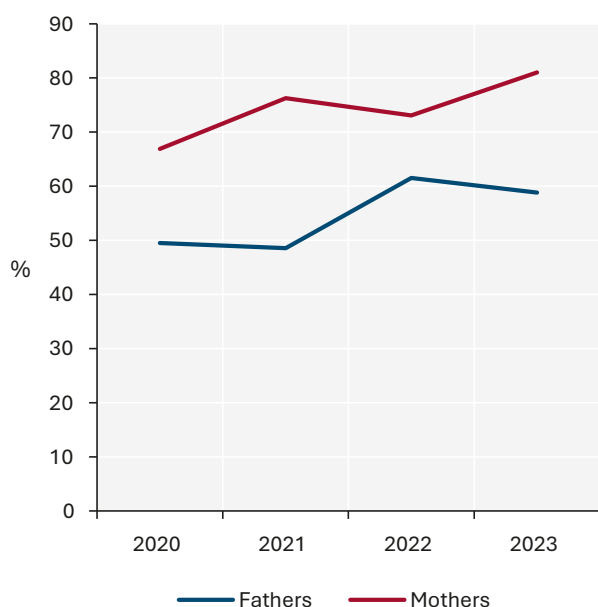
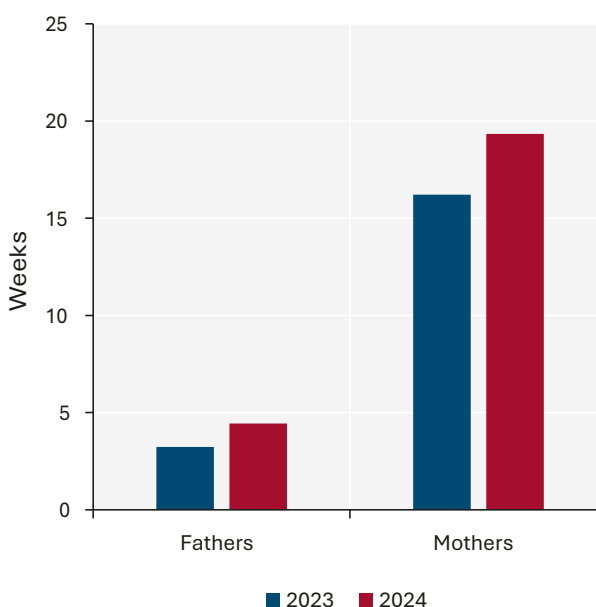


Figure 2.5: Mean number of weeks of paid parental leave—Parents with a youngest child aged under 2 who took parental leave



Note: 'Birth year' refers to the wave during which the child was aged 0.

Figure 2.5 presents the mean number of weeks of paid leave taken within the last 12 months among parents with a child aged 0 to 1 who reported having taken paid parental leave. Leave duration exhibits more pronounced gender differences than the proportion of leave-takers. In 2024, mothers took an average of 19.3 weeks of paid leave, whereas fathers took about 4.4 weeks. Both mothers and fathers saw increases in the duration of paid parental leave between 2023 and 2024. While the absolute increase in the leave period was larger for mothers (3.1 weeks) than for fathers (1.2 weeks), in relative terms, fathers increased their leave more than mothers (by 37% compared to 19%). The increase in the duration of paid parental leave between 2023 and 2024 could at least in part be due to the expansion of the maximum government-funded leave period during that time.

Household incomes

The HILDA Survey places considerable emphasis on measuring and understanding the drivers of the economic wellbeing of Australians. Most important to this effort is the annual measurement of household incomes via a detailed set of questions asked of each household member aged 15 and over. However, the HILDA Survey also collects data on a range of other measures of economic wellbeing, including household expenditure and wealth, experience of financial stress, the ability to raise funds at short notice, experience of material deprivation, perceived adequacy of household income, saving habits, saving horizon, attitudes to financial risk and satisfaction with one's financial situation. Chapter 8 of this report draws on some of this information to examine economic disadvantage in Australia.

Annual income

Cross-sectional estimates of mean and median household annual disposable income (as defined in Box 2.6) are presented in Table 2.3. For this table, the household is the unit of observation, meaning that each household contributes one 'observation' to the calculation of the mean and the median.

Box 2.6: Measurement of household income in the HILDA Survey

The main household income measure examined in this report is 'real household annual disposable income'. Household annual disposable income is the combined income of all household members after receipt of government pensions and benefits^a and deduction of income taxes in the financial year ended 30 June of the year of the wave (e.g., 2001 in Wave 1). This is then adjusted for inflation—the rise in the general price level in the economy—using the Australian Bureau of Statistics' (ABS) Consumer Price Index, so that income in all waves is expressed at the price level prevailing in the December quarter of 2024 (referred to as 'December 2024 prices'), to give *real* income. Since prices tend to rise over time, real incomes are higher than the nominal incomes reported by sample members.

HILDA Survey respondents do not actually report their disposable income; rather, each respondent is asked how much income they received from each of a number of sources, including employment, government benefits, superannuation, investments and any businesses they own. The total gross income of each individual is equal to the sum of these income components. The disposable income of each respondent is then calculated by estimating the income tax payable by the individual and subtracting this from the individual's total gross income. Disposable incomes of all household members are added together to obtain *household* disposable income. See Wilkins (2014) for details on the construction of gross income and the methods used to calculate disposable income. Note that, consistent with the Canberra Group's recommendations (see United Nations, 2011), large irregular payments received by individuals are excluded from income for the analysis presented in this report—that is, *regular* disposable income is examined.

^a Following the Australian Bureau of Statistics' (ABS) practice in its Survey of Income and Housing (ABS, 2019–20), Commonwealth Rent Assistance is included as income despite being a rental subsidy. Note that this approach is inconsistent with the Canberra Group's recommendation (United Nations, 2011).

Mean and median household disposable incomes grew very strongly between 2003 and 2009, both increasing by approximately \$3,700 per year at December 2024 prices. Between 2009 and 2018, growth was much weaker. Total growth in the mean was \$2,864, or 2.5%, while the median in 2018 was \$1,110 lower than in 2009. Between 2018 and 2021 there was stronger growth in mean and median incomes, with the mean rising by \$7,432 and the median rising by \$7,733. The mean income continued to grow between 2021 and 2022, but it declined sharply between 2022 and 2023 and increased only modestly in 2024, such that it remained below its 2021 level. The median declined by \$4,587, or 4.3%, between 2021 and 2023, and only recovered slightly in 2024 such that it was still 3.3% below its 2021 level.



Table 2.3: Household annual disposable incomes, 2001 to 2024

	Mean (\$, December 2024 prices)	Median (\$, December 2024 prices)	Number of households	Number of people
2001	87,941	75,886	7,281,363	18,824,376
2002	89,415	77,598	7,357,079	19,039,091
2003	90,084	78,102	7,433,836	19,258,412
2004	93,015	80,695	7,505,562	19,468,325
2005	96,672	84,918	7,589,921	19,714,426
2006	101,653	87,629	7,686,360	20,013,530
2007	106,466	92,025	7,836,760	20,382,461
2008	109,305	94,756	8,009,920	20,809,743
2009	112,393	100,111	8,175,735	21,216,949
2010	112,352	96,970	8,298,875	21,521,079
2011	113,247	95,162	8,413,537	21,834,344
2012	114,634	98,731	8,578,027	22,221,454
2013	115,729	99,507	8,737,151	22,594,836
2014	115,073	97,142	8,882,149	22,929,926
2015	114,808	97,104	9,028,432	23,266,630
2016	114,583	98,294	9,196,868	23,656,158
2017	115,599	96,765	9,379,972	24,046,268
2018	115,257	99,001	9,564,841	24,423,561
2019	118,640	100,307	9,751,890	24,794,547
2020	120,103	102,593	9,873,658	24,993,931
2021	122,689	106,734	9,937,054	25,070,656
2022	125,089	102,683	10,161,749	25,523,183
2023	120,615	102,147	10,481,600	26,169,834
2024	121,581	103,166	10,717,790	26,633,746

Box 2.7: Equivalised income

Equivalised income is a measure of material living standards, obtained by adjusting household disposable income for the household's 'needs'. Most obviously, a household of four people will require a higher household income than a single-person household to achieve the same living standard. There are, however, many factors other than household size that could be taken into account in determining need. These include household members' age, gender, health and disability, and the household's geographic location and home-ownership status, all of which can affect the costs of achieving a given standard of living.

In practice, it is common for adjustment of income to be based only on the number of adult and child household members, achieved by an equivalence scale. In this report, we primarily use the 'modified OECD' scale (Hagenaars et al., 1994) as applied by the Australian Bureau of Statistics (ABS), which divides household income by 1 for the first household member plus 0.5 for each other household member aged 15 or over, plus 0.3 for each child under 15. A family comprising two adults and two children under 15 years of age would therefore have an equivalence scale of 2.1 (1 + 0.5 + 0.3 + 0.3), meaning that the family would need to have an income 2.1 times that of a single-person household in order to achieve the same standard of living. This scale recognises that larger households require more income, but it also recognises that there are economies of scale in consumption (e.g., the rent on a three-bedroom flat is typically less than three times the rent on an otherwise comparable one-bedroom flat) and that children require less than adults. The equivalised income calculated for a household is then assigned to each member of the household, the implicit assumption being that all household members experience the same standard of living (which will, of course, not always be the case—particularly in households containing unrelated people).

Table 2.4 considers the distribution of household income, taking into account potential changes to household composition by examining 'equivalised' income per person (see Box 2.7 for an explanation of how equivalised income is calculated and Box 2.8 for an explanation of the statistics presented in the table). The individual is the unit of observation, which means that the statistics presented are for the distribution of equivalised incomes across all individuals in the population, including children.

Patterns in average levels of income between 2001 and 2024 evident for incomes of households are also evident for equivalised incomes of individuals. The HILDA Survey indicates that there was little net change in income inequality between 2001 and 2024. For example, the Gini coefficient, a common measure of overall inequality, was approximately 0.3 at both the start and end of this period. However, the arrival of the COVID-19 pandemic led to sizeable movements in inequality. In 2020, the first year affected by the COVID-19 pandemic, there was a marked decline in inequality, despite only the last three-and-a-half months of the financial year ending 30 June 2020 potentially affected—that is, mid-March to 30 June 2020. Indeed, the Gini coefficient decreased from 0.305 in 2019 to 0.291 in 2020. The Gini coefficient subsequently increased slightly in 2021 and then increased substantially in 2022, to be at its highest level ever in the HILDA Survey period, at 0.323. The growth between 2020 and 2022 reflected slight growth in high incomes relative to middle incomes (as reflected by the ratio of the 90th percentile to the median) and large declines in low incomes relative to middle incomes (as reflected by the ratio of the median to the 10th percentile). The Gini coefficient declined to 0.305 in 2023 and 0.300 in 2024.

Box 2.8: Income distribution statistics

A variety of inequality measures are used in income distribution studies. In this report, estimates are presented for several commonly used measures. Average- and middle-income levels are described by the mean and median, respectively, while inequality in the income distribution is described by the ratio of the 90th percentile to the median, the ratio of the median to the 10th percentile and the Gini coefficient. The 90th percentile is the income of the individual who has 10% of individuals with higher incomes and 90% with lower incomes. The 10th percentile is the income of the individual who has 90% of individuals with higher incomes and 10% with lower incomes. The Gini coefficient is an overall measure of inequality that ranges from 0, where everyone has the same income, to 1, where one individual has all the income. See the Technical Appendix for further explanation of these measures.

Table 2.4: Distribution of individuals' household equivalised income, 2001 to 2024

	Mean (\$, December 2024 prices)	Median (\$, December 2024 prices)	Ratio of 90th percentile to the median	Ratio of median to the 10th percentile	Gini coefficient
2001	52,033	46,045	1.91	2.11	0.304
2002	52,863	46,660	1.89	2.11	0.302
2003	53,463	47,803	1.87	2.12	0.300
2004	54,903	49,588	1.85	2.12	0.293
2005	57,007	50,918	1.85	2.05	0.294
2006	59,711	52,895	1.91	2.09	0.299
2007	63,238	55,043	1.94	2.13	0.308
2008	64,306	56,087	1.92	2.14	0.306
2009	66,520	60,215	1.81	2.18	0.294
2010	66,064	58,097	1.90	2.08	0.301
2011	66,869	58,016	1.97	2.13	0.312
2012	67,641	59,257	1.91	2.07	0.301
2013	68,243	59,275	1.91	2.03	0.302
2014	67,917	59,358	1.91	2.00	0.303
2015	68,118	59,496	1.93	1.99	0.298
2016	67,955	59,500	1.88	2.01	0.297
2017	68,778	59,362	1.92	2.02	0.308
2018	68,808	60,703	1.89	2.07	0.299
2019	71,068	62,916	1.87	2.11	0.305
2020	72,276	64,040	1.87	2.01	0.291
2021	74,212	66,003	1.85	2.07	0.296
2022	75,936	65,810	1.88	2.23	0.323
2023	73,321	65,036	1.87	2.16	0.305
2024	74,112	66,311	1.85	2.15	0.300

Income differences by family type

Figure 2.6 compares median equivalised incomes across family types (defined in Box 2.9).⁵ A reasonably consistent ordering by type of family is evident across the 24 years of the survey, ranging from older people at the bottom to non-elderly couples without dependent children at the top. It also appears that there are three broad ‘clusters’ of family type: non-elderly couples without dependent children, who have the highest incomes; couples with dependent children and non-elderly single people, who have middle-level incomes; and single-parent families and older people, who have low incomes. All family types have exhibited growth in median incomes between 2001 and 2024, with non-elderly couples without children faring somewhat better than other family types. However, this family type experienced the sharpest decrease in median income in 2023.

Box 2.9: Family types

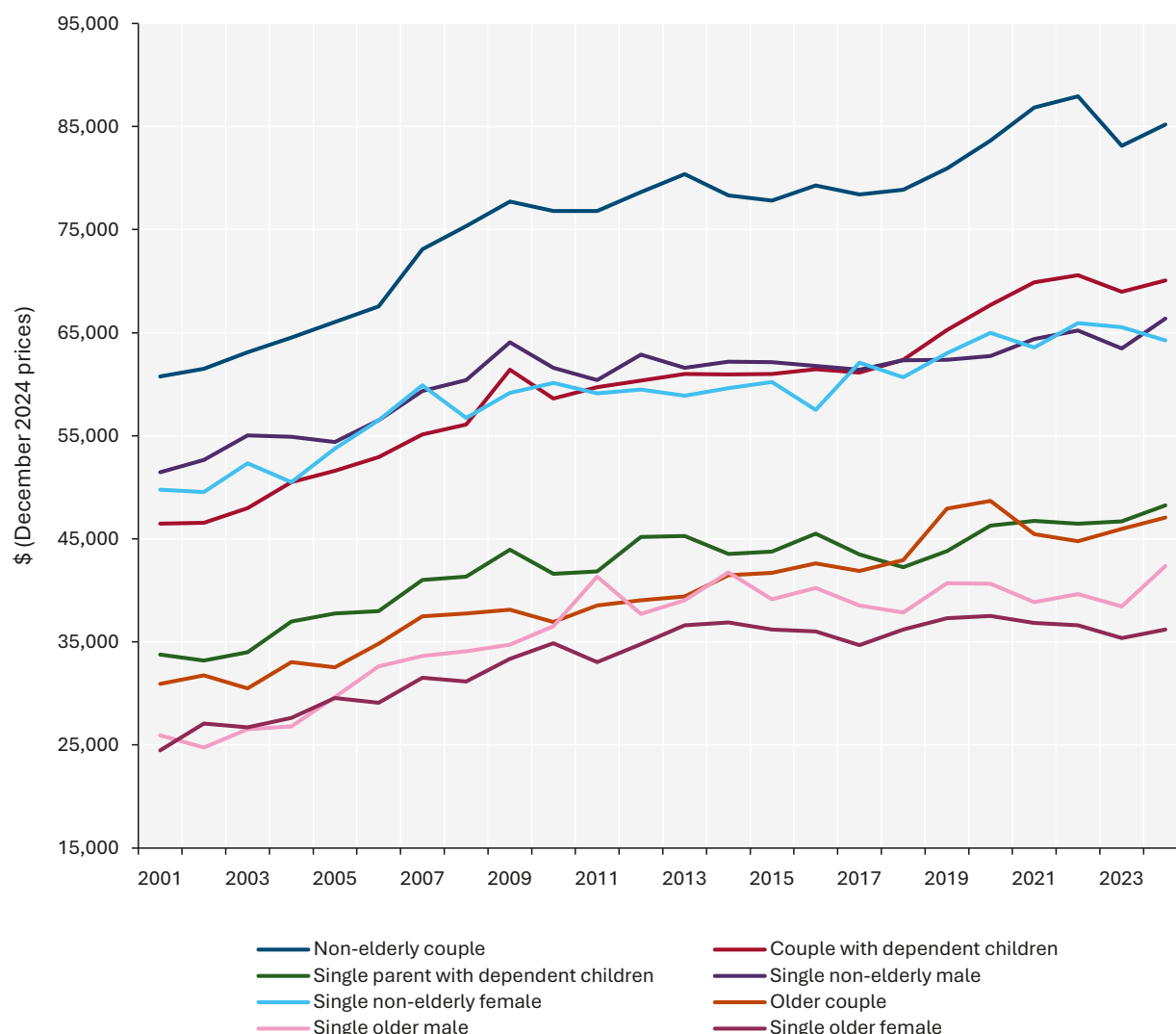
The following eight family types are distinguished in this report: (1) non-elderly couple, defined to be a couple (married or de facto) without dependent children with at least one member of the couple under 65 years of age; (2) couple with at least one dependent child living with them (regardless of the ages of the members of the couple); (3) single parent living with at least one dependent child (again, regardless of the age of the single parent); (4) non-elderly (aged under 65) single male; (5) non-elderly single female; (6) older couple, where both people are over 65 years of age; (7) older (aged 65 and over) single male; and (8) older (aged 65 and over) single female. In some analyses, only four family types are distinguished: (1) couple without dependent children; (2) couple with dependent children; (3) single parent with dependent children; and (4) single person.

Note that some households will contain multiple ‘families’. For example, a household containing a non-elderly couple living with a non-dependent son will contain a non-elderly couple family and a non-elderly single male. Both of these families will, of course, have the same household equivalised income. Also note that, to be classified as having dependent children, the children must live with the parent or guardian at least 50% of the time (where children residing in each parent’s household exactly 50% of the time are allocated to the mother’s household). Consequently, individuals with dependent children who reside with them less than 50% of the time will not be classified as having resident dependent children. See Wilkins (2016) for an analysis of parents in this situation.



⁵ The classification of family types does not distinguish single-parent families by whether the parent is male or female. Approximately 85% of single-parent families are headed by a female parent; consequently, sample sizes for male single-parent families are generally too small for statistically reliable separate analysis. Note that median incomes tend to be slightly higher for male-headed single-parent families, but rates of poverty and financial stress are similar to those found for female single-parent families. Rather than exclude male single-parent families from analysis, they are grouped with female single-parent families.

Figure 2.6: Median equivalised income, by family type



Income differences by region

Figure 2.7 compares mean equivalised incomes of individuals over the 2001 to 2024 period across the five mainland capital cities as well as the combined rest of Australia (see Box 2.10 for an explanation of how region of residence is classified).

In 2001, the mean income was highest in Sydney, followed by Melbourne, and then Brisbane and Perth, which had very similar mean incomes. The lowest mean incomes in 2001 were in Adelaide and the combined rest of Australia (which comprises all regions other than the mainland capital cities). Mean incomes have broadly tended to converge among the mainland capital cities, with the notable exception of Adelaide, which has consistently had a similar mean income to the combined rest of Australia. The gap in mean incomes between the mainland capital cities other than Adelaide and the rest of the country has, moreover, tended to grow over the 24-year period. For example, the mean income in Adelaide relative to the mean income in Brisbane fell from 91% in 2001 to 82% in 2024.

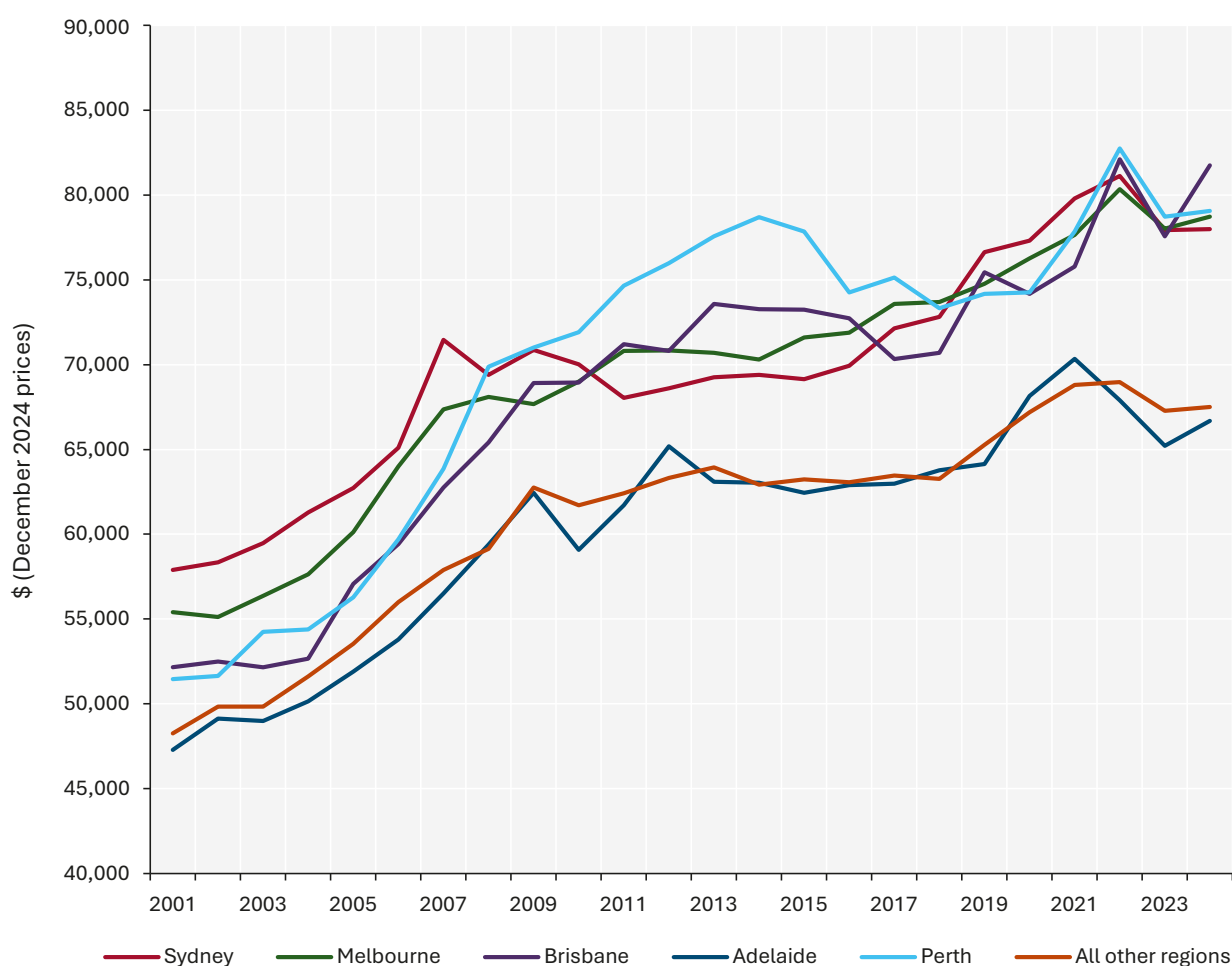
Also notable in Figure 2.7 are the relatively large fluctuations in the mean income in Perth. The mean surged between 2004 and 2008, and again between 2010 and 2014, but then fell between 2014 and 2016 before surging again between 2020 and 2022. Between 2022 and 2023, mean incomes decreased considerably in all regions examined in Figure 2.7, while between 2023 and 2024, mean incomes recovered only slightly in all regions other than Brisbane, which experienced strong growth between 2023 and 2024.

Box 2.10: Classification of region of residence

There are various ways of characterising the region of residence of sample members. In this report, we primarily characterise regions by state or territory of residence or by the region's population density. Based on the Australian Bureau of Statistics' (ABS) geographical classifications (ABS, 2001, 2011, 2021a), three levels of population density are distinguished: *major urban* (cities with populations of 100,000 or more); *non-major urban* (towns and cities with populations of 1,000 to 99,999); and *non-urban* (towns with populations of less than 1,000, and rural and remote areas). The 2001 classification (ABS, 2011) is used for Waves 1 to 6, the 2011 classification (ABS, 2011) is used for Waves 7 to 16 and the 2021 classification (ABS, 2021a) is used for Waves 17 onwards. The HILDA Survey data show that, in 2024, approximately 73% of the population resided in major urban areas, 17% resided in non-major urban areas and 10% resided in non-urban areas.

In more detailed analysis by region, information on state or territory of residence, whether resident of the state's capital city and, for those not residing in the capital city, the population density of their location of residence, are combined to create more disaggregated regions, each of which has a sufficient sample size to support the statistical analyses presented. The most disaggregated classification distinguishes 16 regions: (1) Sydney; (2) other urban New South Wales; (3) non-urban New South Wales; (4) Melbourne; (5) other urban Victoria; (6) non-urban Victoria; (7) Brisbane; (8) other urban Queensland; (9) non-urban Queensland; (10) Adelaide; (11) rest of South Australia; (12) Perth; (13) rest of Western Australia; (14) Tasmania; (15) Northern Territory; and (16) Australian Capital Territory. In some analyses, non-urban areas of Australia are distinguished as a single category and urban Northern Territory is combined with other urban South Australia. Further, some analyses distinguish only the five mainland capital cities.

Figure 2.7: Mean equivalised income by region



Income mobility and income changes

Table 2.5 takes advantage of the longitudinal information from the HILDA Survey to examine the income mobility of individuals. Specifically, mobility measures are examined over three timeframes—two years, five years and 10 years—and for three sub-periods of the 2001 to 2024 period based on the initial year in which income is measured: 2001 to 2004, 2010 to 2013 and 2020 to 2023.

The upper panel examines the mean absolute change in percentile rank, noting that the maximum possible change is 99 (moving from the bottom percentile to the top percentile, or vice versa). For example, the estimate in the top-left cell indicates that, for initial years 2001 to 2004, the mean change in percentile rank from one year to the next was 12.8—that is, on average, people moved 12.8 percentiles (up or down) in the distribution of income. Similarly, the estimate of 18.3 in the next row indicates that, for the same initial years, the mean change in percentile rank over five years was 18.3—that is, five years after the initial year, people had, on average, moved 18.3 percentiles. The lower panel examines persistence in the bottom quintile, showing the proportion of people in the bottom quintile of the income distribution who remain in that quintile. For example, the upper-left cell indicates that, for initial years 2001 to 2004, 67.7% of people who were in the bottom quintile in the initial year were still in the bottom quintile one year later. The first estimate in the next row indicates that 38.9% of people who were in the bottom quintile in the initial year remained in the bottom quintile in all of the subsequent four years.

The estimates for the three time periods show that short-term income mobility has reduced slightly this century. The mean absolute change in percentile rank from one year to the next was highest in the 2001 to 2004 period, at 12.8, and lowest in the 2020 to 2023 period, at 11.6. This pattern is also evident for medium-term (five-year) income mobility comparing 2001 to 2004 with 2010 to 2013: the mean absolute change in percentile rank was 18.3 in 2001 to 2004 and 17.7 in 2010 to 2013. For long-term (10-year) income mobility, little change in mobility is evident.

Consistent with the small decline in overall mobility, persistence in the bottom quintile has increased slightly over the two-year window, rising from 67.7% in the 2001 to 2004 period to 69.5% in the 2020 to 2023 period. Similarly, persistence over a five-year window increased from 38.9% in 2001 to 2004 to 41.3% in 2010 to 2013. However, a slight decrease in persistence in the bottom quintile is evident over the 10-year window, falling from 22.1% in 2001 to 2004 to 21.2% in 2010 to 2013.

Table 2.5: Movements of individuals in the income distribution

	Initial years		
	2001–2004	2010–2013	2020–2023
<i>Mean absolute change in percentile rank</i>			
Over 2 years	12.8	11.8	11.6
Over 5 years	18.3	17.7	–
Over 10 years	22.0	22.1	–
<i>Proportion of those in the bottom quintile remaining in the bottom quintile (%)</i>			
For 2 years	67.7	68.9	69.5
For 5 years	38.9	41.3	–
For 10 years	22.1	21.2	–

Table 2.6 provides information on individuals' experiences of income changes in recent years, a period that has been marked by considerable economic and social upheaval. It presents changes in equivalised incomes from one year to the next since 2018. The proportion of the population experiencing a decline in income was lowest between 2020 and 2021, when 42.1% of people had a decrease in income and the median change was a \$2,039 increase in income.



Table 2.6: Changes in individuals' household equivalised incomes from one year to the next, 2018 to 2024

	Mean change (\$, December 2024 prices)	Median change (\$, December 2024 prices)	Percentage experiencing a decrease in income
2018–2019	2,008	1,698	42.4
2019–2020	557	1,336	44.2
2020–2021	1,611	2,039	42.1
2021–2022	1,592	–632	52.0
2022–2023	–2,668	–1,091	54.0
2023–2024	681	1,020	45.6

Strikingly, large negative mean and median changes in income are evident between 2022 and 2023, with 54% of people experiencing a decrease in income. The median change was also negative between 2021 and 2022, when 52% of people experienced a decrease in income. However, the mean income change between 2021 and 2022 was a \$1,592 *increase* in income, indicating that—despite the majority of people experiencing a decline in income—a significant number of people experienced large increases in income between 2021 and 2022. Between 2023 and 2024, 45.6% of people experienced a decline in income, with the median increase (\$1,020) larger than the mean increase (\$681).

The labour market

Labour force status

Figure 2.8 presents trends in the labour force status of men and women over the 2001 to 2024 period, differentiating between people who are 'employed', 'unemployed' and 'not in the labour force' (see Box 2.11). The analysis is limited to ages 18–64 to focus on the population most likely to be available for work across the 2001 to 2024 period. While most individuals under 18 remain in full-time education, most people aged 65 and over are retired, although it should be noted that the retirement age has increased in recent years (see Chapter 5 in Laß et al., 2025).

Box 2.11: Labour force status

In this report, insofar as is possible, we follow international and Australian Bureau of Statistics (ABS) conventions in determining an individual's labour force status. In particular:

- A person is classified as *employed* if that person had a job, business or farm in the week preceding the interview, and had either worked in the last four weeks or had not worked but: had been in paid work for any part of the last four weeks; or had been on worker's compensation and expected to return to work for the same employer; or had not worked because of a strike or lock-out.
- An employed person is classified as *employed part-time* if their usual weekly hours of work in all jobs total less than 35 hours. Otherwise, an employed person is classified as *employed full-time*.^a
- A non-employed person is classified as *unemployed* if that person had actively looked for work at any time in the four weeks preceding the interview and was available to start work in the week preceding the interview; or if that person was waiting to start a new job within four weeks from the date of interview and could have started in the week preceding the interview if the job had been available.
- A non-employed person who is not unemployed is classified as *not in the labour force*.

^a The definition of part-time employment adopted in this report differs from the definition the ABS uses in its Labour Force Survey. The ABS definition requires both usual and current actual weekly hours to be less than 35; otherwise, a person is classified as employed full-time.

For both sexes, the broad trend over this period has been an increase in the employment rate, but with notable disruptions during the COVID-19 pandemic in 2020 and (for men) in 2009 in the wake of the Global Financial Crisis. The proportion of employed men rose from 79.7% in 2001 to a record high of 84.4% in 2024. For women, the increase was even more pronounced, with the employment rate rising from 64.3% to 76% between 2001 and 2024 (a proportion only second to the 76.2% reached in 2022). Correspondingly, the proportion of women who are not in the labour force declined notably, from 32% in 2001 to its lowest recorded level of 21.7% in 2024.



Figure 2.8 also breaks down the employment rate by whether workers are employed full-time or part-time, highlighting stark differences in employment patterns between men and women.

Among men, full-time work has been by far the more dominant type of employment, accounting for around 63% to 73% of all men aged 18 to 64 across the entire period. After a peak of 73.4% in 2008, men's full-time employment declined, a trend that was accelerated with the onset of the COVID-19 pandemic in 2020, when it plummeted to 62.7%. Men's full-time employment rate has since shown strong recovery and stood at 69.9% in 2024.

The proportion of men employed part-time was low across the 2001 to 2024 period, but it did see an upward trend, from 11% in 2001 to 14.5% in 2024. It rose particularly sharply during the pandemic, to 15.8% in 2020, its highest level in the HILDA Survey period.

For women aged 18 to 64, the proportion employed full-time has been considerably lower than for men. However, it increased significantly over the period, from 35.3% in 2001 to 40.7% in 2019. After a temporary decline to 38.5% in 2020, it surged over the next three years to a record high of 44.8% in 2023 before declining slightly to 43.3% in 2024.

By contrast, part-time work is significantly more prevalent among women than among men. It also trended upwards over the period, from 28.9% in 2001 to an all-time high of 33.5% in 2019. After a steady decline between 2019 and 2023, women's part-time rate has seen an uptick in the most recent year, standing at 32.7% in 2024.

Figure 2.8: Labour force status—People aged 18 to 64

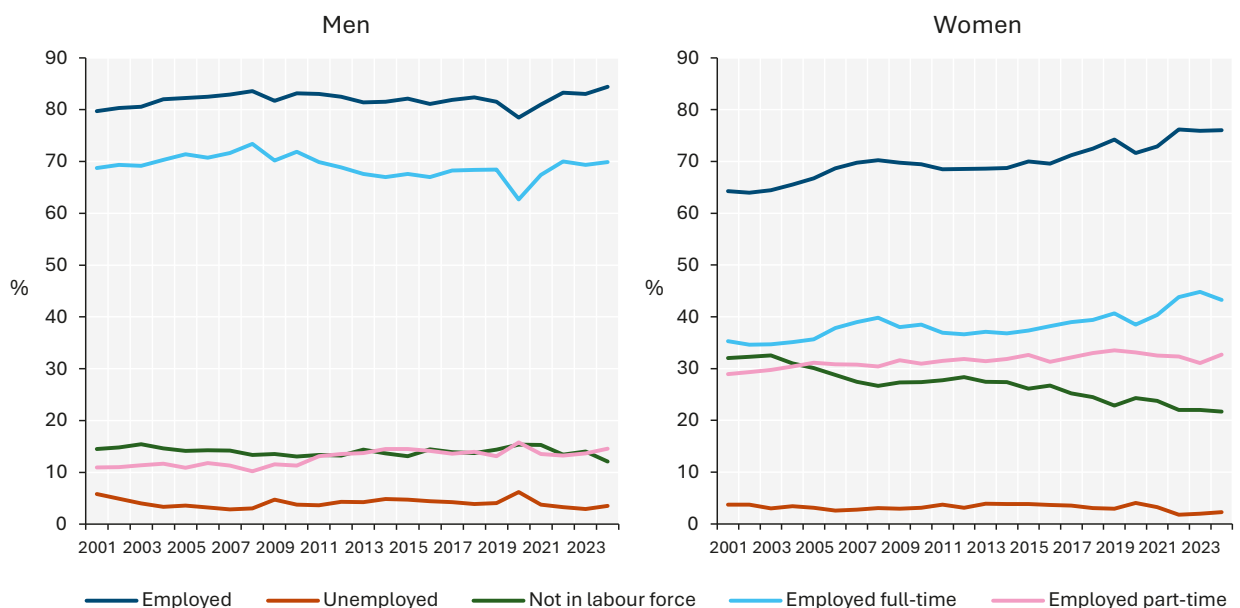
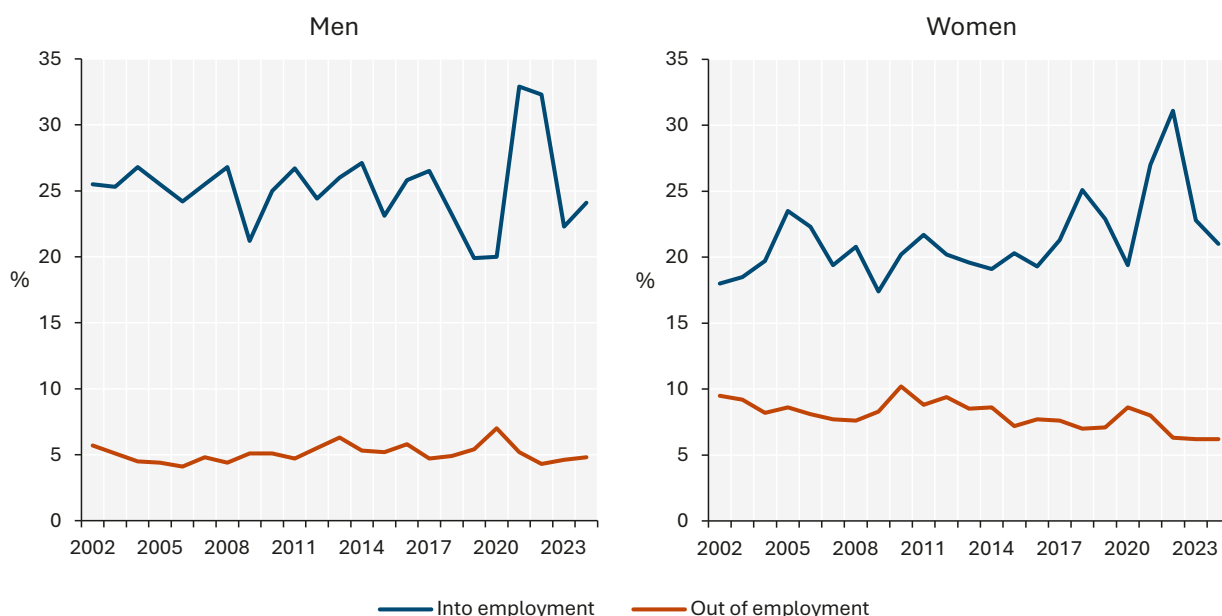


Figure 2.9 examines one-year transitions between employment and non-employment of people aged 18 to 64 over the 2001 to 2024 period. The figure shows the proportion of non-employed individuals moving into employment from one year to the next, and the proportion of employed individuals moving out of employment from one year to the next.

Men generally have lower transition rates out of employment than women, which likely reflects, at least in part, women's greater caregiving responsibilities. However, women's annual exit rates have decreased significantly over time, from 9.5% in 2002 to 6.2% in 2024.

Dramatic effects in the three years after the onset of the COVID-19 pandemic are evident, with a visible rise in the transition to non-employment in 2020, followed by a very large rise in the entry rate for both men and women in 2021 and 2022. By contrast, the year 2023 saw very significant declines in entry rates into employment—a trend that has continued for women into 2024.

Figure 2.9: Annual rates of movement into and out of employment—People aged 18 to 64



Notes: Years on the horizontal axis refer to the second year of the two-year transition period. For example, 2002 refers to transitions between 2001 and 2002. The rate of movement into employment is the proportion of those not employed in the first year who are employed in the second year. The rate of movement out of employment is the proportion of those employed in the first year who are not employed in the second year.

Labour market earnings

Earnings are a key dimension of labour market outcomes. A worker's earnings per hour measures the rate at which their labour is rewarded in the labour market and thus provides a measure of the market value of that worker's labour. Earnings—the main income source for most working-age people—are also an important contributor to an individual's economic wellbeing.

Figure 2.10 examines weekly earnings among employees,⁶ plotting both mean and median earnings (see Box 2.12 for an explanation of the earnings measures). To provide a comprehensive picture of overall earnings in Australia, this analysis includes all employees aged 15 and over (rather than just those aged 18 to 64, as in the labour force status section). The left-hand side of the figure focuses on earnings from the main job among full-time employees only, whereas the right-hand side of the figure presents weekly earnings for all workers from all jobs.

⁶ Note that all figures in this subsection are for earnings of *employees* and therefore exclude earnings of the self-employed and employers, whose earnings are often confounded with returns on capital invested in the business, either because reported earnings include a return on capital, or because reported capital income includes a component that is actually a return on labour.

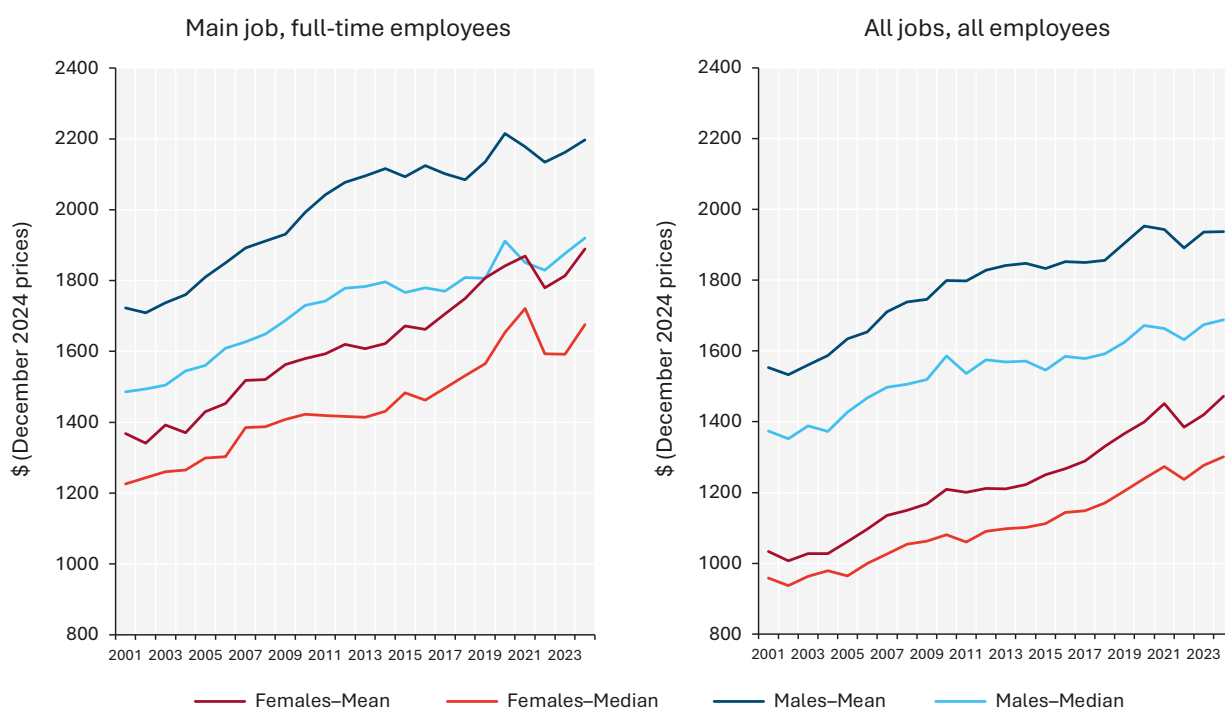
Box 2.12: HILDA Survey measures of labour market earnings

The HILDA Survey does not ask respondents to report their hourly wage; rather, usual weekly (typically gross) earnings and usual weekly hours of work are obtained from everyone who is employed. Hourly rates of pay can then be calculated from this information. The hourly rate of pay so obtained is 'current usual earnings per hour worked'. While the hourly wage rate is the appropriate focus when interest is in the rate at which labour is rewarded, one concern that arises in hourly wage rate analysis is that additional measurement error is introduced by dividing reported weekly earnings by reported weekly hours of work. This provides one rationale for examining weekly earnings, at least as an augmentation to the study of hourly earnings. Another reason for examining weekly earnings is that, for full-time employees who are paid a salary, the notion of an hourly wage is often less relevant. For example, a full-time employee may report working more than 38 hours per week but may implicitly only be paid for 38 hours.

Focusing on earnings from the main job for full-time workers first shows that over the 2001 to 2024 period, females' mean weekly full-time earnings have been significantly lower than those of males. However, while both sexes saw an increase in mean weekly earnings over time, the rise was stronger for females. For males, mean weekly full-time earnings rose from \$1,723 to \$2,197 (a 27.5% increase) and for females from \$1,368 to \$1,889 (a 38.1% increase) (expressed at December-quarter 2024 prices). Median weekly full-time earnings have been significantly lower than mean earnings but have followed a similar trajectory.

Most recently, that is, between 2023 and 2024, mean earnings for male full-time employees saw a moderate increase of 1.6%, reaching a similar level in 2024 as during the peak in 2020. The increase in male median full-time earnings was slightly larger, at 2.3%. For female full-time employees, both mean and median earnings rose more strongly than for their male counterparts between 2023 and 2024 (by 4.2% and 5.2%, respectively), with females' mean full-time earnings reaching an all-time high in 2024.

Figure 2.10: Weekly earnings of employees



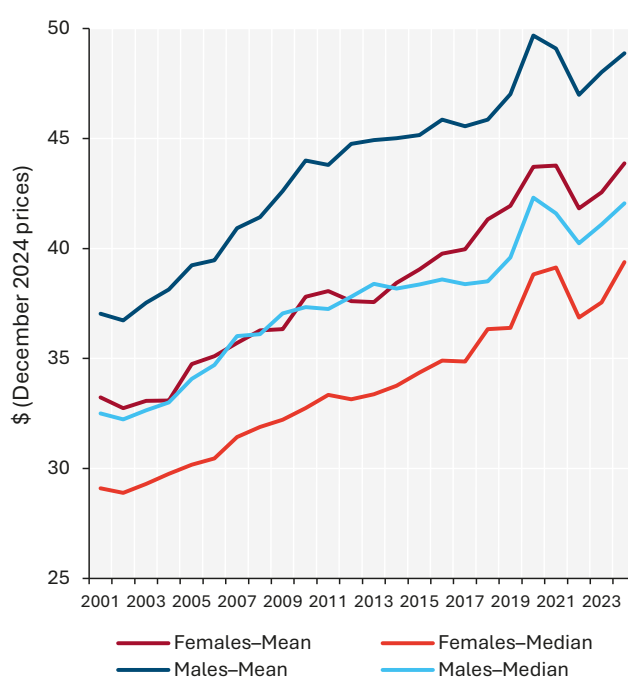
Note: Weekly earnings less than \$100 at December 2024 prices have been excluded.

The figure on the right-hand side provides a sense of the total distribution of weekly earnings among all employees, that is, how much total wage and salary income each employee receives, irrespective of part-time or full-time status. This perhaps gives a better indication of how employees are faring on average. The growth in mean weekly earnings from all jobs between 2001 and 2024 was 24.7% for males (rising from \$1,553 to \$1,937) and 42.5% for females (rising from \$1,033 to \$1,472). Mean earnings in all jobs rose notably between 2023 and 2024 for females, while there was little change for males.

Figure 2.11 provides an overall picture of the hourly rates of pay for all employees. Between 2001 and 2024, both males and females sustained consistent growth in mean hourly wages, rising from \$37 to \$49 among males and from \$33 to \$44 among females. The pandemic period was accompanied by a sharp rise in hourly wages, followed by an equally sharp decline in 2022. This spike was driven by a reduction in the mean number of working hours during the pandemic, while mean weekly wages continued to grow. Between 2023 and 2024, mean hourly earnings rose by 3.1% among females and 1.8% among males. Again, the trajectory for median wages was similar, but the increase in 2024 was stronger than for mean wages, at 4.9% for females and 2.3% for males.



Figure 2.11: Hourly earnings in all jobs, all employees



Note: Hourly earnings less than \$2 and greater than \$600 at December 2024 prices have been excluded to remove implausible values at the low end and to prevent a few extreme high values from skewing the mean.

While the figures presented above show large increases in the weekly and hourly earnings of the average and median worker, another question is how the level of inequality in earnings between workers has developed over time. To this end, Table 2.7 presents trends over the 2001 to 2024 period in several indicators of wage inequality. In order not to confound inequality in wage levels with inequality in weekly working hours, the focus is on hourly wages in all jobs. This is also in line with prior literature on wage inequality in Australia that has used hourly wages as the preferred measure (Chatterjee et al., 2016; Freestone, 2018).

The first four columns of data in Table 2.7 present indicators of wage inequality across the wage distribution, that is, between high-, medium- and low-wage earners: the Gini coefficient, the ratio between the wage at the 90th percentile and that at the 10th percentile of the wage distribution (the 90/10 ratio), the ratio between the 90th percentile wage and the median wage (the 90/50 ratio), and the ratio between the median wage and the 10th percentile wage (the 50/10 ratio) (see Box 2.8 for an explanation of these measures). Based on these measures, there has been relatively little change in wage inequality: in 2001, the Gini coefficient was 0.272, which is only slightly higher than the 0.265 calculated for the year 2024. In 2001, workers at the 90th percentile of the wage distribution earned about 3.18 times as much as workers at the 10th percentile and about 1.83 times as much as the median worker. In 2024, these ratios were very similar, at 3.15 and around 1.87. Furthermore, in both years, the median worker earned about 1.7 times as much as the worker at the 10th percentile.

Nevertheless, there has been some volatility over time, with the years around 2012 to 2014 showing relatively large 90/50, 90/10 and 50/10 ratios, indicating more inequality than in most other years. Also noteworthy is the drop in the 90/10 and 90/50 ratios between 2019 and 2020 while the 50/10 ratio rose slightly, suggesting that top wages fell relative to the median and the bottom. By contrast, all ratios increased between 2021 and 2022, indicating a widening of the gap between the top and bottom of the wage distribution in the aftermath of the COVID-19 pandemic.

Table 2.7: Trends in inequality in hourly wages in all jobs

	Inequality across wage distribution				Gender inequality
	Gini coefficient	90/10 ratio (%)	90/50 ratio (%)	50/10 ratio (%)	Gender pay gap (%)
2001	0.272	318.2	182.9	174.0	10.3
2002	0.269	310.4	177.2	175.2	10.9
2003	0.268	317.6	181.1	175.3	11.9
2004	0.262	312.9	179.3	174.5	13.3
2005	0.276	318.2	182.1	174.8	11.4
2006	0.270	320.6	186.7	171.7	11.0
2007	0.269	307.4	180.7	170.1	12.8
2008	0.273	318.1	183.2	173.6	12.4
2009	0.276	324.7	183.9	176.6	14.7
2010	0.279	321.6	187.1	171.9	14.1
2011	0.279	319.4	188.6	169.4	13.1
2012	0.278	324.8	191.3	169.8	16.0
2013	0.279	337.3	189.8	177.8	16.4
2014	0.277	328.2	192.5	170.5	14.6
2015	0.273	313.1	186.7	167.7	13.5
2016	0.275	314.4	188.7	166.6	13.3
2017	0.276	318.1	190.9	166.7	12.3
2018	0.273	309.0	187.2	165.1	9.9
2019	0.273	315.8	190.5	165.8	10.8
2020	0.268	304.3	183.2	166.2	12.0
2021	0.266	304.5	182.7	166.7	10.8
2022	0.273	320.0	186.7	171.4	11.0
2023	0.268	316.6	188.3	168.1	11.4
2024	0.265	315.0	187.5	168.0	10.2
Change 2001–2024	-0.007	-3.3	4.6	-6.0	-0.1

The rightmost column focuses on wage inequality between males and females by displaying trends in the gender pay gap, which represents the gap between males' and females' mean hourly wages (in all jobs) as a percentage of males' wages. In 2024, the gender pay gap was 10.2%, which is the second-lowest level recorded over the period (after the 9.9% recorded in 2018). There was notable volatility in the size of the gender pay gap over the observed period: whereas in 2001, levels of gender inequality in wages were similarly low as 2024 levels, at 10.3%, the years 2012 and 2013 had particularly large gender wage gaps, at 16% and 16.4%, respectively.

Mental and physical health

The HILDA Survey has administered the SF-36 Health Survey in every wave since 2001 as part of the self-completion questionnaire (SCQ) (see Box 2.13). The SF-36 produces summary measures of general health and mental health, each scored on a 0 to 100 scale, with higher scores indicating better health.

Box 2.13: SF-36 measures of health

The SF-36 Health Survey (Version 1) is a 36-item questionnaire that is intended to measure health outcomes (functioning and wellbeing) from a patient point of view. It was specifically developed as an instrument to be completed by patients or the general public rather than by medical practitioners, and is widely regarded as one of the most valid instruments of its type. See https://www.rand.org/health-care/surveys_tools/mos/36-item-short-form.html for further details.

The SF-36 comprises eight health scales, five of which are used in this chapter: General Health, Mental Health, Role-Emotional (the extent to which emotional problems interfere with work or daily activities), Social Functioning (the extent to which health problems interfere with normal social activities) and Vitality (energy levels and fatigue). Following Ware et al. (2000), each scale is constructed from the relevant questionnaire items and transformed to an index ranging from 0 to 100, with higher scores indicating better health.

For some analyses in this report, indicator variables are created for poor general health and poor mental health. There are no universally accepted threshold scores for defining poor general and mental health, but for the purposes of this report, poor general health is defined as a score less than or equal to 37, on the basis that the HILDA Survey shows that approximately 10% to 15% of the population is at or below this threshold across the survey period. Similarly, poor mental health is defined as a score less than or equal to 52, on the basis that approximately 10% to 15% of the population is at or below this threshold across the survey period. The 52-point threshold has also been used in previous studies to designate poor mental health (e.g., Roy and Schurer, 2013; Botha et al., 2023). These thresholds are used for descriptive purposes only and are not intended as diagnostic criteria or proxies for clinical mental health conditions.

For general health (Figure 2.12), which presents mean scores separately for males and females, declines are evident among those aged 15 to 54, but not among older age groups. The declines are larger for females than males: among females aged 25 to 34, mean general health fell from 74 in 2001 to 67 in 2024, a decline of approximately 7 points. Among those aged 55 and over, general health has remained stable or improved slightly. The age gradient is as expected, with older age groups reporting lower average general health. By 2024, mean general health scores ranged from around 57 among those aged 65 and over to around 72 among males aged 15 to 24.

Mental health trends show a qualitatively different pattern (Figure 2.13). Whereas general health declines have been gradual over the full period, mental health scores were broadly stable from 2001 to roughly 2011, after which a sustained and steeper decline is observed among younger age groups. Among females aged 15 to 24, mean mental health scores fell from 72 in 2011 to 63 in 2024, a decline of 9 points. Females aged 25 to 34 also experienced notable declines, from 73 to 66 over the same period.

For males, the pattern is similar but less pronounced: among those aged 15 to 24, mean mental health scores declined from 74 to 68 points. By contrast, adults aged 65 and over have maintained essentially stable mental health scores throughout the period, and those aged 55 to 64 show only modest declines. By 2024, mean mental health scores ranged from 63 among females aged 15 to 24 to 76 among males aged 65 and over—a reversal of the typical age gradient observed for general health.

The deterioration in young people's mental health scores began around 2011 to 2012, well before the COVID-19 pandemic. While the pandemic years (2020 to 2021) coincided with further declines—particularly among young females, whose mean mental health scores reached their lowest point in 2021—the downward trajectory was already well established. Scores have partially recovered since 2021, but remain substantially below their pre-2012 levels.

The causes of this sustained decline are likely multiple, and the data do not permit causal attribution. The timing aligns broadly with the diffusion of smartphones and social media among young people, a pattern observed in similar data from other high-income countries (Twenge, 2020; Twenge et al., 2021). It is also possible that growing awareness and reduced stigma around mental health have increased willingness to report difficulties, contributing to observed changes in scores over time.

Figure 2.12: Mean general health scores, by sex and age group

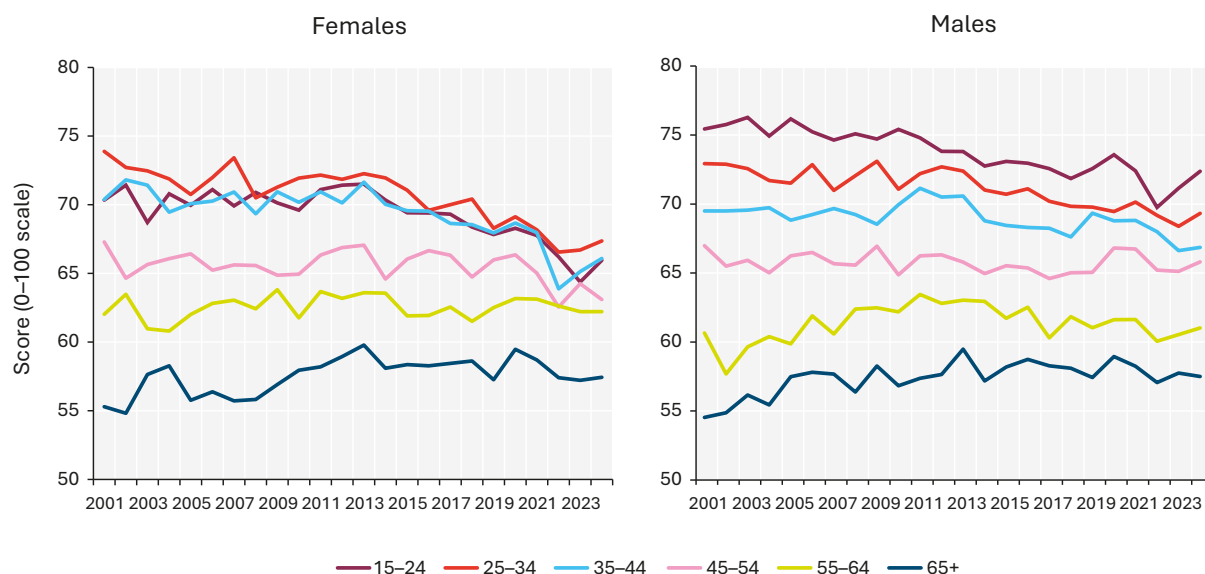
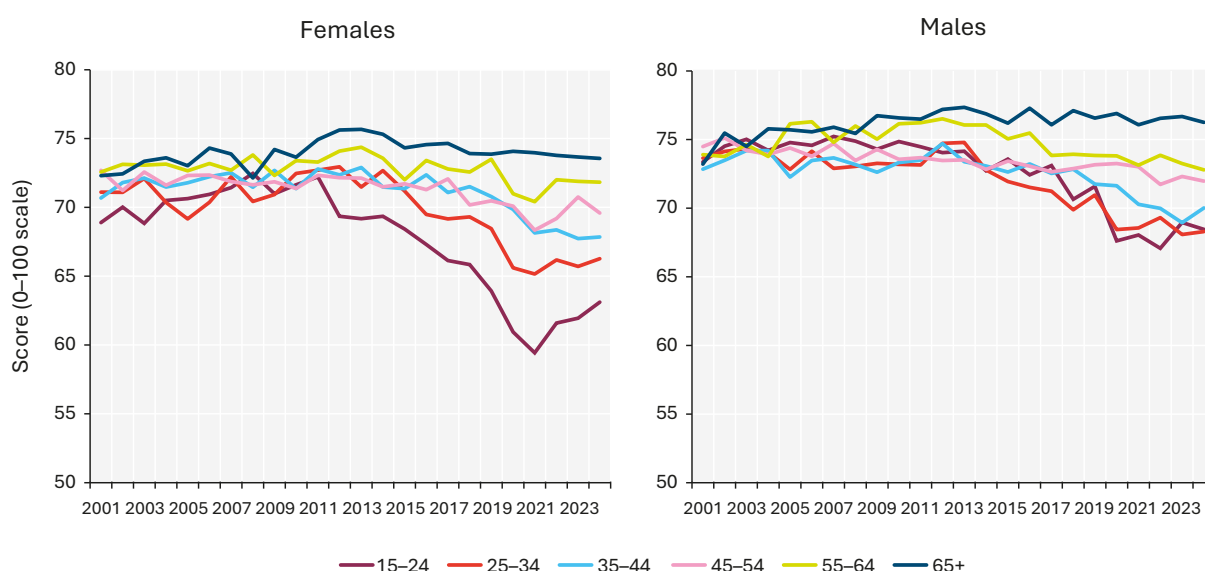


Figure 2.13: Mean mental health scores, by sex and age group

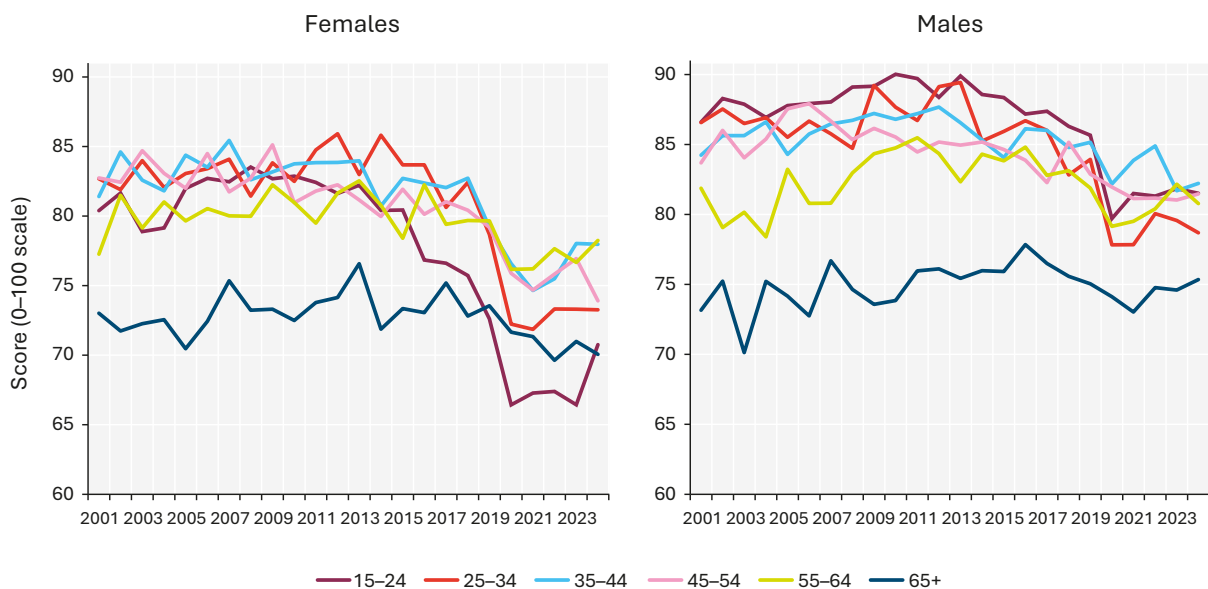


The SF-36 also includes subscales for specific health domains. Three of these are the most closely related to mental health: Role-Emotional, Social Functioning and Vitality. Given the substantial declines observed in mental health but not general health, examining these subscales separately helps identify which aspects of mental health have deteriorated most. Role-Emotional captures the extent to which emotional problems—such as anxiety or depression—interfere with work or daily activities, causing people to accomplish less than they would like or to perform tasks less carefully than usual. This subscale shows the largest declines (Figure 2.14).

Among females aged 15 to 24, mean Role-Emotional scores fell from 80 in 2014 to 71 in 2024, a decline of approximately 10 points. Females aged 25 to 34 experienced an even steeper decline, from 86 to 73 (13 points). Among males, declines are evident but more moderate—for example, males aged 15 to 24 declined from 89 to 82 over the same period. The pandemic period (2020 to 2021) accounts for a substantial share of these declines, with partial recovery evident thereafter.



Figure 2.14: Mean role-emotional score, by sex and age group



Social Functioning measures the degree to which physical or emotional health problems interfere with normal social activities—visiting friends, participating in community activities, and so on. This subscale has also declined substantially, though declines are smaller than for Role-Emotional (Figure 2.15). As with other mental health measures, the pattern shows a clear age gradient, with larger declines among younger age groups and among females. Among females aged 15 to 24, mean Social Functioning fell from 82 points in 2014 to 75 points in 2024.

Vitality captures energy levels and fatigue—how energetic versus tired and worn out people feel (Figure 2.16). Unlike the other subscales, Vitality shows declines across all age-sex groups, not just younger cohorts. This broader pattern likely reflects the fact that fatigue can stem from physical health problems as well as mental health issues. Nonetheless, the steepest declines remain among younger females: those aged 15 to 24 declined from 62 in 2011 to 52 in 2024, while those aged 25 to 34 declined from 60 to 52 over the same period.

Figure 2.15: Mean social functioning score, by sex and age group

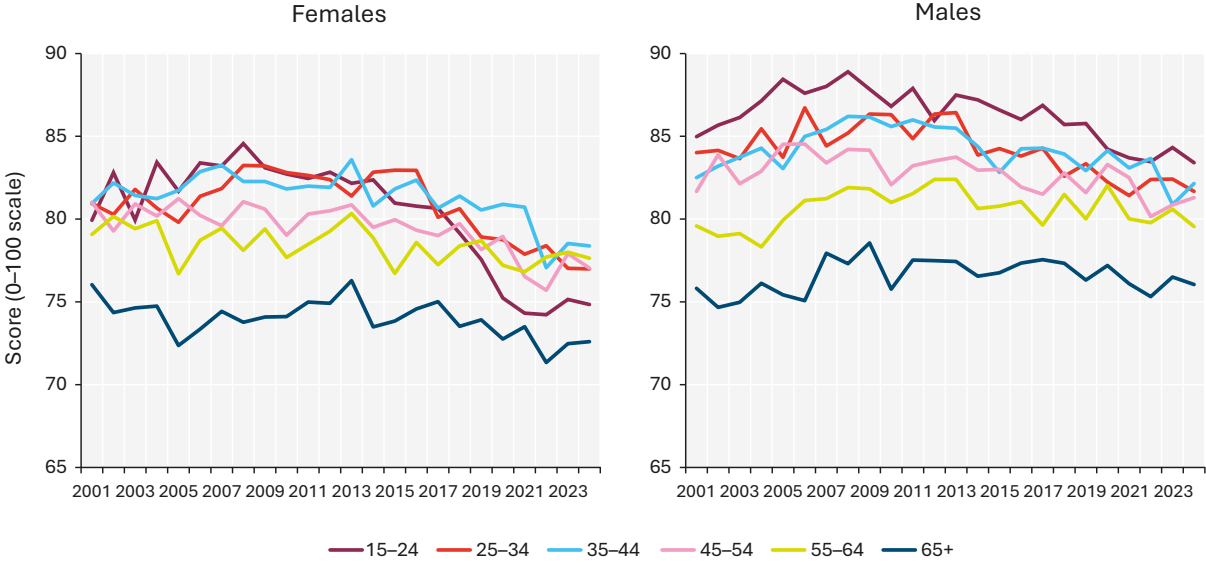
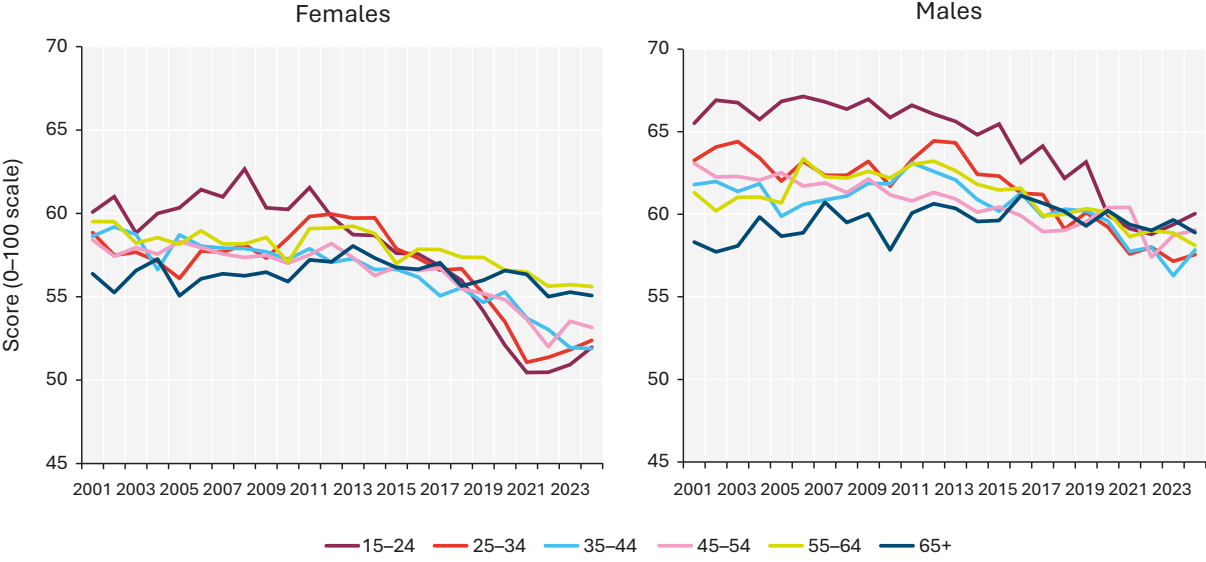


Figure 2.16: Mean vitality score, by sex and age group



The SF-36 findings point to substantial declines in mental health, particularly among young people. To corroborate these patterns, we turn to the Kessler-10 (K10), a clinical screening tool designed specifically to identify psychological distress. The HILDA Survey has administered the K10 biennially since 2007 (see Box 2.14). Following prior work (e.g., Laß et al., 2025, Chapter 8), a person is classified as being in psychological distress if their K10 score falls in the high or very high category (a score of 22 or above).

Box 2.14: Kessler-10 measure of psychological distress

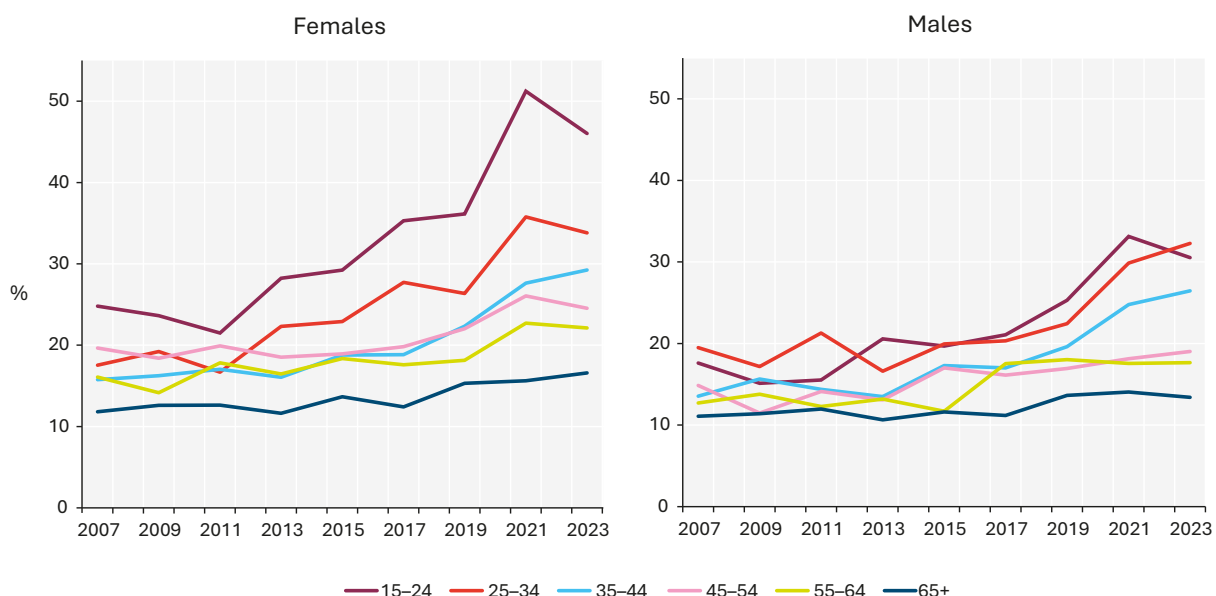
The Kessler-10 (K10) scale, a measure of non-specific psychological distress developed by Kessler et al. (2002), has been included in every other wave of the SCQ of the HILDA Survey since 2007. Respondents are asked the following: *In the last four weeks, about how often did you feel ...:*

- a. tired out for no good reason?
- b. nervous?
- c. so nervous that nothing could calm you down?
- d. hopeless?
- e. restless or fidgety?
- f. so restless that you could not sit still?
- g. depressed?
- h. that everything was an effort?
- i. so sad that nothing could cheer you up?
- j. worthless?

For each question, possible responses are: (1) 'none of the time'; (2) 'a little of the time'; (3) 'some of the time'; (4) 'most of the time'; and (5) 'all of the time'. In the interviewer-administered version of the K10, items (c) and (f) are not asked when responses to items (b) and (e) are 'none of the time'. In the HILDA SCQ, this is not possible. Therefore, responses to items (c) and (f) are set to a value of 1 if responses to items (b) and (e) are 'none of the time' (also see Wooden, 2009). The overall K10 score is then obtained by summing the responses to all items to get a score ranging from 10 (low psychological distress) to 50 (high psychological distress). The K10 can also divide the population into four distinct groups based on the level of psychological distress, namely 'low' (K10 score: 10–15), 'moderate' (K10 score: 16–21), 'high' (K10 score: 22–29) and 'very high' (K10 score: 30–50). In this chapter, a person is deemed to be in psychological distress if their K10 score is 'high' or 'very high' (i.e., having a score of 22 or higher).

Figure 2.17 shows the proportion of persons in psychological distress by sex and age group from 2007 to 2023. Among females aged 15 to 24, the proportion in high or very high distress rose from 25% in 2007 to 46% in 2023, peaking at 51% in 2021. By 2023, nearly half of young females were reporting high or very high psychological distress. Among males aged 15 to 24, distress rose from 18% to 31% over the same period—a substantial increase, but considerably lower than among females.

Figure 2.17: Proportion of persons in psychological distress, by sex and age group



The gender gap in distress has widened considerably among young people. In 2007, the gap between females and males aged 15 to 24 was approximately 7 percentage points; by 2023, it had grown to 15 percentage points. This widening gap is consistent with the patterns observed in the SF-36 measures, where declines in mental health subscales have been largest among young females.

The increase in psychological distress extends beyond young people but is markedly age-graded. Between 2007 and 2023, distress prevalence rose by approximately 13 to 21 percentage points among those aged 15 to 44, compared with increases of up to 6 percentage points among those aged 45 and over. Among adults aged 65 and over, distress prevalence has remained comparatively low, increasing from around 12% to 17% for women and from 11% to 13% for men. The 2021 spike—likely reflecting the impact of COVID-19 and associated public health restrictions—is most visible among younger females, but the broader upward trend clearly predates the pandemic and persists through 2023.



Table 2.8 shows how SF-36 mental health subscales vary by K10 distress category among young people aged 15 to 24 in 2023. The gradient is steep and consistent: young females in the ‘very high’ distress category score approximately 40 points lower on Mental Health and nearly 60 points lower on Role-Emotional compared with those in the ‘low’ category. Role-Emotional—which captures the extent to which emotional problems interfere with daily activities—shows the steepest gradient, consistent with the K10’s focus on symptoms that disrupt functioning. Females score lower than males on nearly every measure within each distress category, indicating that the gender gap reflects both higher distress prevalence among females and lower SF-36 scores at each level of distress.

Table 2.8: Mean mental health scores by K10 psychological distress category—Persons aged 15 to 24, by sex, 2023

	Mental Health	Role-Emotional	Social Functioning	Vitality
Females				
Low	78	92	92	69
Moderate	69	79	83	55
High	56	54	71	44
Very high	41	35	49	32
Males				
Low	82	97	96	73
Moderate	68	82	85	59
High	58	69	76	47
Very high	44	54	58	37

Taken together, the SF-36 and K10 data paint a consistent picture: self-reported mental health and psychological distress among Australians have worsened substantially over the past decade, with the decline concentrated among younger people and more pronounced among females. This pattern is evident across multiple instruments and health domains, from broad summary measures to screening tools for psychological distress, and is distinct from—and substantially larger than—the more gradual declines observed in general health over the same period. These trends warrant attention from health services and social policy perspectives, particularly as the cohorts most affected move into their prime working and family-formation years.

Chapter 3

Single parents



Key findings

- About 19% of families with children under 18 are single-parent families; the proportion increases with the age of the youngest child.
- Single parents are predominantly female (about 87% for families with children under 18) and tend to have lower educational attainment and higher rates of long-term health conditions than partnered parents.
- Single parents face substantial economic and housing disadvantage: many are low-income earners, report financial stress, and far fewer are homeowners.
- Single motherhood is more persistent than single fatherhood; around 42% of single-mother episodes last at least five years, compared to 20% of single-father episodes.
- Entering single parenthood is associated with declines in perceived safety, financial satisfaction and mental health (especially for mothers), while exit from single parenthood is followed by improvements in these areas.

Single-parent families constitute a significant share of all families with children in Australia. However, compared to couple parents, single parents often face particular challenges. They are responsible for at least the majority (and often all) the care of their children and at the same time are required to sustain the family financially. Furthermore, single parenthood is often preceded by relationship conflicts and separation from a long-term partner, placing further strain and stress on the single parent. Some continue to experience conflicts with their ex-partner after separation. Correspondingly, single parenthood has been repeatedly associated with a range of adverse wellbeing outcomes, both financially and psychologically (see Chapter 8, page 100; see also Dey and Cebulla, 2023 or Wilkins et al., 2025).

This chapter provides an overview of single parenthood in Australia, with a specific focus on the longitudinal dimension of being a single parent. It first looks at the prevalence and characteristics of single-parent families. It then presents analyses on the duration of single parenthood as well as the characteristics associated with entering and exiting single parenthood. Finally, it looks at the development of psychological wellbeing before, during and after the single-parent episode.



Prevalence of single parents

Figure 3.1 shows how the prevalence of single-parent families has developed since 2001. In 2024, single-parent households (with children of any age, i.e., including those with adult children) accounted for 10.3% of all households in Australia. This proportion remained roughly stable across the 2001 to 2024 period. Among families with children (of any age), single-parent families accounted for 25.8%. There was a slight increase in this proportion over time—from 24.7% in 2001 to a peak of 27.4% in 2019. Focusing on families with children under 18, the proportion of single-parent families was significantly lower than for families with children of any age, at 19.2% in 2024. Furthermore, this proportion has declined since 2001, when it stood at 22.2%.

Figure 3.1: Prevalence of single-parent families

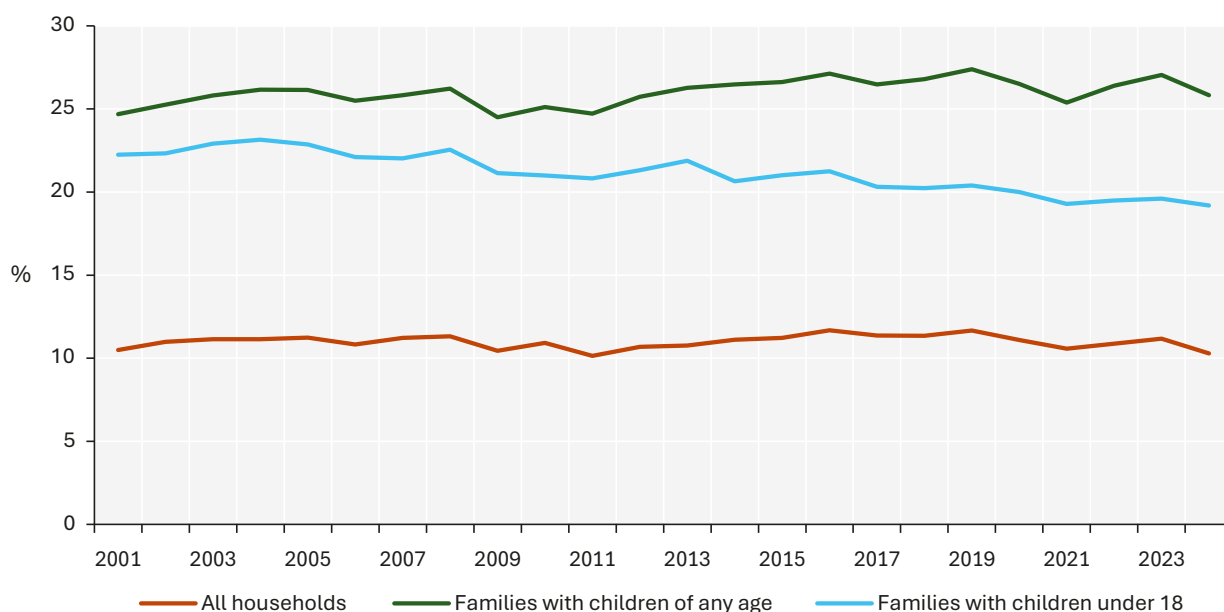


Table 3.1 provides a more detailed picture of trends in the prevalence of single parenthood over the 2001 to 2024 period by differentiating by the age of the youngest child. The proportion of single-parent families was lowest among families with very young children aged 0 to 3, at 10.2% in 2024. It increased substantially with the age of the youngest child and was already more than double in the second youngest age group, age 4 to 7, than in the youngest, at 20.7%. Among families with a youngest child aged 18 to 24, 31.1% were headed by a single parent, and among those with a youngest child aged 25 and older, almost half (49.8%) were single-parent families.

The rising proportion of single-parent families across children's ages can in part be traced back to the fact that, over time, an increasing proportion of the couple families has split up. Furthermore, additional analysis (results not shown) suggests that children from single-parent families tend to move out of the parental home later and are more likely to move back in than children from couple-parent families.

Table 3.1: Proportion of families with children that are single-parent families, by age of the youngest child, 2001 to 2024 (%)

	2001	2010	2020	2024	Change 2001-2024
0-3 years	17.6	14.5	15.6	10.2	-7.4
4-7 years	26.1	23.1	21.5	20.7	-5.4
8-12 years	23.8	24.7	20.4	25.3	1.5
13-17 years	24.5	26.3	25.5	25.7	1.2
18-24 years	24.3	25.3	32.6	31.1	6.8
25 and older	40.6	44.2	47.4	49.8	9.2
All families with children under 18	22.2	21.0	20.0	19.2	-3.0
All families with children	24.7	25.1	26.5	25.8	1.1

Comparing 2001 and 2024 shows a decline in the proportion of single-parent families with young children under 8, and especially so in the youngest age group, which dropped by 7.4 percentage points. By contrast, the share of families consisting of a single parent with an adult child increased substantially.

Table 3.2 shifts the focus from the family level to the child's perspective. It shows that, in 2024, 22% of all children and 17.6% of children under 18 lived in a single-parent family. Just like the proportion of single-parent families, the proportion of children in these families increases with age: of the children aged 0 to 3, close to one in 10 (9.9%) have a single parent, compared to 23.8% of those aged 18 to 24 and 42.4% of those aged 25 and over.

Table 3.2: Proportion of children living in single-parent families, by age, 2001 to 2024 (%)

	2001	2010	2020	2024	Change 2001-2024
0-3 years	16.9	12.5	15.3	9.9	-7.0
4-7 years	21.1	18.4	18.1	16.6	-4.5
8-12 years	22.0	21.0	18.8	21.8	-0.2
13-17 years	19.6	21.6	19.2	20.7	1.1
18-24 years	19.1	23.3	25.1	23.8	4.7
25 and older	36.4	40.7	38.9	42.4	6.0
All children under 18	20.0	18.4	18.0	17.6	-2.4
All children	21.4	22.1	22.2	22.0	0.6

The analyses presented in this section show that a significant proportion of single parents have adult children only. However, the experiences of single parents with adult children tend to differ substantially from those of single parents with children under 18. While younger children usually require a significant amount of care and both practical and financial support, adult children might themselves contribute financially to the family or support their parents in other ways (e.g., when adult children move back in with their elderly parents to care for them).⁷ Therefore, the remainder of the chapter focuses on single parents with a youngest child under 18.

Characteristics of single parents

This section investigates the extent to which single parents differ in their socio-demographic characteristics and economic situation from couple parents. Table 3.3 presents select socio-demographic characteristics by parent type and sex. Since the number of single fathers in each wave is very low, the most recent five waves (2020 to 2024) have been pooled for this analysis. The top panel shows that most single-parent families are female-headed, with about 87% of single-parent families with children under 18 headed by a mother.⁸ The share of single-mother families declines with the age of the youngest child, from 94% among families with a youngest child aged 0 to 3 to about 78% of families with a youngest child aged 13 to 17.

Most single parents—both mothers and fathers—are in the 35 to 44 or 45 to 54 age groups. Compared to couple mothers, single mothers are more likely to be both younger (15 to 24) and older (55 and over). Single fathers are also more likely than couple fathers to be in the higher age groups, but less likely to be in the younger age groups.

⁷ Differentiating between dependent and independent children (defined in Box 2.1, Chapter 2, page 11) shows that in most single-parent families with a youngest child aged 18 to 24 (59% in 2024), all children are already independent. Furthermore, in 2024, about 73% of children aged 18 to 24 living in single-parent families were employed, at least part-time.

⁸ The share of single-parent families (with children under 18 years) headed by mothers changed very little between 2001 and 2024: The female proportion stood at 86.1% in both 2001 and 2024 and ranged between 85.3% and 89.7% in the intervening years.

Table 3.3: Socio-demographic characteristics of single and couple parents of children under 18 years, 2020 to 2024 (pooled) (%)

	Single parents		Couple parents		All parents
Female parent share by age of youngest child					
0–3 years	94.0		51.5		54.5
4–7 years	93.0		50.6		55.5
8–12 years	86.9		49.8		54.6
13–17 years	77.7		49.5		53.8
Total	87.3		50.5		54.6
Parents' age	Single mothers	Single fathers	Couple mothers	Couple fathers	All parents
15–24 years	3.6	0.6	1.6	0.9	1.5
25–34 years	25.9	15.6	24.3	17.1	21.2
35–44 years	38.3	35.0	45.2	43.0	43.4
45–54 years	27.8	33.3	26.3	30.4	28.4
55–64 years	3.6	14.4	2.5	7.6	5.0
65 and older	0.8	1.2	0.2	1.1	0.7
Total	100.0	100.0	100.0	100.0	100.0
Age of youngest child					
0–3 years	24.4	10.6	37.2	35.8	34.9
4–7 years	23.4	12.1	21.2	21.1	21.3
8–12 years	27.3	28.3	22.9	23.6	23.7
13–17 years	24.8	48.9	18.8	19.6	20.1
Total	100.0	100.0	100.0	100.0	100.0
Number of children under 18 years					
One child	51.0	58.1	38.2	38.9	40.0
Two children	33.1	30.9	41.5	41.3	40.5
Three or more children	16.0	11.0	20.3	19.8	19.5
Total	100.0	100.0	100.0	100.0	100.0
Educational attainment					
Year 11 and below	19.1	19.9	7.6	9.4	9.6
Year 12, Certificate III or IV, Diploma	53.7	64.1	42.3	48.9	46.7
Bachelor's degree or higher	27.2	16.0	50.1	41.7	43.7
Total	100.0	100.0	100.0	100.0	100.0
Disability					
Does not have a disability	64.8	71.6	84.0	84.4	82.1
Has a disability	35.2	28.4	16.0	15.6	17.9
Total	100.0	100.0	100.0	100.0	100.0
First Nations identity					
First Nations	8.6	9.1	2.4	2.0	2.9
Non-Indigenous	91.4	90.9	97.6	98.0	97.1
Total	100.0	100.0	100.0	100.0	100.0
Immigrant status					
Australian-born	81.7	81.1	63.7	63.8	65.7
Immigrant, main English-speaking countries	4.7	7.2	9.5	10.7	9.5
Immigrant, other countries	13.7	11.7	26.8	25.5	24.7
Total	100.0	100.0	100.0	100.0	100.0

Children of single parents tend to be older than children of couple parents. Most strikingly, almost half of the single-father families have a youngest child aged 13 to 17, compared to less than 20% of couple fathers. As shown in the next section, most single-parent families result from a couple family separating, so that the children are already older when the single-parent family emerges. The fact that single fathers tend to have older children than single mothers could be due to two reasons. First, when couple parents separate, young children are more likely than older children to stay with their mother. Second, children who lived with their mother right after the separation might later decide to move in with their father when they are older.

In terms of number of children, most single parents have one child (under 18) living with them. However, they are less likely than couple parents to have two or three or more children. A range of factors might explain this pattern. First, childbearing plans might have been interrupted by the couple separating. Second, more children might make separation less likely. And third, since the children of single parents are older overall, some might already be 18 years or older and/or have already moved out.

Single parents are more likely than couple parents to have completed at most Year 11 at school and are notably less likely to have completed a bachelor's degree or higher. They are also significantly more likely to have a disability (see Box 3.1). Furthermore, the prevalence of First Nations people is higher among single parents than among couple parents. In addition, single parents are less likely than couple parents to be born outside Australia, especially in countries other than the main English-speaking ones.

Box 3.1: Definition and classification of disability

The International Classification of Functioning, Disability and Health (ICF), produced by the World Health Organization, defines disability as an umbrella term for impairments, activity limitations and participation restrictions. It denotes the negative aspects of the interaction between an individual's health conditions and the various contextual (environmental and personal) factors of that individual. In this report, a person is defined as having a disability if they have any long-term health condition, impairment or disability that restricts the individual in everyday activities and that has lasted, or is likely to last, for six months or more. This is an 'operational' definition of disability that is very similar to that used in many household surveys, such as the Australian Bureau of Statistics' (ABS) Survey of Disability, Ageing and Carers.

Some parts of this report also consider disability severity, which is typically defined in terms of restrictions in the core activities of self-care, communication and mobility. The HILDA Survey does not collect information in each wave on core-activity restrictions, but it does collect information on the extent to which health conditions limit the amount of work an individual can do (on a 0 to 10 scale, where 0 equals 'not at all' and 10 equals 'unable to do any work'). In this report, we use a measure of disability severity based on this information, defining three levels of severity: no work restriction (0); moderate work restriction (1 to 7); and severe work restriction (8 to 10). The latter two categories are respectively referred to as 'moderate disability' and 'severe disability' and are sometimes combined in a single category.



Single parents also differ from couple parents in their employment and economic situation, as can be seen in Table 3.4. They are much more likely to not be working and to have a low household income. More than one-third of single mothers and fathers are in the lowest income quartile, compared to only a bit more than 10% of couple mothers and fathers. Correspondingly, the share of parents with moderate or severe financial stress is markedly higher among single parents (see Box 8.2, page 107, for the construction of the financial stress measure). Notably, more than one-quarter of single mothers experience severe financial stress. Single parents are also less likely to be homeowners: whereas close to three-quarters of couple parents are homeowners (with or without a mortgage), this applies to only about one-third of single parents. More than half of single parents are privately renting, and about 10% live in social housing.

Note that the differences in employment and economic outcomes between single and couple parents reflect differences in both household composition and contextual factors — for example, labour market constraints (e.g., caregiving demands, access to flexible or part-time work), child-care access and affordability, and cost-of-living pressures such as housing affordability.

Table 3.4: Economic characteristics of single parents of children under 18 years, 2020 to 2024 (pooled) (%)

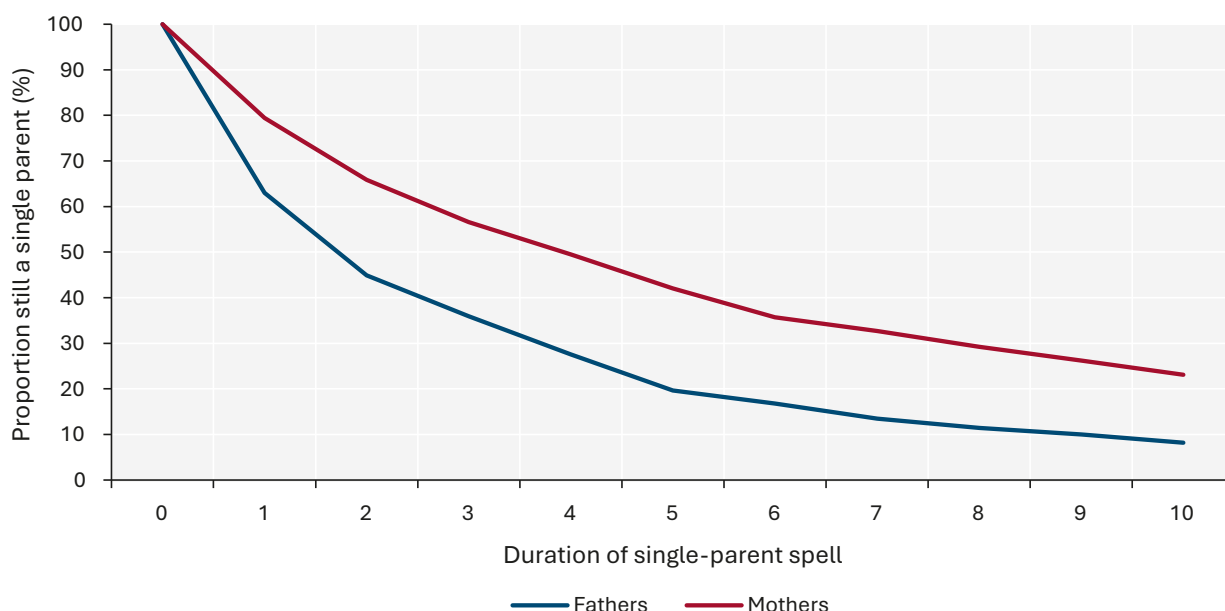
	Single mothers	Single fathers	Couple mothers	Couple fathers	All parents
Employment status					
Employed full-time	30.9	48.0	38.9	84.0	58.1
Employed part-time	28.7	15.9	38.1	8.2	23.7
Not employed	40.4	36.1	23.0	7.9	18.2
Total	100.0	100.0	100.0	100.0	100.0
Equivalised household income quartile					
Lowest	37.1	34.9	11.3	10.9	13.9
Second-lowest	41.3	37.6	30.4	30.3	31.5
Second-highest	17.6	17.0	33.3	33.3	31.5
Highest	4.1	10.5	25.0	25.6	23.0
Total	100.0	100.0	100.0	100.0	100.0
Financial stress					
No financial stress	49.8	55.2	77.5	81.3	76.2
Moderate (1–2 Indicators)	24.4	22.6	16.0	13.5	15.8
Severe (3+ indicators)	25.8	22.2	6.4	5.2	8.0
Total	100.0	100.0	100.0	100.0	100.0
Housing tenure type					
Homeowner	36.3	33.6	73.6	74.4	69.8
Private renter	53.8	56.3	25.3	24.4	28.1
Social housing	9.9	10.1	1.1	1.2	2.1
Total	100.0	100.0	100.0	100.0	100.0

Entry into and exit from single parenthood

Given the economic disadvantages experienced by single parents, it is not only relevant from a welfare perspective how many single-parent families there are at one point in time, but also for how long parents remain in this situation and what determines entry into and exit from single parenthood. This section again focuses on single parents with children under 18. This means that entry into single parenthood is defined as moving from any other living arrangement to living together with at least one child under 18 but without a partner in the household. Correspondingly, exiting from single parenthood can be achieved by: a) moving in with a partner (including reconciliation with the other parent); b) children moving out; or c) the youngest resident child turning 18. It should thus be noted that 'exit from single parenthood' includes cases where the person effectively remains a single parent but where all children in the household have reached 18 years.

How long people remain single parents is analysed through the ‘survival rate’, which is an estimate of the proportion of people who are still single parents a certain number of years after entering single parenthood. The survival rate is presented separately for single mothers and fathers in Figure 3.2. In order to have a sufficient number of cases (especially for fathers), all single-parent episodes across the 2001 to 2024 period are included in this analysis.⁹ Nevertheless, it should be noted that the number of fathers in this analysis who have been single parents for eight years or longer is less than 30, so that results for those long durations should be interpreted cautiously.

Figure 3.2: Number of years as a single parent with children under 18



Note: Estimates from unweighted discrete-time event history models based on pooled data from 2001 to 2024.

The figure shows that single motherhood is more persistent than single fatherhood. One year after becoming a single parent, about 79% of mothers are still single parents, compared to 63% of fathers. Five years after becoming a single parent, 42% of mothers are still single parents, versus fewer than 20% of fathers. Ten years after, around 23% of mothers and 8% of fathers are still single parents.

Another question is what family situation single parents come from and where they go when they exit single parenthood. Figure 3.3 presents people’s living arrangements in the year before they become a single parent as well as in the year after, separately by sex (again based on pooled data from 2001 to 2024). Potentially not surprisingly, most single-parent families originate from a couple-parent family (through separation or widowhood). However, this pathway is much more prevalent among single mothers than fathers: about 76% of females who become single mothers were in a couple family with children before, compared to 53% of males.

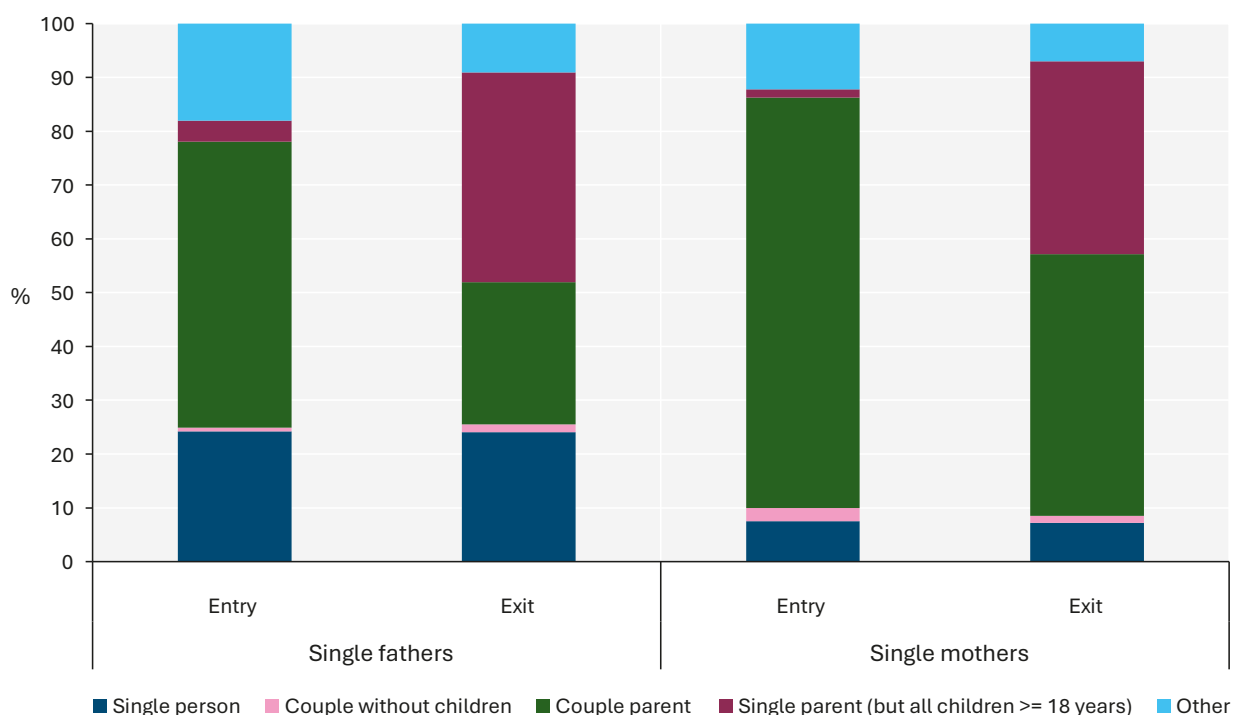
By contrast, a considerable share of males, about 24%, lived alone in the year prior to becoming a single father. Further analysis (results not displayed) show that in most of these cases, previously non-resident children move in with their father (i.e., they start spending more than 50% of their time in the father’s household). Another prevalent pathway, for both females and males, is to change from another living arrangement (i.e., living with one’s parents or other relatives or in a group household) to becoming a single parent.

Changing from a couple family without children to a single-parent family—for example, when the couple separates around the time of the child’s birth—is very rare. Similarly, only a small proportion of single-parent families (with children under 18) originates from a single-parent family with only children aged 18 and over. This could occur, for example, when a younger child living elsewhere moves into the household, or the single parent has another child with a partner not living in the household.

⁹ Individuals can contribute multiple single-parent episodes to the analysis; however, most individuals (about 84%) contribute only one episode.

Figure 3.3 also shows the living arrangements individuals change into when they stop being a single parent (of a child under 18). Again, there are significant gender differences. Among single mothers, the largest group (48.6%) exits single parenthood by repartnering, that is, moving into a couple-parent household. This compares with only 26.4% of single fathers. By contrast, among fathers, the largest group is those who 'exit' single fatherhood when their youngest resident child reaches 18 (39%), that is, they remain single fathers but then only have adult children living with them. This is also the second most important trajectory among single mothers (35.8%). Among fathers, a significant proportion (about 24.1%) exits single fatherhood when their children move out, leaving the father in a single-person household. By contrast, this applies to only 7.2% of single mothers.

Figure 3.3: Living arrangement before and after being a single parent with a child under 18



The question that follows is which characteristics—besides sex and living arrangement—make it more likely for people to become single parents, and which characteristics promote exit from single parenthood. To investigate these transitions, three logistic regression models were fitted that analyse the association between various socio-demographic characteristics and entry into and exit from single parenthood. Here, we focus on individuals below the age of 65 since the previous analysis (Table 3.3) shows that very few people above this age have children under 18 years.

The leftmost regression model in Table 3.5 investigates the probability of becoming a single parent from one year to the next for all people aged under 65. It reconfirms that females are significantly more likely than males to become single parents and that the probability of entering single parenthood is highest among persons living in a couple with children. Age also plays a significant role. Compared to persons aged 15 to 24, becoming a single parent is more likely among those aged 25 to 34 but less likely among those aged 45 and over. People with a bachelor's degree or higher educational qualification are less likely to become single parents than persons who have completed Year 11 or below. Furthermore, people living in the mainland capital cities are more likely to become single parents than people who live in more rural areas, and First Nations Australians are more likely than non-Indigenous Australian-born people to become single parents. By contrast, people born overseas in a country other than the main-English speaking countries are less likely to enter single parenthood than Australian-born persons.

Economic conditions also play a crucial role, with people on higher incomes and homeowners less likely to become single parents, while those under financial stress are more likely to enter single parenthood. Non-employment is associated with a higher probability of entering single parenthood, while part-time employment is associated with a lower probability. Having a disability also increases the probability of single parenthood. Compared to years 2001 to 2004, most other periods exhibit a reduced probability of entering single parenthood.

Table 3.5: Determinants of entry into and exit from single parenthood—Persons aged 15 to 64

	Entry into single parenthood		Exit from single parenthood
	All persons	Couple parents with children under 18	Single parents with children under 18
Female	0.011	0.030	-0.039
<i>Living arrangement (Reference category: Couple with children)</i>			
Single person	-0.007		
Couple without children	-0.013		
Single parent (youngest child >= 18 years)	-0.007		
Other	-0.010		
<i>Age category (Reference category: 15–24 years)</i>			
25–34 years	0.001	-0.013	ns
35–44 years	ns	-0.018	-0.070
45–54 years	-0.002	-0.020	-0.070
55–64 years	-0.007	-0.021	ns
<i>Educational attainment (Reference category: Year 11 and below)</i>			
Year 12, Certificate III or IV, Diploma	ns	ns	ns
Bachelor's degree or higher	-0.003	-0.006	-0.047
Mainland capital city	0.001	0.002	ns
First Nations	0.007	0.008	0.032
<i>Immigrant status (Reference category: Australian-born)</i>			
Immigrant, main English-speaking countries	ns	ns	0.045
Immigrant, other countries	-0.002	-0.003	ns
<i>Employment status (Reference category: Full-time)</i>			
Employed part-time	-0.001	-0.003	ns
Not employed	0.002	ns	ns
Has a disability	0.001	0.004	ns
<i>Equivalised household income quartile (Reference category: Lowest)</i>			
Second-lowest	ns	ns	ns
Second-highest	-0.002	-0.005	ns
Highest	-0.003	-0.004	0.047
<i>Financial stress (Reference category: None)</i>			
Medium (1–2 indicators)	0.003	0.006	-0.025
Severe (3 or more indicators)	0.007	0.014	-0.027
Homeowner	-0.005	-0.008	ns
<i>Period (Reference category: 2001–2004)</i>			
2005–2009	ns	ns	ns
2011–2014	-0.002	-0.004	ns
2015–2019	-0.001	ns	ns
2020–2021	-0.001	-0.003	ns
2022–2024	ns	ns	ns
<i>Age of youngest child (Reference category: 0–3 years)</i>			
4–7 years		0.003	0.030
8–12 years		0.003	ns
13–17 years		ns	0.219
<i>Number of children (Reference category: 1 child)</i>			
2 children		ns	-0.033
3 children or more		ns	-0.036
Disabled child		ns	ns
<i>Time since start of single-parent episode (Reference category: 1 year)</i>			
2 years			-0.048
3 years			-0.081
4 years			-0.090
5–9 years			-0.097
10+ years			-0.109
Number of observations	245,788	83,244	6,795

Notes: This table presents mean marginal effects from logit regression models of the predictors of entering and exiting single parenthood with a youngest child under 18 years. See the Technical Appendix for an explanation of these models. *ns* indicates the estimate is not significantly different from 0 at the 10% level. The year 2010 is missing because information on financial stress was not collected in that year.

The second column presents the results from a similar model, but this time the sample is restricted to couple families with children under 18 years. This allows us to include some characteristics of the children in the model. Overall, the determinants of becoming a single parent are similar among couple parents to those among the general population. However, among this subgroup, all age groups have a lower probability of entering single parenthood than the youngest age group. Furthermore, having a youngest child aged 4 to 7 or 8 to 12 years is associated with a greater probability of entering single parenthood than having a youngest child aged 0 to 3 years. By contrast, the number of children and the presence of a child with a disability are not significantly associated with the probability of entering single parenthood.

The rightmost model presents results from a similar analysis, but this time the logistic regression estimates the association between the parents' and children's characteristics and the probability of exiting single parenthood until the next year. Again, exiting single parenthood involves repartnering, children moving out and the youngest resident child turning 18.

The model reconfirms the finding from above that females are less likely than males to exit single parenthood. Furthermore, people in the middle age groups, 35 to 44 and 45 to 54, are less likely to exit single parenthood than the youngest group, and highly educated persons are less likely to exit than less educated people. First Nations people are more likely to exit single parenthood than non-Indigenous Australian-born persons. People from the main English-speaking countries are also more likely to exit single parenthood than Australian-born persons. Economic circumstances play a crucial role as well: a higher income raises the probability of leaving single parenthood, whereas financial stress lowers it. Children's characteristics also matter: parents with a youngest child aged 4 to 7 or 13 to 17 have a higher probability of exiting single parenthood than those with a child aged 0 to 3, and having two, three or more children reduces the probability compared to having one child. Finally, the longer a person has already spent as a single parent, the less likely they are to leave that status.



Psychological wellbeing of single parents

Studies often show that single parents fare worse than others with respect to both economic and psychological wellbeing (see prior sections in this chapter, Chapter 8 in this report for economic disadvantage, or Dey and Cebulla (2023) for mental health). However, these well-known associations cannot necessarily be interpreted in a causal way, as certain (disadvantaged) groups are more likely than others to become single parents in the first place. For example, and as shown in the preceding section, persons with low income, high financial stress or a disability have a greater probability of becoming single parents.

To circumvent this issue of selective entry into single parenthood, this section looks at the wellbeing of single parents from a longitudinal perspective, following the same individuals from before they became single parents through their single-parent episode and their exit from single parenthood. The focus is on cognitive and emotional wellbeing (see Wilkins et al. (2025) for a similar analysis that includes indicators for economic wellbeing).

Figure 3.4 shows how average satisfaction with a range of different aspects of life evolves around the single-parent episode, separately for mothers and fathers. The figures on the left relate to entering single parenthood. We begin observing each person up to three years before they become a single parent and follow them for up to five years while they remain single parents. The figure shows that females experience a decline in a range of satisfaction measures between the last interview before becoming a single mother (year -1) and the first interview after (year 0). Satisfaction with how safe they feel and with the amount of free time show the biggest decline, by 0.4 points on the 0 to 10 scale between year -1 and year 0. Several factors may explain the drop in safety satisfaction upon becoming a single mother, such as increased conflict with a former partner or moving to a different (and possibly more disadvantaged) neighbourhood. Satisfaction with life overall also declines upon becoming a single mother, by 0.3 points. Finally, mothers' satisfaction with their financial situation—which was already relatively low prior to single parenthood—declines by 0.2 points. While these life domains experience notable drops in satisfaction around the time of becoming a single mother, it is noteworthy that satisfaction with life overall, safety and financial situation is already in decline in the years leading up to becoming a single mother.

Over the first five years of single motherhood, we see further satisfaction declines in some areas. Most notably, there is a marked decline in satisfaction with health of 0.3 points, and modest declines in satisfaction with employment opportunities and amount of free time (-0.1 points each). By contrast, satisfaction with safety and life satisfaction sees some recovery compared to year 0 (but only by 0.1 points each).

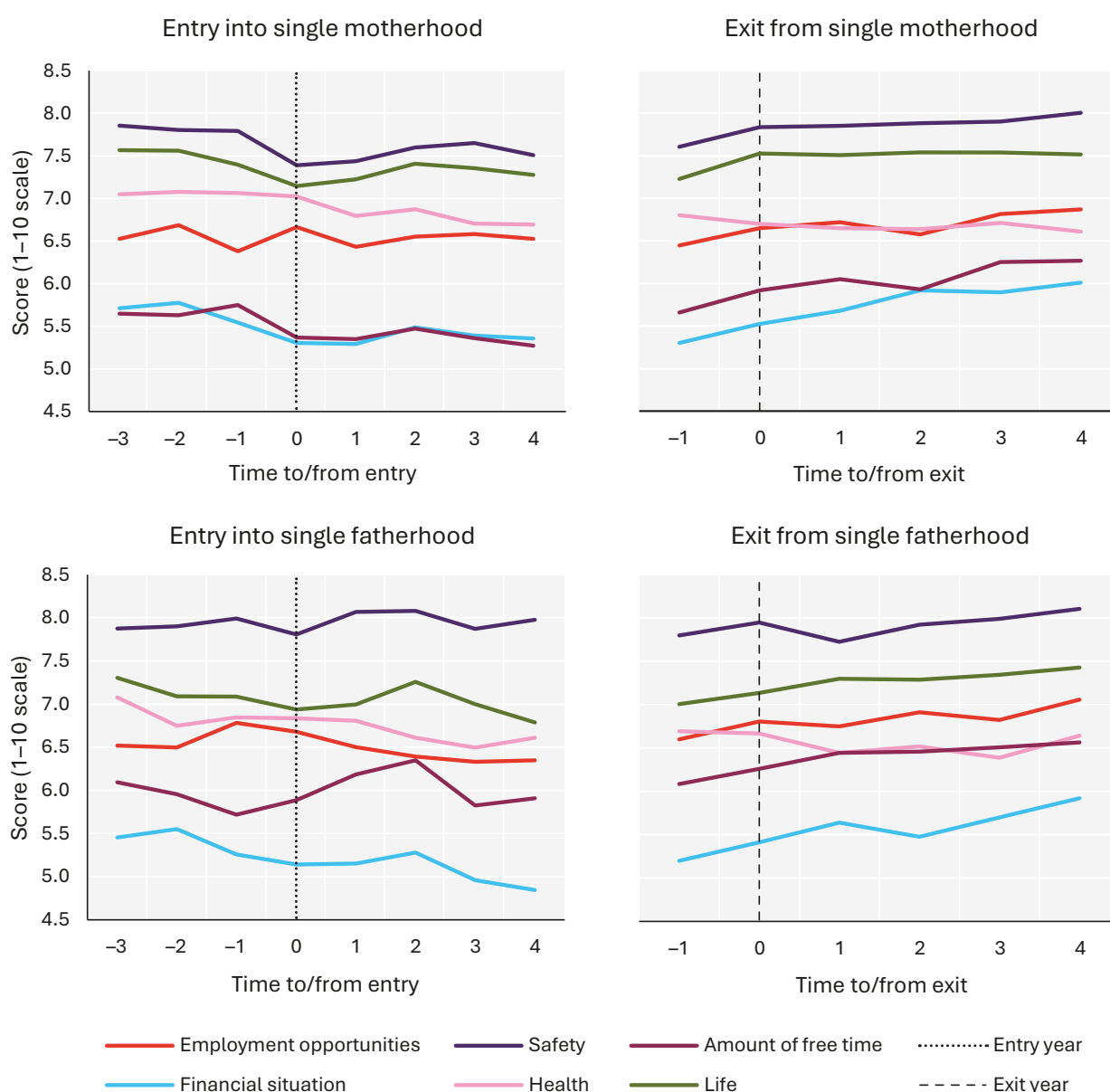


The figure on the right shows the development of the satisfaction ratings around the time of exiting single parenthood. Compared to the last year of single motherhood (year -1), there are notable increases in satisfaction in all areas except for health. In year 4 (five years after leaving single motherhood), mean satisfaction with the financial situation is 0.7 points higher than in year -1, and satisfaction with amount of free time is 0.6 points higher. Satisfaction with both employment opportunities and safety increased by 0.4 points.

Among males, the overall pattern is similar to that of females; however, satisfaction declines in the year of entering single fatherhood are smaller than for mothers: between the first year of single fatherhood and the previous year, fathers experience declines in average satisfaction with safety and life of about -0.2 points each, and with their financial situation and employment opportunities of -0.1 points each. In year 2, single fathers' satisfaction ratings temporarily recover in several areas (life, financial situation, amount of free time); however, this is followed by further declines as the single-father episode continues.

Just like for mothers, exit from single fatherhood comes with a notable improvement in most wellbeing areas. Between year -1 and year 4, satisfaction with the financial situation increases by 0.7 points, with employment opportunities and amount of free time by 0.5 points, and with life overall by 0.4 points.

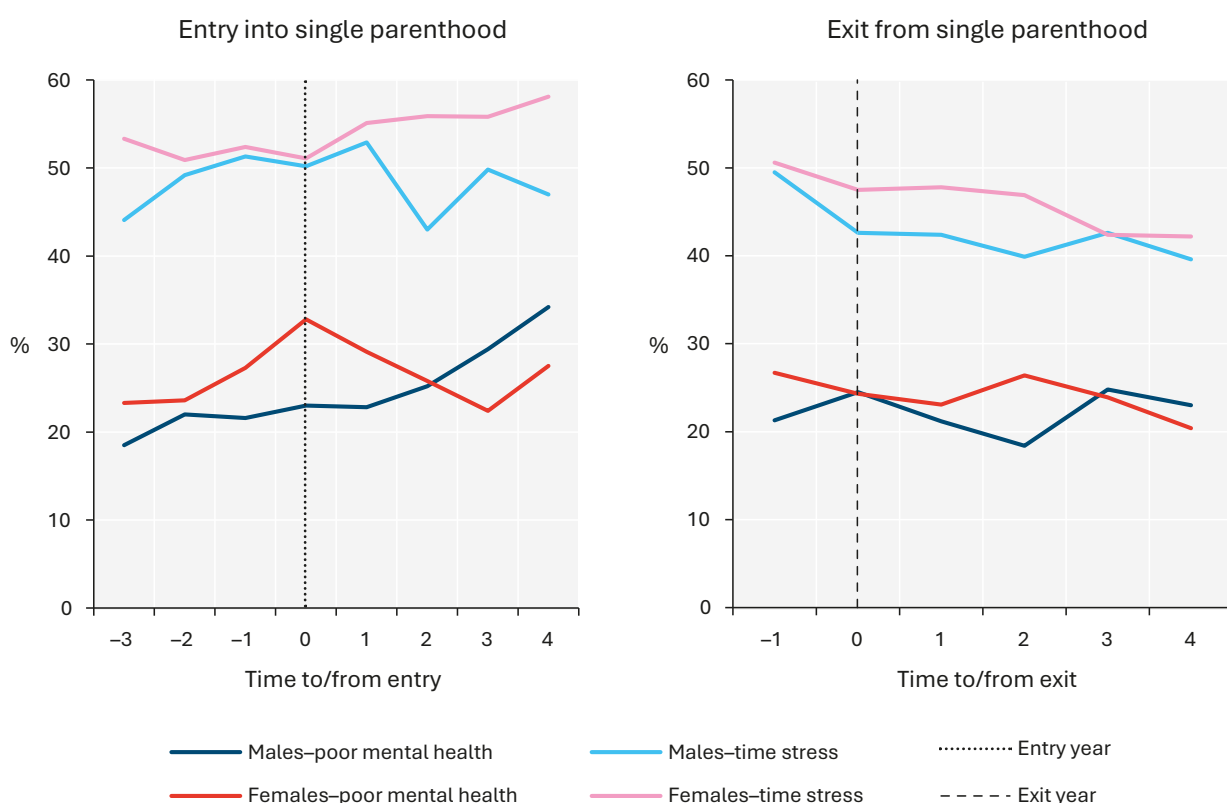
Figure 3.4: Mean satisfaction with different aspects of life around single-parenthood episodes—Single parents with children under 18 years



While satisfaction with certain areas of life constitutes a measure of cognitive wellbeing, emotional wellbeing is another important dimension that may be affected by becoming a single parent. Figure 3.5 shows how the proportion of people who are feeling time stressed and who are in poor mental health changes around a single-parent episode. With respect to entry into single parenthood, the most striking finding is the sharp rise in the prevalence of poor mental health among mothers in the years leading up to and in the year immediately after becoming a single parent. This pattern may reflect rising interpersonal conflict around relationship breakdown, anticipatory economic worries, loss of partner support and increased loneliness, added caregiving burdens, or selection—insofar as pre-existing poorer mental health raises the risk of separation. For fathers, the prevalence of poor mental health increases more gradually over the years before and after becoming a single parent.

The proportion feeling time stressed does not increase for females before or upon becoming a single parent but does increase over the following years. By contrast, for males, time stress tends to increase in the years leading up to becoming a single parent until one year after entry into single parenthood.

Figure 3.5: Prevalence of poor mental health and time stress around single-parenthood episodes—Single parents with children under 18 years



Exit from single parenthood is associated with notable declines in the prevalence of time stress for both mothers and fathers. Furthermore, the prevalence of poor mental health declines among mothers upon exiting single parenthood, although it temporarily rebounds in year 2.

Chapter 4

Relationship quality



4

Relationship quality

Inga Laß

Key findings

- Perceived quality of the partner relationship is generally high, averaging 4.3 out of 5 points, with females consistently reporting lower scores than males.
- Relationship quality is highest among recent unions and very long-term unions, but notably lower for relationships of intermediate duration, reaching its lowest point about 24 years after partners move in together.
- Relationship quality is highest among childless couples with relatively even earnings (who also tend to share paid and unpaid work relatively equally) and lowest in couples with dependent children where the female is the primary earner (and typically undertakes most paid and unpaid work).
- Financial stress, disability, resident children, living outside the mainland capital cities and being born overseas outside the main English-speaking countries are all associated with lower relationship quality.
- High relationship quality is fairly persistent over three to four years, whereas low relationship quality is frequently followed by separation.



For many people, intimate relationships are among the most important social relationships. The quality of such relationships is a crucial factor for individuals' wellbeing and a strong predictor of relationship stability. It is therefore important to look at the level of relationship quality in the population, how this has changed over time, and which groups experience relatively low levels of relationship quality.

Every year in the self-completion questionnaire (SCQ), the HILDA Survey collects information on satisfaction with various family relationships, one of which is a person's relationship with their partner. In some waves, the SCQ contained a range of items that captured additional dimensions of relationship quality. These items can be combined in a composite scale that provides a concise measure of relationship quality (see Box 4.1 for an explanation of how to calculate this measure).

The first section provides an overview of the individual dimensions of relationship quality and how they have developed over the 2003 to 2024 period. This is followed by trends in the composite measure of relationship quality over time as well as by age and relationship duration. The third section presents analyses of the relationship between couples' earnings arrangements and relationship quality, whereas the fourth section analyses the various determinants of relationship quality more broadly. The final section investigates persistence of high and low relationship quality over time as well as the link between relationship quality and subsequent relationship dissolution.

Box 4.1: Measuring relationship quality in the HILDA Survey

In Waves 3, 6, 9, 12, 16, 20 and 24, the SCQ collected comprehensive information about the respondent's relationship with their spouse or partner, for all respondents reporting to be married or living with someone in a long-term relationship. These questions were taken from Hendrick's (1988) Relationship Assessment Scale and ask:

- a) *How good is your relationship compared to most?* (scale from 1 'poor' to 5 'excellent')
- b) *How often do you wish you had not married/got into this relationship?* (scale from 1 'never' to 5 'very often')
- c) *To what extent has your relationship met your original expectations?* (scale from 1 'hardly at all' to 5 'completely')
- d) *How much do you love your spouse/partner?* (scale from 1 'not much' to 5 'very, very much')
- e) *How many problems are there in your relationship?* (scale from 1 'not many' to 5 'very many')
- f) *How well does your spouse/partner meet your needs?* (scale from 1 'poor' to 5 'excellent')

For the analyses presented in this chapter, the values on items (b) and (e) were reverse-coded, so that higher values always reflect higher relationship quality.

Furthermore, each year in the SCQ, respondents are asked to indicate how satisfied or dissatisfied they are with their relationship with their partner, with response options ranging from 0 ('completely dissatisfied') to 10 ('completely satisfied'), and another option, 'does not apply'.

All seven items were combined in a composite scale of relationship quality, using a similar approach as outlined by Perales and Baxter (2018). First, the 0 to 10 scale of the annual relationship satisfaction item was transformed into a 1 to 5 scale to match the other six items, by calculating: new score = (original score*4/10) + 1. Then, all seven scores (using the reverse-coded versions of items (b) and (e)) were summed and divided by 7 to arrive at the average score across all items. Respondents who had not provided a valid response to at least five out of the seven items were excluded. The resulting relationship quality scale ranges from 1 (lowest quality) to 5 (highest quality). Cronbach's alpha for the relationship quality scale is 0.92, indicating excellent internal consistency.

Dimensions of relationship quality

Table 4.1 presents the ratings of a range of statements capturing six dimensions of relationship quality for the year 2024, separately for males and females. This analysis includes all people who reported being married or in a long-term relationship, regardless of whether the partner lives in the same household.

High scores dominate across all six dimensions, indicating relatively high relationship quality. However, there are notable differences according to sex and dimension. Across all dimensions, females are less likely than males to give the highest score. Love is the dimension that receives the highest rating overall: 72.6% of males and 67.5% of females indicate that they love their partner 'very, very much', scoring 5 out of 5 points. Similarly, most people (71.8% of males and 67.3% of females) report that they never regret having married or entered the relationship. On the other hand, ratings on how well the spouse or partner meets the person's needs and to what extent the relationship meets original expectations are notably lower—only about 40% of males and around one-third of females score 5 points on these dimensions.

Focusing on the other end of the spectrum, very low ratings of 1 or 2 points are very rare across all dimensions, but they are more frequent among females than males. For example, 3.7% of females see very many problems in their relationship (rating it with only 1 point) and another 8.4% score 2 points on that dimension, compared to only 2.4% and 6.8% among males, respectively.

Table 4.1: Ratings of different dimensions of relationship quality, by sex, 2024 (%)

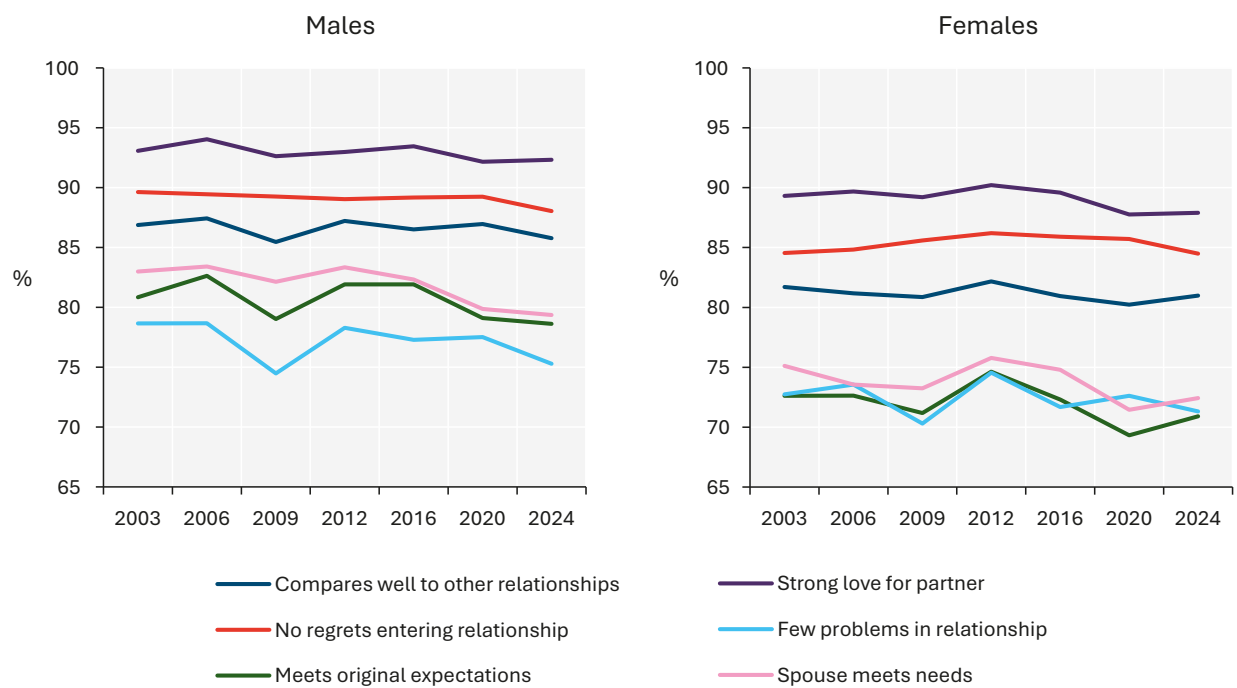
	Value 1 label	1	2	3	4	5	Value 5 label
Males							
How good is your relationship compared to most?	Poor	1.2	1.6	11.5	38.8	47.0	Excellent
How often do you wish you had not got married/got into this relationship?	Very often	1.9	3.2	6.9	16.2	71.8	Never
To what extent has your relationship met your original expectations?	Hardly at all	1.4	3.8	16.2	38.2	40.5	Completely
How much do you love your spouse/partner?	Not much	0.8	1.1	5.8	19.8	72.6	Very, very much
How many problems are there in your relationship?	Very many	2.4	6.8	15.5	19.6	55.7	Not many
How well does your spouse/partner meet your needs?	Poor	1.9	4.2	14.5	37.5	41.8	Excellent
Females							
How good is your relationship compared to most?	Poor	2.0	2.8	14.2	39.8	41.2	Excellent
How often do you wish you had not got married/got into this relationship?	Very often	2.6	4.4	8.6	17.2	67.3	Never
To what extent has your relationship met your original expectations?	Hardly at all	2.7	6.4	20.0	37.4	33.5	Completely
How much do you love your spouse/partner?	Not much	1.3	2.1	8.7	20.4	67.5	Very, very much
How many problems are there in your relationship?	Very many	3.7	8.4	16.6	19.3	52.0	Not many
How well does your spouse/partner meet your needs?	Poor	3.1	5.9	18.6	37.0	35.5	Excellent

Figure 4.1 shows how the perceived level of quality in these relationship dimensions has developed over time. Specifically, it shows the proportion of people rating each of the dimensions with a score of 4 or 5, indicating relatively high levels of relationship quality.

Comparing across dimensions shows that for both sexes the proportion of people reporting high levels of love for their partner was particularly high: between 92% and 94% of males and between 88% and 90% of females score 4 to 5 points on this dimension. This is followed by a large proportion of people reporting not regretting having entered their relationship. By contrast, among males, the proportion reporting few problems was consistently the lowest out of all dimensions (with about 75% to 79%). For females, both the proportion reporting few problems and the proportion reporting their relationship meeting expectations were relatively small, at about 70% to 75%.

The figure also shows a slight downward trend between 2003 and 2024 in the proportion of people reporting high relationship quality on these dimensions. Among both males and females, the strongest declines were visible in the proportion reporting that the spouse meets their needs (–3.6 percentage points and –2.7 points, respectively). The second biggest decline among males was in the proportion reporting few problems in their relationship (–3.4 percentage points), and among females in the proportion reporting that their relationship met their original expectations (–1.7 points). Noteworthy is the marked decline in relationship quality across several dimensions in 2009, especially in the proportion reporting few relationship problems. This decline coincided with the Global Financial Crisis period, which may have influenced relationship stressors. Another notable decline in several dimensions is visible in 2020, which is likely related to challenges associated with the COVID-19 pandemic.

Figure 4.1: Proportion of people in long-term relationships who have high relationship quality on different dimensions



Overall relationship quality

Based on the six dimensions of relationship quality presented above, as well as the annual measure of satisfaction with a person’s relationship with their partner, we constructed a composite measure of overall relationship quality (see Box 4.1). Table 4.2 presents trends in the mean level of relationship quality based on this composite measure across the 2003 to 2024 period, by sex as well as by age group.

The mean quality for all partnered persons (the ‘total’ column) shows relatively high scores of around 4.2 to 4.3 out of 5 points across the entire period. Nonetheless, there is a slight dip in 2009.

Relationship quality has also remained relatively stable for each sex. However, reported quality is slightly lower among females than males at each time point, with a 0.1- to 0.2-point gap.

Trends by age group show that the two youngest age groups of 15 to 24 and 25 to 34 saw a slight increase in relationship quality over the 2003 to 2024 period, while the two oldest groups of 55 to 64 and 65 and over saw slight declines. Comparing the different age groups at the same point in time reveals a u-shaped pattern, with reported quality being higher among the youngest and oldest age groups than among the middle groups.

Table 4.2: Mean relationship quality, by sex and age group, 2003 to 2024—Persons who are married or in a long-term relationship (1 to 5 scale)

	2003	2006	2009	2012	2016	2020	2024	Change 2003–2024
Sex								
Males	4.36	4.37	4.31	4.37	4.35	4.33	4.32	–0.04
Females	4.20	4.21	4.17	4.25	4.22	4.19	4.19	–0.01
Age group								
15–24	4.39	4.34	4.38	4.40	4.37	4.37	4.48	0.09
25–34	4.32	4.38	4.36	4.43	4.34	4.38	4.40	0.08
35–44	4.16	4.20	4.13	4.26	4.28	4.19	4.19	0.03
45–54	4.17	4.14	4.08	4.12	4.17	4.14	4.13	–0.04
55–64	4.35	4.32	4.29	4.32	4.21	4.21	4.16	–0.19
65 and over	4.48	4.50	4.39	4.47	4.41	4.38	4.35	–0.13
Total	4.28	4.29	4.24	4.31	4.28	4.26	4.25	–0.03



The u-shaped pattern in relationship quality by age group found in Table 4.2 prompts further investigation into how relationship quality varies by age. Therefore, Figure 4.2 presents mean relationship quality for each year of life, separately for men and women. In order to have a sufficiently large sample for each year, this analysis is based on pooled data from the 2003 to 2024 period. We exclude people younger than 19 and older than 85 as there are relatively few (partnered) respondents in these age groups.

The figure confirms marked differences in relationship quality by age. For both men and women, perceived relationship quality is relatively high in the 20s and then declines until the mid- to late 40s. Subsequently, relationship quality increases steadily with age and, at least for men, reaches its highest level at the oldest ages. Also notable is that the gender difference in perceived relationship quality is very small among people in their 20s and early 30s but then it widens from the late 30s onwards and remains pronounced throughout the second half of life.

Figure 4.2: Mean relationship quality by age

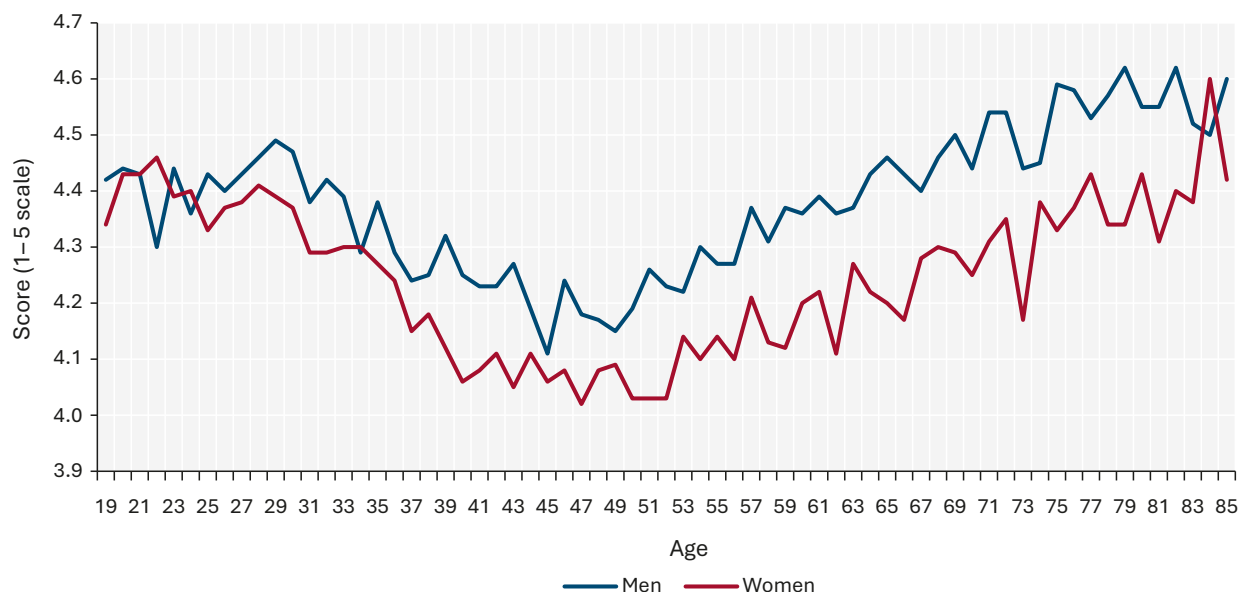
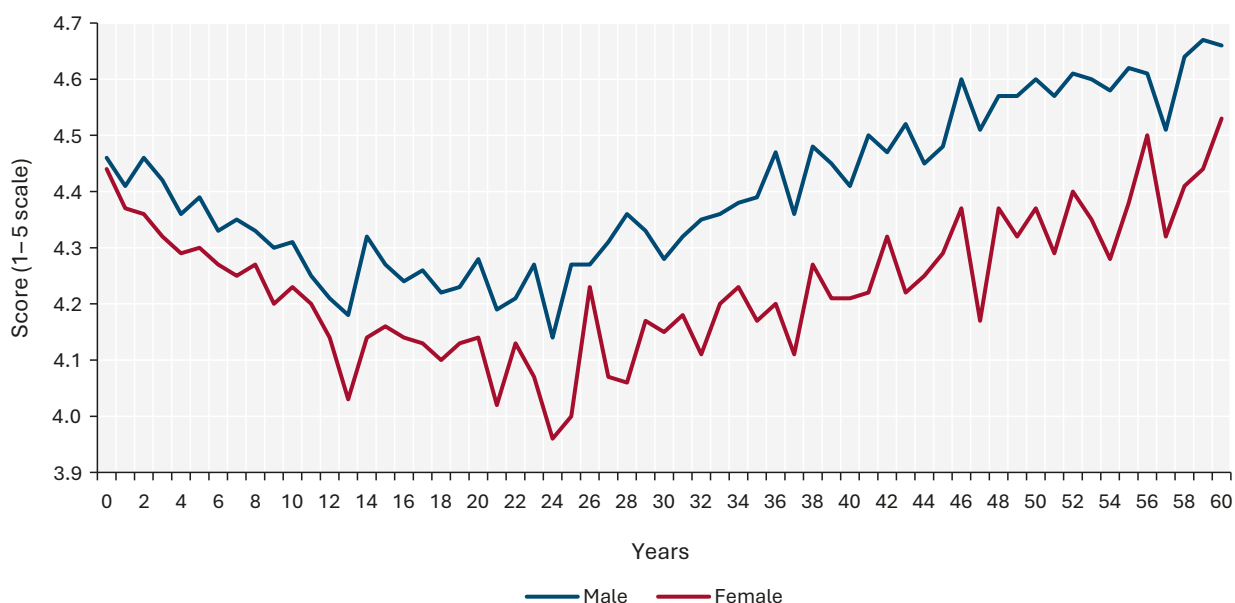


Figure 4.3 presents mean relationship quality as a function of relationship duration. For this analysis, we focus on co-resident couples and measure relationship duration in years since the couple started living together.¹⁰ Overall, the trajectory is relatively similar to that of age, which is to be expected given age and relationship duration are strongly related. Perceived relationship quality is relatively high upon moving in together (year 0) but then declines notably over the next 20 to 24 years before gradually improving for longer relationship durations.

Again, there is a visible gender gap in perceived relationship quality, which increases over time. While mean relationship quality is almost identical for males and females upon moving in together, the decline until year 24 is more pronounced among females. Furthermore, the subsequent increase in relationship quality between year 24 and year 60 appears steeper for males, so that the gender gap in relationship quality widens further.

Figure 4.3: Mean relationship quality by time since moving in together



¹⁰ The HILDA Survey does not generally collect information on the time couples have been in a relationship but did not live together. In select waves (Waves 5, 8, 11, 15, 19 and 23) the survey has collected the start date of non-coresidential relationships; however, these waves do not overlap with the waves in which the relationship quality items were collected. Furthermore, for couples who do live together, retrospective information on relationship duration before moving in together was not collected.

Earnings arrangements, division of labour and relationship quality

One factor that may significantly affect how people perceive their relationship is share of earnings and the division of labour within the couple. Therefore, this section looks at the links between earnings arrangements, unpaid labour and relationship quality. This analysis is restricted to opposite-sex couples¹¹ living together who are both of working age, defined here as under the age of 65, and where at least one partner had positive earnings.¹² The restriction to opposite-sex couples allows us to examine the extent to which traditional gender norms determine relative earnings and the division of paid and unpaid labour.

We consider three relative earnings arrangements: (1) the female's earnings are less than 80% of the male's earnings ('male primary earner'); (2) the female's earnings are more than 80% of the male's earnings *and* the male's earnings are more than 80% of the female's earnings ('approximately even earnings'); (3) the male's earnings are less than 80% of the female's earnings ('female primary earner').

Figure 4.4 considers trends in the proportion of people in each of these three earnings arrangements across the 2001 to 2024 period. Clear trends over time are evident. The male-primary-earner couple was the most prevalent arrangement across the 2001 to 2024 period; however, its proportion has declined from 68% to 61%. By contrast, the proportion in which earnings are approximately even has risen (from 16% to 20%) and so has the proportion of female-primary-earner couples (from 17% to 19%).

Figure 4.4: Relative earnings among opposite-sex couples aged under 65

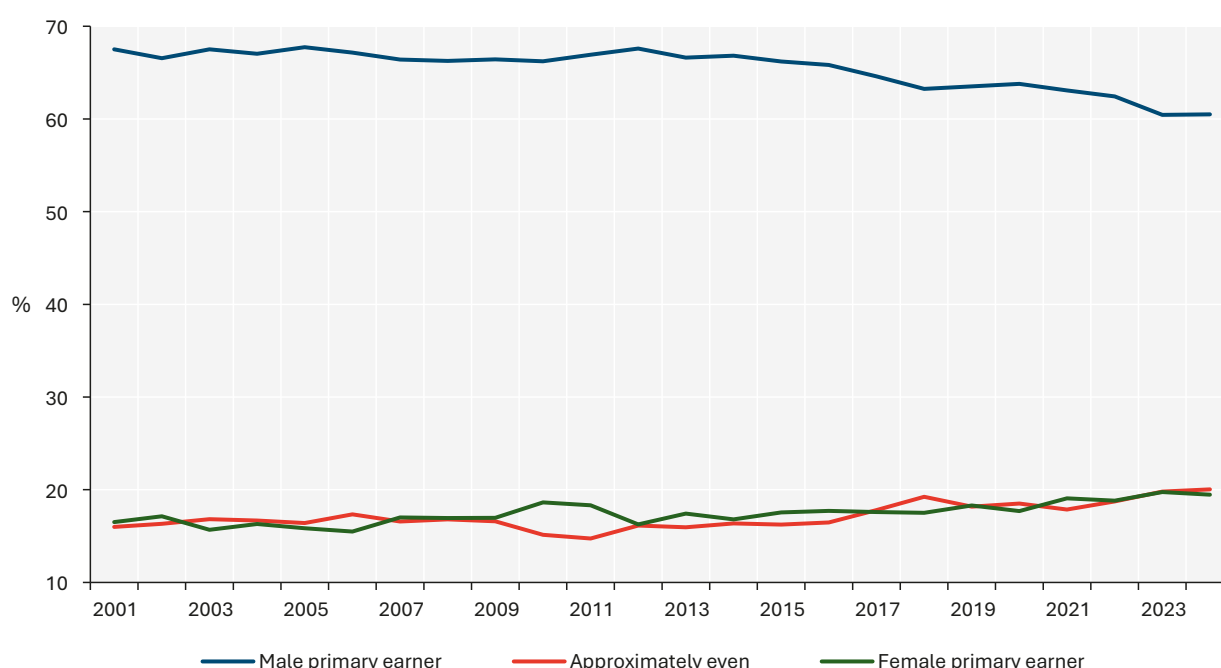


Table 4.3 examines the total time spent on paid and unpaid work by males and females in couples with different relative earnings in the year 2024. Paid work relates to both working time and commuting time, while unpaid work comprises housework, looking after one's own children, and other unpaid activities (see Box 4.2 for more information on the measurement of paid and unpaid work).

Among couples without dependent children, total time spent on paid and unpaid work is higher for males in male-primary-earner couples, approximately equal for couples with approximately even earnings, and higher for females in female-primary-earner couples.

¹¹ Note that the distinction between opposite-sex and same-sex couples is based on the respondents' (biological) sex rather than their gender, so that some opposite-sex couples may be same-gender couples and vice versa (see Box 2.5, page 17 for information on the measurement of sex and gender).

¹² Earnings include wages and salary as well as business income; they are examined for the financial year as a whole rather than simply focusing on current weekly earnings. Thus, earnings arrangements for each year relate to the financial year ending in the indicated year. For example, 2001 refers to the financial year running from 1 July 2000 to 30 June 2001.

Among couples with dependent children, however, total time is approximately equal for males and females in male-primary-earner families, higher for females in approximately even couples, and is substantially higher for females in female-primary-earner families. Females, on average, report more time spent on housework than males across all arrangements, although the difference in the female-primary-earner couples without children is relatively small. In couples with children, females spend considerably more time on housework and child care across all earnings arrangements, even when they are the primary earners.

The table also shows the relationship between each earnings arrangement and relationship quality. For both sexes, mean relationship quality is about 0.2 points lower in couples with dependent children than in couples without dependent children. Furthermore, within these two groups, both males and females report the highest levels of relationship quality when earnings are approximately even. Approximately even couples without dependent children therefore report the highest relationship quality, at about 4.5 points for males and 4.4 points for females.

The lowest quality rating for both sexes is among female-primary-earner couples with dependent children, where females only score an average of around 3.9 points and males 4.1 points. For females in this arrangement, relationship quality is likely undermined by their shouldering a disproportionate share of paid and unpaid work. For males, reduced relationship quality in this arrangement may partly reflect a clash with traditional expectations that males—particularly fathers—should be the primary earner.

Table 4.3: Mean time spent on paid and unpaid work per week and relationship quality of males and females among opposite-sex couples aged under 65, by earnings arrangement, 2024

	Male primary earner		Approximately even		Female primary earner		Total	
	Males	Females	Males	Females	Males	Females	Males	Females
Couples without dependent children								
Total time (hours)	60.7	49.5	56.4	58.1	47.7	59.9	56.5	54.1
Housework (hours)	13.0	18.4	11.4	15.6	15.0	15.8	13.1	17.1
Relationship quality (1-5 scale)	4.39	4.30	4.46	4.37	4.37	4.25	4.40	4.31
Couples with dependent children								
Total time (hours)	78.7	76.8	72.4	80.4	69.2	81.6	76.1	78.3
Housework (hours)	16.8	25.0	15.3	19.8	18.7	23.7	16.8	23.9
Child care (hours)	11.6	25.3	10.0	21.1	12.1	15.8	11.4	23.0
Relationship quality (1-5 scale)	4.23	4.12	4.29	4.16	4.15	3.93	4.23	4.10

Box 4.2: Classification of paid and unpaid work

In the SCQ of the HILDA Survey, respondents are asked annually how much time they spend in a typical week on each of nine activities:

- Paid employment
- Travelling to and from a place of paid employment
- Household errands, such as shopping, banking, paying bills and keeping financial records (but not driving children to school and other activities)
- Housework, such as preparing meals, washing dishes, cleaning house, washing clothes, ironing and sewing
- Outdoor tasks, including home maintenance (repairs, improvements, painting, etc.), car maintenance or repairs, and gardening
- Playing with one's own children, helping them with personal care, teaching, coaching or actively supervising them, or getting them to child care, school or other activities
- Looking after other people's children (aged under 12 years) on a regular, unpaid basis
- Volunteer or charity work (e.g., canteen work at the local school, unpaid work for a community club or organisation)
- Caring for a disabled spouse or disabled adult relative, or caring for elderly parents or parents-in-law

The question has been included in the HILDA Survey every year, although paid employment was only added in 2002, and the possibility to report time use in minutes (as opposed to hours only) was likewise only added in 2002. As a result, the time-use data is only comparable from 2002 on.

For the analysis reported in this chapter, total working time is equal to the sum of the time spent on these nine activities. Housework (defined as items (c), (d) and (e)), and child care item (f) are the most important activities of unpaid work in the household, and are therefore also separately examined in this chapter.

Predictors of relationship quality

This section investigates in greater detail which characteristics affect relationship quality. Table 4.4 presents results from regression models that estimate the association between various personal and couple characteristics and the composite measure of relationship quality, separately for males and females. This analysis focuses on couples living together in which both partners were interviewed in order to allow inclusion of partners' characteristics.



Relationship duration is one of the key predictors of relationship quality, especially for females. Compared to the first few years after moving in together, quality declines over time and reaches its lowest point at 20 to 29 years among men, when it is around 0.11 points lower on the 1 to 5 scale compared to a duration of 0 to 4 years, all else being equal. For females, relationship quality declines until a duration of 30 to 39 years, when it is around 0.23 points lower than at the beginning of the relationship. For males, relationship quality rises again for very long durations, so that males who have been living with their partner for 40 years or more have equally high relationship quality to those who have been together for 0 to 4 years. By contrast, there is little recovery at greater durations among females.

Age at the start of the relationship and the age difference between the partners also matter. Those who started cohabiting relatively young (before the age of 25) report higher relationship quality than those who moved in together later in life. Males who are roughly the same age as their partner or are two to five years older report significantly higher relationship quality than those with a partner who is more than five years older. For females, any age combination is associated with greater relationship quality than having a partner who is more than five years older.

If both partners have a tertiary qualification, relationship quality is higher than when only the respondent has one or when neither partner does. Females in same-sex relationships report greater relationship quality than those in opposite-sex relationships, while this is not the case among males. Furthermore, persons with resident children have lower relationship quality than those without resident children, with the associations being particularly negative for those with a youngest child aged 4 to 7 or 8 to 17.

People living in the mainland capital cities report higher relationship quality than people living outside these areas. Furthermore, immigrants born in countries other than the main English-speaking countries have lower relationship quality than Australian-born people.

Employment arrangements and division of unpaid work also matter. Females in female-primary-earner couples have lower relationship satisfaction compared to females in male-primary-earner or equal-earner couples. Moreover, people in couples without earnings (a group that is dominated by couples where both partners are retired), have significantly higher relationship quality. Males' relationship quality is higher when housework and child care are shared relatively equally or when their partner does most of these tasks (i.e., the partner accounts for more than 60% of the couple's total time spent on these tasks) than when males perform most of the work themselves. Females report greater satisfaction when housework and child care are shared equally, but not when their partner does most of these tasks.

Relationship quality is lower if there is financial stress and if either partner has a disability. Finally, the period indicators show that relationship quality is lower in the most recent period, 2020 to 2024, compared to the period 2003 to 2006.

In another analysis (results not displayed) we re-estimated the regression model from Table 4.4 for the joint sample of males and females, with the addition of an indicator for being female. This model shows that females have significantly lower relationship quality than males, all else being equal.

Table 4.4: Association between personal and couple characteristics and relationship quality

	Males	Females
<i>Relationship duration (Reference category: 0–4 years)</i>		
5–9 years	–0.051	–0.091
10–19 years	–0.092	–0.152
20–29 years	–0.105	–0.213
30–39 years	–0.081	–0.229
40+ years	<i>ns</i>	–0.174
<i>Age at start of cohabitation (Reference category: Under 25 years)</i>		
25–39 years	–0.056	–0.103
40–54 years	–0.049	–0.133
55+ years	<i>ns</i>	–0.114
<i>Age difference to partner (Reference category: Partner more than 5 years older)</i>		
Partner 2–5 years older	<i>ns</i>	0.062
About same age	0.040	0.060
Self 2–5 years older	0.052	0.083
Self more than 5 years older	<i>ns</i>	0.061
<i>Educational level combination (Reference category: Both tertiary degree)</i>		
Self tertiary only	–0.036	–0.059
Partner tertiary only	<i>ns</i>	–0.038
No one tertiary	–0.019	–0.081
Same-sex couple	<i>ns</i>	0.154
<i>Age of youngest resident child (Reference category: No resident child)</i>		
0–3 years	–0.123	–0.141
4–7 years	–0.224	–0.220
8–17 years	–0.189	–0.215
18 and older	–0.080	–0.118
Mainland capital cities	0.034	0.046
First Nations	<i>ns</i>	<i>ns</i>
<i>Immigrant status (Reference category: Australian-born)</i>		
Immigrant, main English-speaking countries	<i>ns</i>	<i>ns</i>
Immigrant, other countries	–0.044	–0.062
<i>Earnings arrangement (Reference category: Self primary earner)</i>		
Equal earners	<i>ns</i>	0.093
Partner primary earner	<i>ns</i>	0.090
No positive earnings	0.099	0.131
<i>Division housework and child care (Reference category: Self does most (> 60%))</i>		
Equal share	0.051	0.054
Partner does most (> 60%)	0.048	<i>ns</i>
Has a disability	–0.061	–0.068
Partner has a disability	–0.058	–0.077
<i>Financial stress (Reference category: None)</i>		
Moderate (1–2 indicators)	–0.125	–0.172
Severe (3+ indicators)	–0.305	–0.302
<i>Period (Reference category: 2003–2006)</i>		
2009–2016	<i>ns</i>	<i>ns</i>
2020–2024	–0.034	–0.035
Constant	4.504	4.492
Number of observations	25,652	26,012

Notes: This table presents coefficients from pooled ordinary least squares regression models of the predictors of relationship quality among males and females who reside with their partner in the same household, based on data from Waves 2003, 2006, 2009, 2012, 2016, 2020 and 2024. See the Technical Appendix for an explanation of these models. *ns* indicates the estimate is not significantly different from 0 at the 10% level.

Persistence of relationship quality

The findings presented in the previous sections suggest that relationship quality changes noticeably over time, not only as a function of the duration of the relationship but also as couples experience different phases and events in their lives, such as the arrival or departure of children, health issues or financial stress. This section looks at individual-level changes in relationship quality over time to quantify how frequent deteriorations and improvements in relationship quality are and how predictive (low) relationship quality is of relationship dissolution.

To this end, Table 4.5 shows changes in the levels of relationship quality within the same relationship between a given wave and the next wave in which relationship quality was collected, which was three to four years later.¹³ The analysis is restricted to people who live with their partner at baseline so that the partner can be uniquely identified and tracked over time. To reduce the number of categories, non-integer scores on the relationship quality scale were rounded to the nearest integer, resulting in five different levels of relationship quality. Cells shaded green designate improvements in relationship quality over time, while those shaded red designate deteriorations.

High levels of relationship quality are quite persistent: about 72% of those scoring 5 points on the relationship quality scale still (or again) live with the same partner and still score 5 points three to four years later. About 21% are with the same partner but now report slightly lower relationship quality of 4 points. Only about 4% no longer live with their original partner. Similarly, about 55% of those scoring 4 points in one year still score 4 points three to four years later, and about 24% now score 5 points.

By contrast, low relationship quality is associated with a higher likelihood of separation: close to 39% of those scoring 1 point and almost 26% of those scoring 2 points are no longer living with their original partner at the next measurement. Those who have remained with their partner mostly still experience low levels of relationship quality: of those initially scoring 1 point, about 24% still score 1 point and about 26% score 2 points three to four years later. By contrast, only a small proportion of those scoring 1 point initially experienced a major improvement in their relationship quality, with less than 3% later scoring 4 or 5 points.



Table 4.5: Transitions between different levels of relationship quality over time within a relationship—People who live with a partner at baseline (%)

Quality in current year	Quality 3 to 4 years later					Separated	Total
	1 (lowest)	2	3	4	5 (highest)		
1 (lowest)	23.6	25.5	9.0*	1.2*	1.7*	38.9	100.0
2	6.9	25.0	30.3	9.0	3.1	25.8	100.0
3	1.5	8.0	39.6	30.7	5.3	15.0	100.0
4	0.2	1.3	11.9	54.9	24.3	7.3	100.0
5 (highest)	0.1*	0.3	2.4	21.4	71.5	4.3	100.0
Total	0.6	2.2	10.6	34.3	45.0	7.3	100.0

Note: Separation is assumed if the original partner no longer lives in the same household. *Estimate not reliable.

¹³ Between 2003 and 2012, the relationship quality items were collected every three years, and after 2012, every four years. Therefore, the analysis pools three-year transitions between 2003 and 2006, 2006 and 2009, and 2009 and 2012 as well as four-year transitions between 2012 and 2016, 2016 and 2020, and 2020 and 2024. Despite the different spacing, these periods are considered together given the relatively low number of observations in some cells.

Chapter 5

Education and labour market outcomes



5

Education and labour market outcomes

Kyle Peyton and Roger Wilkins

Key findings

- The trend growth in the educational attainment of women has continued throughout the last quarter-century: well over half of women aged 25 to 44 now hold a university degree.
- Men's educational attainment has also grown, but much more slowly; as a result, in all age groups below 65, women now have considerably higher educational attainment than men.
- Education continues to pay off, with higher qualifications associated with higher earnings for both women and men.
- Men who have not completed Year 12 are falling behind—their non-participation rate nearly doubled and full-time employment has fallen sharply since the early 2000s.
- What university graduates studied matters more than where they studied, with the largest earnings premiums in medicine, engineering, IT and law.

Educational qualifications of Australians

Understanding how educational qualifications relate to labour market outcomes is central to assessing opportunities for Australians across generations. The HILDA Survey has collected information on educational attainment since its inception, and the periodic 'human capital' modules provide additional detail on fields of study and, for university graduates, the institutions they attended. This chapter provides a statistical overview of educational qualifications in Australia, followed by an exploration of the relationship between education and labour market outcomes. In addition, it examines variation in graduate outcomes by university type and field of study. For all of the analysis presented in this chapter, adults aged 25 and over are examined on the basis that most people have completed formal education by this age.



Box 5.1: Classification of educational attainment

The classification of educational qualifications adopted by the HILDA Survey is based on the Australian Standard Classification of Education (ASCED), which classifies formal educational qualifications by level and by field of study (Australian Bureau of Statistics (ABS), 2001). The level of highest educational attainment is derived from information on highest year of school completed and level of highest non-school qualification. In this report, up to seven levels of attainment are distinguished, ranging from 'Year 11 and below' to 'master's or doctorate'. Note in particular that, as explained in ABS (2014), Year 12 is defined to be a higher qualification than a Certificate I or II, so that the category 'Year 11 and below' includes people who have not completed Year 12 at school but hold a Certificate I or II.

It is important to note that educational pathways have changed substantially over time. In earlier decades, it was common for students to leave school after Year 10 with a school-leaving certificate and enter the workforce or pursue a trade qualification. Those who completed a trade apprenticeship are classified as holding a Certificate III or IV—a level above Year 12 in the current classification—even if they did not complete 12 years of schooling. As a result, comparisons of Year 12 completion rates across generations should be interpreted with caution, as lower rates of Year 12 completion among older cohorts do not necessarily indicate lower overall educational attainment.

Table 5.1 shows the educational attainment of the population aged 25 and over in 2024, disaggregated by sex and age group (see Box 5.1 for details on the classification of educational qualifications). Among adults aged 25 and over, a master's degree or doctorate is the highest qualification for around 10% of both women and men. A bachelor's degree or graduate diploma is the highest qualification for 30.6% of women and 24.6% of men, while vocational qualifications (Certificate III/IV or Diploma) are more common among men (37.3%) than women (28.8%). At the lower end of the distribution, approximately 12% of both women and men have Year 12 as their highest qualification, while 18.6% of women and 14.9% of men have a highest qualification of less than Year 12.

There are substantial differences in the educational attainment profile by age. Each successively older age group has a smaller proportion with university qualifications and a higher proportion who did not complete Year 12. Among women aged 25 to 34, over half (51.5%) hold a bachelor's degree or higher, compared with just 21.7% of women aged 65 and over. At the other end of the spectrum, only 5.2% of women aged 25 to 34 were in the below-Year 12 category, compared with 42.7% of women aged 65 and over. The differences by age group are also substantial for men, although historically low rates of Year 12 completion among older women mean the age gradient is steeper for women than for men. We thus see that women in the 65 and over age group are, on average, less educated than men in this age group, while women in younger age groups are, on average, considerably more educated than similarly aged men.

Table 5.1: Educational attainment by sex and age group, 2024 (%)

	25–34	35–44	45–54	55–64	65 and over	All aged 25 and over
Men						
Master's degree or doctorate	11.0	15.7	11.8	7.7	7.0	10.7
Bachelor's degree or graduate diploma	28.6	26.4	28.2	21.9	18.5	24.6
Certificate III/IV or Diploma	27.1	34.6	41.2	43.4	42.0	37.3
Year 12	22.2	12.5	9.7	7.7	8.7	12.5
Below Year 12	11.0	10.8	9.1	19.3	23.8	14.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Women						
Master's degree or doctorate	13.7	16.0	11.9	7.8	3.7	10.4
Bachelor's degree or graduate diploma	37.8	41.3	32.9	24.9	18.0	30.6
Certificate III/IV or Diploma	27.2	25.1	33.4	34.7	26.0	28.8
Year 12	16.1	10.8	10.1	11.2	9.6	11.6
Below Year 12	5.2	6.7	11.7	21.4	42.7	18.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

Note: Percentages may not add up to 100 due to rounding.

Educational attainment in Australia, 2001 to 2024

The educational attainment of Australians has transformed since 2001. Figure 5.1 shows the proportion of the population with a university degree (bachelor's degree or higher) by age group and sex from 2001 to 2024.

Among women, university attainment has risen dramatically across all age groups. The largest gains have been among those aged 35 to 44, who now have the highest rate of university attainment of any age-sex group. Among women aged 25 to 34, attainment rose from 28% to 52% over the same period. Even among older women, gains have been substantial—reflecting the gradual replacement of earlier, less-educated cohorts by more highly educated generations.

For men, the increases have been more modest. Among those aged 35 to 44, university attainment rose from 24% in 2001 to 42% in 2024. Among men aged 25 to 34, attainment increased from 26% to 40%. In 2001, men and women had similar rates of university attainment across most age groups. By 2024, women substantially exceeded men at every age, with the gap largest in the 35 to 44 age group (57% for women versus 42% for men—a difference of 15 percentage points).



Figure 5.1: Proportion of people with a university degree by sex and age group

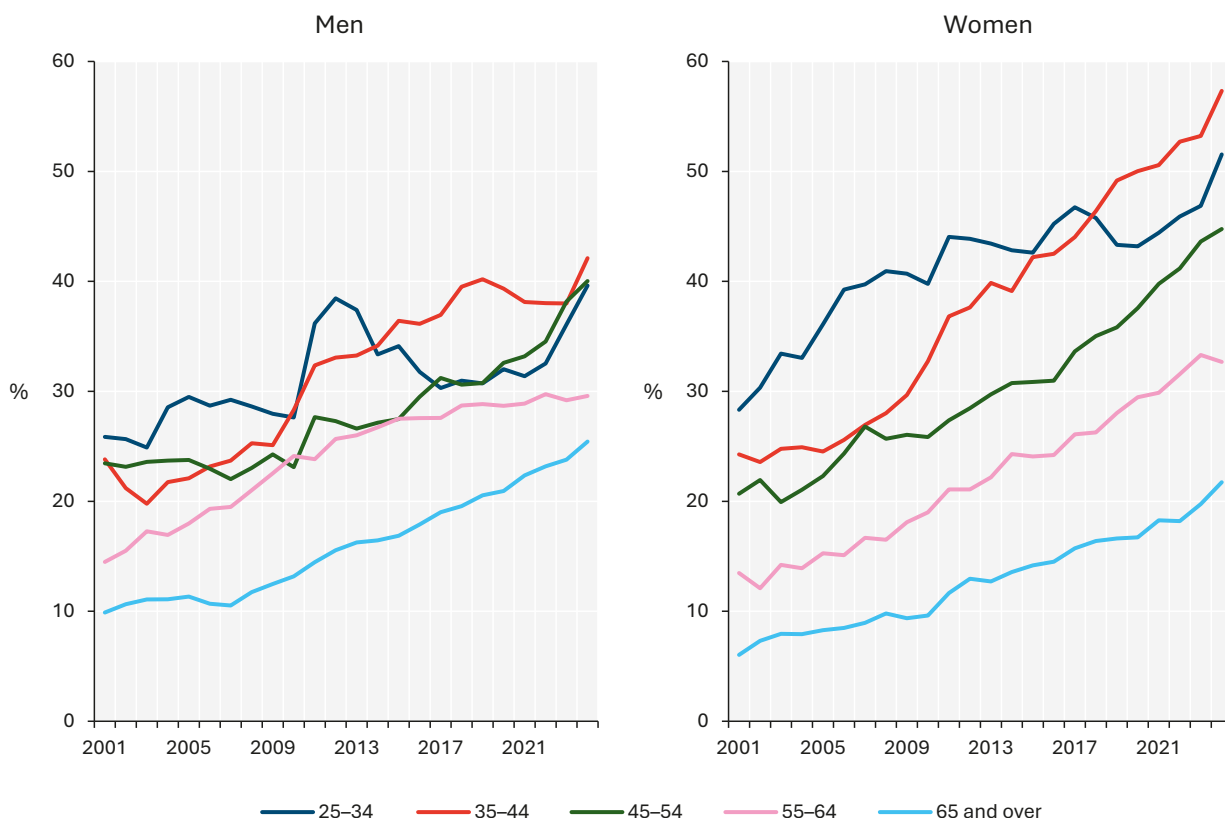
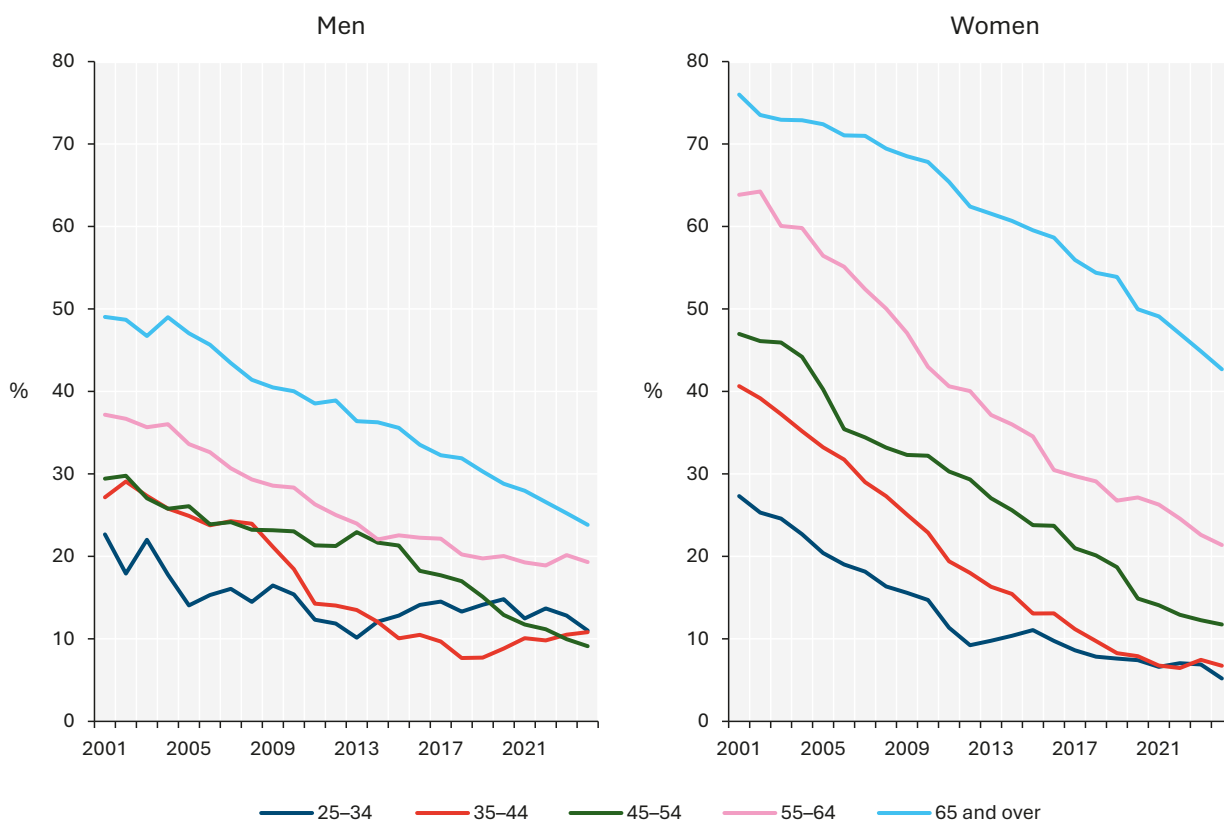


Figure 5.2 shows corresponding trends in Year 12 non-completion. Among older cohorts, women in the early 2000s were far more likely than men to have not completed secondary school, reflecting historical norms where previous generations of women were less likely to complete secondary schooling. In 2001, 76% of women aged 65 and over had not completed Year 12, compared to 49% of men whose highest attainment was below Year 12—a gap of 27 percentage points. Among those aged 55 to 64, 64% of women had not completed Year 12 versus 37% of men. Among those aged 55 to 64, 64% of women had not completed Year 12 versus 37% of men.

This historical gender gap has largely disappeared in younger cohorts, and in some cases it has reversed. Among those aged 25 to 34 in 2024, just 5% of women had not completed Year 12, compared to 11% of men. The convergence is evident across all age groups, with women's non-completion rates falling more steeply than men's over time. By 2024, women had significantly lower Year 12 non-completion rates than men in the 25 to 34 and 35 to 44 age groups. Among those aged 45 to 64, non-completion rates for women and men were similar, while among those aged 65 and over, women's non-completion rates remained substantially higher than men's.

These trends are driven primarily by cohort replacement—successive generations entering each age group with higher levels of educational attainment than the generations they replace. Figure 5.3 illustrates this directly by comparing three birth cohorts, each measured at the same life stage (age 35 to 44). The 1960s cohort (born 1960 to 1969) was observed at age 35 to 44 in 2004; the 1970s cohort was observed in 2014; and the 1980s cohort was observed in 2024.

Figure 5.2: Proportion of people with a highest educational attainment of below Year 12

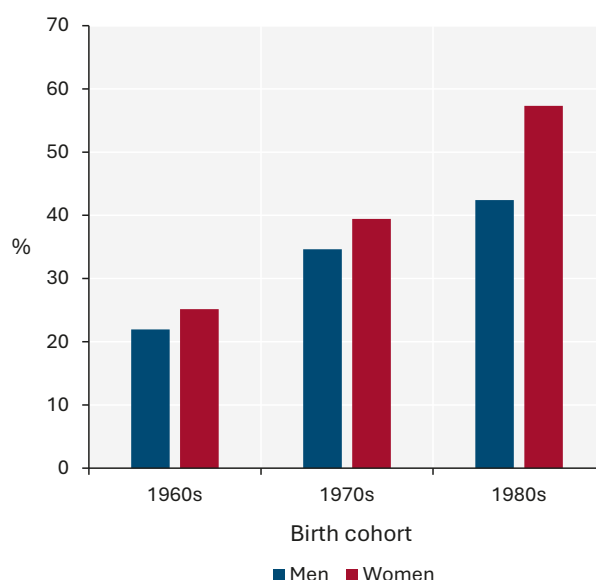


At age 35 to 44, 25% of women born in the 1960s held a university degree, compared to 39% of women born in the 1970s and 57% of women born in the 1980s. For men, the corresponding figures are 22%, 35% and 42%. The generational transformation is particularly striking for women, whose attainment at this life stage more than doubled across these three cohorts. While men have also seen substantial gains, the gender gap has widened considerably—from near parity in the 1960s cohort (25% versus 22%) to a 15-percentage-point gap in the 1980s cohort (57% versus 42%).

These patterns indicate that the large increases in educational attainment observed within age groups over time primarily reflect cohort replacement—with more educated younger cohorts replacing less educated older cohorts—rather than individuals acquiring additional qualifications later in life. The educational composition of the Australian workforce has been fundamentally reshaped by successive generations of increasingly educated workers—particularly women—entering prime working age. These educational shifts have important implications for labour market outcomes; this is examined in the following section.



Figure 5.3: Proportion with a university degree at ages 35 to 44



Education and labour market outcomes

The expansion of educational attainment documented in the previous section has occurred alongside substantial changes in labour market outcomes. This section examines how employment, labour force participation and earnings differ by education level, focusing on individuals aged 25 to 44. This age range captures adults who have largely completed their formal education, providing a clear picture of how education relates to labour market outcomes across the early and mid-career stages.

Figure 5.4 shows full-time employment rates (see Box 2.11 in Chapter 2 for labour force status categories) among Australians aged 25 to 44 by education level and sex from 2001 to 2024. A strong and persistent education gradient is evident for both women and men throughout the period, with university graduates consistently having the highest rates of full-time employment and those who did not complete Year 12 having the lowest.

Among women, full-time employment rates have increased across all education groups since the early 2000s. For university-educated women, full-time employment rose from 53% in 2001 to 57% in 2024. Women with vocational qualifications saw full-time employment rise from 40% to 45%, while women with Year 12 as their highest qualification increased their full-time employment rate from 41% to 47%. The most striking pattern is among women who have not completed Year 12, whose full-time employment rates remained persistently low at around 25% throughout the period, with no clear trend of improvement.

For men, full-time employment rates are substantially higher at every education level but have generally declined since the early 2000s. Among university-educated men, full-time employment was 84% in 2001 and remained relatively stable at 85% by 2024. The largest declines occurred among men with lower levels of education. Full-time employment among men with vocational qualifications fell from 85% to 78%, while men with Year 12 only saw declines from 77% to 72%. Men who have not completed Year 12 experienced the steepest decline, from 70% in 2001 to 63% in 2024, with a notable dip to 52% in 2020 during the COVID-19 pandemic.

Figure 5.4: Full-time employment rates among adults aged 25 to 44, by education level



Figure 5.5 shows non-participation rates (the share not in the labour force) among adults aged 25 to 44 by education level and sex. The education gradient in labour force participation is particularly pronounced among women, reflecting the interplay between education, family formation and workforce attachment.

Among women, non-participation rates have declined for those with higher levels of education, indicating strengthening labour market attachment. University-educated women had the lowest non-participation rates throughout the period, falling from 15% in 2001 to 9% by 2024. Women with vocational qualifications saw non-participation fall from 26% to 22%, while among women who have completed Year 12, non-participation only declined from 29% to 24%. In stark contrast, women who have not completed Year 12 continue to exhibit very high non-participation rates—rising from 40% in 2001 to 48% in 2024—with a spike to 54% in 2020, likely reflecting the impact of the COVID-19 pandemic on this group.

For men, non-participation rates are much lower overall but have increased for those with lower levels of education. University-educated men maintained consistently low non-participation rates, actually falling from 4% in 2001 to 2% in 2024. Men with vocational qualifications saw modest increases from 5% to 7%, while the non-participation rate of men with Year 12 only rose from 7% to 10%. The most substantial change occurred among men who have not completed Year 12, whose non-participation rate rose from 12% in 2001 to 22% by 2024, representing a near-doubling over the period.

Taken together, these patterns indicate that rising educational attainment has been accompanied by stronger labour market attachment among women, particularly at higher levels of education, while declining full-time employment and rising non-participation among men have been concentrated among those with lower educational attainment.

Figure 5.5: Non-participation rates among adults aged 25 to 44, by education level and sex

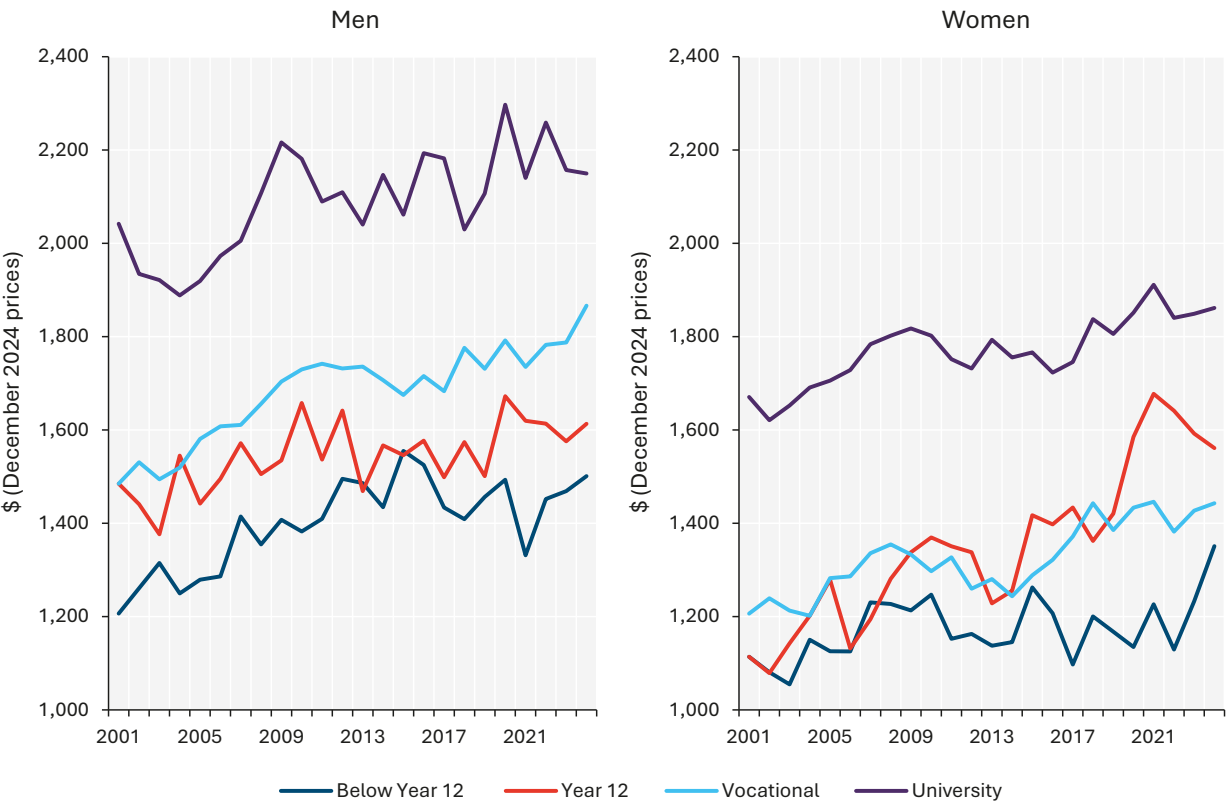


Figure 5.6 shows median real weekly earnings among full-time employees (see Box 2.12 in Chapter 2 for definitions of earnings measures) aged 25 to 44 by education level and sex from 2001 to 2024. Focusing on full-time workers allows for clearer comparison of earnings across groups by holding hours of work roughly constant and avoids conflating wage differences with differences in labour supply.

Across all years, earnings rise systematically with educational attainment for both women and men, and this education gradient has remained stable over time. University graduates have consistently had the highest median earnings, followed by those with vocational qualifications, Year 12 completion, and those who did not complete Year 12.

Among women, median weekly earnings have increased across all education groups since 2001. For university-educated women, median earnings rose from \$1,670 per week in 2001 to \$1,860 in 2024 (in real terms). Women with vocational qualifications saw median earnings rise from \$1,210 to \$1,440 over the same period. Women with Year 12 completion experienced substantial growth, with median earnings rising from \$1,110 to \$1,560. Despite this convergence at lower education levels, large absolute differences remain: in 2024, university-educated women earned around \$420 more per week than those with vocational qualifications and around \$510 more than those who did not complete Year 12.

Figure 5.6: Median real weekly earnings from main job of full-time employees aged 25 to 44, by education level and sex



For men, median earnings are higher than for women at every education level, and the education gradient is steeper. University-educated men saw earnings rise from \$2,040 per week in 2001 to \$2,150 in 2024, with considerable year-to-year variation. Men with vocational qualifications experienced steady growth, with median earnings rising from \$1,480 in 2001 to \$1,870 by 2024. Men with Year 12 only and those without Year 12 also saw growth in median earnings, from \$1,480 to \$1,610 and from \$1,210 to \$1,500, respectively. In 2024, university-educated men earned around \$280 more per week than those with vocational qualifications, approximately \$540 more than those with Year 12 only, and around \$650 more than those who did not complete Year 12.



To quantify how the relationship between educational attainment and labour market outcomes has changed over time, we estimate regression models separately for women and men aged 25 to 44. Three outcomes are examined: not being in the labour force, being employed full-time and real weekly earnings among full-time employees.

Our strategy distinguishes between two quantities. First, we estimate pooled education gradients, which summarise the average association between education and each outcome across the early 2000s (2001 to 2003) and early 2020s (2022 to 2024), controlling for age and year. Second, we estimate models that interact education with period indicators and report changes in education gradients between these two periods. All models control for age and include period fixed effects, but do not adjust for other characteristics such as family background, occupation or region. The estimated associations should be interpreted as descriptive education gradients, not the causal effects of education.

The pooled estimates in Table 5.2 (Panel A) show strong and systematic education gradients for both women and men. Those who did not complete Year 12 are substantially more likely to be out of the labour force and less likely to be employed full-time, while those with tertiary qualifications have markedly better labour market outcomes. Education gradients in weekly earnings are especially steep. Averaged across periods, women with postgraduate qualifications earn around 28% more per week than those with Year 12, while men with postgraduate qualifications earn around 31% more. Those without Year 12 earn substantially less than those with Year 12—around 19% less for women and 14% less for men.

Table 5.2: Education gradients in labour market outcomes among persons aged 25 to 44, pooled associations and changes since the early 2000s

	Not in the labour force		Employed full-time		Log weekly earnings (full-time employees)	
	Men	Women	Men	Women	Men	Women
Panel A: Pooled associations						
<i>Education (Reference category: Year 12)</i>						
Master's or doctorate	-0.081	-0.166	0.113	0.229	0.306	0.276
Bachelor's or graduate diploma	-0.082	-0.118	0.111	0.096	0.256	0.203
Certificate III/IV or Diploma	-0.044	<i>ns</i>	0.072	<i>ns</i>	<i>ns</i>	<i>ns</i>
Less than Year 12	0.058	0.152	-0.085	-0.159	-0.139	-0.186
Panel B: Changes in associations, 2001–2003 to 2022–2024						
<i>Education (Reference category: Year 12)</i>						
Master's or doctorate	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	-0.114	-0.247
Bachelor's or graduate diploma	<i>ns</i>	<i>ns</i>	<i>ns</i>	-0.064	-0.073	-0.201
Certificate III/IV or Diploma	<i>ns</i>	<i>ns</i>	-0.055	<i>ns</i>	<i>ns</i>	-0.203
Less than Year 12	0.106	0.090	-0.084	<i>ns</i>	<i>ns</i>	-0.193
Number of observations	15,590	17,478	15,590	17,478	11,617	7,128

Notes: Estimates in Panel A are pooled associations across the two period groups (2001 to 2003, 2022 to 2024). For 'Not in the labour force' and 'Employed full-time', estimates are average marginal effects from logistic regression models and are expressed as probability changes. Estimates for weekly earnings are from linear regression models with the natural log of weekly earnings as the outcome and are expressed as proportional differences relative to Year 12. Panel B reports changes in education gradients between 2001 to 2003 and 2022 to 2024 from models that interact education with period. All models control for age and include period fixed effects. *ns* indicates the estimate is not statistically different from 0 at the 10% level.

Panel B shows how these education gradients have changed between 2001 to 2003 and 2022 to 2024. For labour force participation, the only significant changes are at the bottom of the education distribution. The gap in non-participation rates between those who did not complete Year 12 and those who did increased by 9 percentage points for women and 11 percentage points for men. This indicates a growing divergence in labour force attachment for those with the lowest levels of education.

For full-time employment, there is little evidence of systematic change in education gradients for women. For men, the gap between those who did not complete Year 12 and those who did widened by around 8 percentage points, indicating that the decline in full-time employment has been particularly concentrated among men who did not complete secondary school. The most striking changes are observed for earnings. Among women, the earnings position of Year 12 completers improved relative to all other education groups. The premiums for tertiary qualifications declined substantially (by 20 to 25 percentage points), while the penalty for not completing Year 12 widened by around 19 percentage points.

Earnings differentials among university graduates

We next examine variation in earnings within the university-educated population, focusing on how weekly earnings among full-time employed graduates differ by type of university attended and field of study (see Box 5.2). Estimates are based on regression models estimated separately for women and men aged 25 to 44, with university type, regional university status, and field of study included jointly in each specification. All models adjust for age and degree level, allowing earnings differentials associated with institutional characteristics to be distinguished from those associated with field of study. The models do not adjust for other characteristics, such as socioeconomic background or prior academic achievement, so the estimated differentials may partly reflect unobserved differences in student composition across university types and fields. Results are reported for the years in which the HILDA human capital module was administered—2012, 2016, 2020 and 2024—grouped into an early period (2012 and 2016), a late period (2020 and 2024) and a pooled model covering all four waves.

Box 5.2: University groupings and field of study

For the purposes of the analyses in this chapter, Australian universities are grouped into three tiers using the Times Higher Education (THE) and QS World University Rankings 2024. The Group of Eight (Go8) is a coalition of eight research-intensive universities: University of Adelaide, Australian National University, University of Melbourne, Monash University, University of New South Wales, University of Queensland, University of Sydney and University of Western Australia. Mid-tier universities are non-Go8 institutions ranked in the top 400 in both the THE and QS rankings, including universities such as University of Technology Sydney, Macquarie University, Queensland University of Technology and University of Newcastle. Lower-tier universities are those ranked below 400 in either ranking, and include smaller, newer or more specialised institutions, such as Australian Catholic University, Central Queensland University, Charles Sturt University, Southern Cross University and University of Notre Dame Australia.

Regional Australian universities include Central Queensland University, Charles Darwin University, Charles Sturt University, James Cook University, Southern Cross University, Federation University, University of New England, University of Southern Queensland and University of the Sunshine Coast. Graduates who obtained their highest qualification overseas are classified separately based on the country of qualification. Overseas—English-speaking includes graduates from the United Kingdom, New Zealand, Canada, the United States, Ireland and South Africa. Overseas—Non-English-speaking includes graduates from all other countries.

The classification of field of study is based on the Australian Standard Classification of Education (ASCED). The HILDA Survey classifies field of study into 14 categories that deviate from the ASCED broad groupings in three ways: (1) medicine and nursing are each distinguished from other 'health-related' fields; (2) law is distinguished from other 'society and culture' fields; and (3) the 'mixed fields' category is removed (i.e., respondents are required to identify a single main field). For the analysis in this report, these 14 categories are collapsed into nine groups: Engineering & IT; Medicine; Law; Management & Commerce; Education; Nursing & Other Health; Natural & Physical Sciences; Architecture & Agriculture; and Society, Culture, Arts & Other.

The results, presented in Table 5.3, show that field of study is a strong and consistent predictor of earnings among university graduates for both women and men. Relative to graduates in Society, Culture, Arts & Other fields, Medicine is associated with the largest earnings premiums in every period. In the pooled estimates, women with medical degrees earn around 62% more per week than the reference group, while men earn around 74% more. Substantial premiums are also observed for Engineering & IT (35% for women, 29% for men) and Law (32% for women, 34% for men). Among other fields, Nursing & Other Health is associated with a 10% premium for women, while Natural & Physical Sciences is associated with around a 15% premium for men. Management & Commerce shows modest premiums of around 8% to 9% for both sexes.

Table 5.3: Earnings differentials by university type and field of study among full-time employed university graduates aged 25 to 44

	Pooled (2012–2024)		2012–2016		2020–2024	
	Men	Women	Men	Women	Men	Women
<i>University type (Reference category: Mid-tier Australian)</i>						
Top-tier Australian (Go8)	<i>ns</i>	0.056	<i>ns</i>	<i>ns</i>	0.103	<i>ns</i>
Lower-tier Australian	–0.125	<i>ns</i>	–0.139	<i>ns</i>	–0.107	<i>ns</i>
Overseas—English-speaking	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Overseas—Non-English speaking	–0.229	–0.171	–0.290	–0.183	–0.176	–0.157
Regional Australian University	–0.087	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
<i>Field of study (Reference category: Society, Culture, Arts & Other)</i>						
Medicine	0.743	0.616	0.961	0.720	0.602	0.556
Engineering & IT	0.293	0.349	0.368	0.326	0.243	0.360
Law	0.344	0.315	0.422	<i>ns</i>	0.291	0.412
Nursing & Other Health	<i>ns</i>	0.100	<i>ns</i>	<i>ns</i>	<i>ns</i>	0.115
Education	0.072	<i>ns</i>	<i>ns</i>	<i>ns</i>	0.153	<i>ns</i>
Architecture & Agriculture	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Natural & Physical Sciences	0.154	<i>ns</i>	0.168	<i>ns</i>	0.160	<i>ns</i>
Management & Commerce	0.092	0.078	<i>ns</i>	<i>ns</i>	0.100	<i>ns</i>
Number of observations	2,700	2,648	1,203	1,149	1,497	1,499

Notes: Estimates for weekly earnings are from linear regression models with the natural log of real weekly earnings as the outcome and are expressed as proportional differences relative to the reference category shown in the table. All models adjust for age and degree level, and the pooled model additionally includes survey wave fixed effects. *ns* indicates the estimate is not statistically different from 0 at the 10% level.



By contrast, earnings differentials by university type are smaller and less consistently estimated. In the pooled model, women who graduated from Go8 universities earn around 6% more per week than comparable graduates from mid-tier institutions, while the corresponding estimate for men is not statistically significant. However, there is some evidence that the Go8 premium for men has increased over time, rising from a non-significant difference in 2012 to 2016 to around 10% in 2020 to 2024. Note, however, that Go8 universities may disproportionately enrol students from more advantaged socioeconomic backgrounds. To the extent that family background independently predicts earnings, the estimated Go8 premium may partly reflect pre-existing differences in student composition rather than institutional effects on earnings.

After controlling for field of study, graduating from a lower-tier university is associated with an earnings penalty for men but not for women. In the pooled model, male graduates from lower-tier institutions earn around 13% less than those from mid-tier universities, with similar penalties observed in both periods. For women, estimated penalties associated with lower-tier institutions are smaller and not statistically significant.

Attending a regional university is associated with a modest earnings penalty for men of around 9% in the pooled model, though this estimate is not statistically significant in period-specific models. For women, no significant regional-university penalty is observed. This regional-university difference is estimated separately from and in addition to the university tier classification, though it may partly reflect residential sorting of regional university graduates into lower-wage regional labour markets.

Graduates who obtained their highest qualification from a university in a non-English-speaking country earn substantially less than graduates from mid-tier Australian universities. In the pooled model, estimated earnings penalties are around 17% for women and 23% for men. These penalties are observed consistently across periods for both sexes, though there is some evidence that the penalty for men has narrowed over time, from 29% in 2012 to 2016 to 18% in 2020 to 2024. Differences for graduates from institutions in English-speaking countries are smaller and not statistically significant.

Overall, the results indicate that among full-time employed university graduates aged 25 to 44, earnings differentials by field of study are large, persistent and evident for both women and men, while differentials by university type are more modest and concentrated among specific groups—particularly male graduates from lower-tier or non-English-speaking overseas institutions. Taken together, these patterns suggest that earnings among university graduates are more strongly differentiated by what individuals studied than by where they studied, once degree level and age are taken into account.



Chapter 6

Cognitive ability



Key findings

- Average cognitive ability declines steadily as people age, with Symbol Digits Modalities task scores showing that females score slightly higher than males.
- Between 2012 and 2024, average scores on one thinking test stayed about the same while the scores on the other fell, and 15- to 24-year-olds were the only age group to show a clear drop.
- Performance in cognitive ability tasks is most strongly associated with age, followed by factors such as education, labour force status and mental health.
- Most of the change people experienced over eight years was due to ageing rather than other measured factors.
- Higher cognitive ability is related to greater financial literacy and higher financial wellbeing.

The significance of cognitive skills and abilities (see Box 6.1) in shaping key social and economic outcomes makes it important to understand and track. The HILDA Survey fielded cognitive ability tasks (see Box 6.2) in 2012, 2016 and 2024, making it possible to examine cognitive ability among Australians in more detail and over time. This chapter reports how average cognitive ability varies depending on people's age and shows how cognitive ability in Australia has changed between 2012 and 2024. The chapter also examines the predictors that jointly explain cognitive ability and explores how selected cognitive activities are related to cognitive ability scores. Finally, the associations between cognitive ability and financial outcomes, specifically financial literacy and financial wellbeing, are examined.

Box 6.1: Defining cognitive ability

Cognitive ability, or cognitive function, refers to the ability to process thoughts, that is, the 'ability to think'. Cognitive ability is generally regarded as multidimensional, comprising several distinct abilities. It is the set of all mental abilities, including attention, memory, judgement and evaluation, reasoning, problem solving and comprehension. Cognitive ability tests will typically not attempt to measure all dimensions of cognitive ability, although these dimensions are generally found to be positively correlated: people who are highly able in one cognitive skill tend to be more able in other cognitive skills.



Box 6.2: Cognitive ability tasks in the HILDA Survey

This report uses two measures of cognitive ability that were administered in the interview component in Waves 12, 16 and 24:

Backward Digits Span (BDS): The interviewer reads out successively longer strings of single-digit numbers, which the respondent is asked to repeat back in reverse order. The string length starts at 2, and with each correct answer it increases by 1, up to a maximum of 8. Respondents are given two chances at each string length, with the task ending if both responses at the same string length are incorrect. The BDS score ranges from 0 (no correct responses) to 7 (a correct response at all seven string lengths). The BDS is typically considered an indicator of working memory.

Symbol Digits Modalities (SDM): Respondents are given a sheet of paper with a printed key matching symbols to single-digit numbers, below which is a grid of symbols. Each symbol has a blank space next to it, and the respondent is given 90 seconds to enter the corresponding number for as many of the symbols as possible, starting with the symbol in the upper-left corner and completing each row in sequence. The SDM score is equal to the number of correct entries, theoretically ranging from 0 to 110. The BDS is typically considered an indicator of processing speed.

See Wooden (2013) for an explanation of the cognitive ability tasks administered in the HILDA Survey and for evidence of the high quality of the measures of cognitive ability produced by the tasks.

Cognitive ability over the life course

Figures 6.1 and 6.2, respectively, depict the average BDS (0 to 7 scale) and SDM (0 to 110 scale) scores over the life course for females and males.

Figure 6.1 shows some discernible differences in BDS scores between females and males. BDS scores increase from age 15 to about age 40, and between ages 20 and 40 males have slightly higher BDS scores than females. From age 50, cognitive ability scores gradually decline with age, although mean scores tend to be higher among females.

The mean SDM scores in Figure 6.2 depict much clearer gender differences and trajectories over the life course. At each age group, the mean SDM score of females is higher than that of males. Remaining relatively stable between ages 15 and roughly 40, there is a clear continuous decline in cognitive ability scores after the age of 40.

The BDS and SDM tests in the HILDA Survey measure working memory and processing speed, respectively, which we would generally expect to decline with age. It is possible that the availability of other cognitive ability tests related to, for example, problem solving and reasoning would reflect different age patterns.

Figure 6.1: Mean BDS score, pooled waves

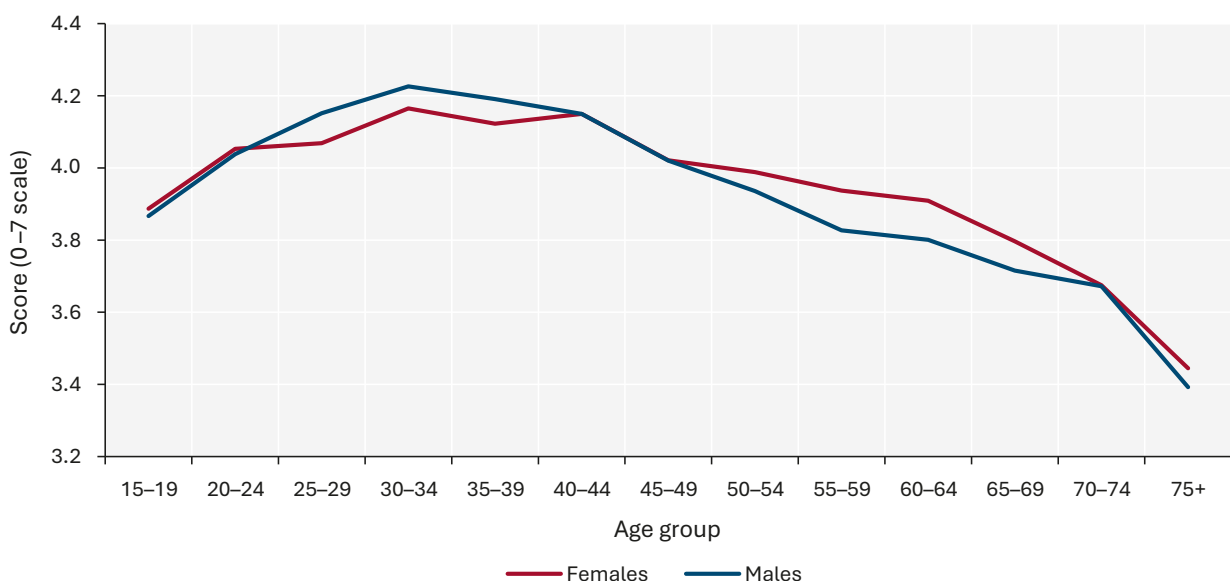
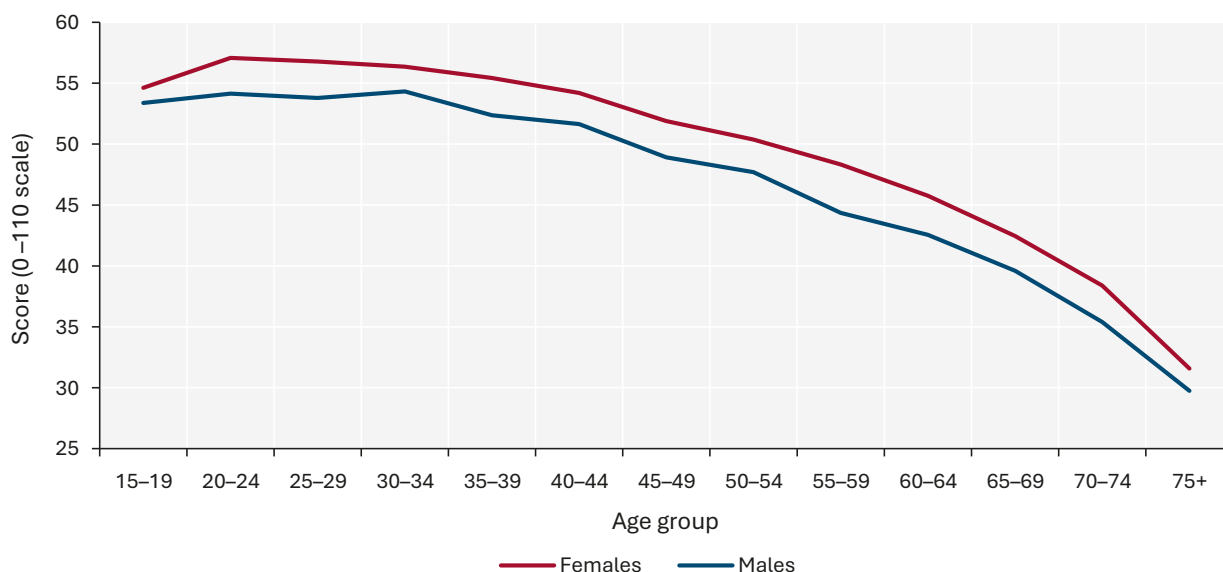


Figure 6.2: Mean SDM score, pooled waves



Changes in mean cognitive ability scores, 2012 to 2024

Table 6.1 presents mean cognitive ability scores for the three waves in which these questions have been asked. BDS scores have been relatively stable over time for all individuals as well as females and males. SDM scores, however, are generally lower in 2024 than in 2012. For example, females had a mean SDM of 50 in 2012 and 50.9 in 2016, before falling to 48.7 in 2024. The SDM score for males increased from 47.4 in 2012 to 48.3 in 2016, before declining to 46 in 2024.

Differences across age groups reveal some interesting patterns. Consistent with the evidence in Figures 6.1 and 6.2, within each survey wave the mean cognitive ability scores declined among older age groups. Between 2012 and 2024, the BDS and SDM scores were constant for those in the 25 to 44 age group, and the BDS for the 65 to 74 age group, and were roughly constant as well. Mean cognitive ability scores in general improved over time among people aged 45 and older.

Table 6.1: Mean cognitive ability scores, by sex and age group, 2012 to 2024

	BDS (0-7)			SDM (0-110)		
	2012	2016	2024	2012	2016	2024
All persons	3.9	4.0	3.9	48.8	49.6	47.4
Sex						
Female	3.9	4.0	3.9	50.0	50.9	48.7
Male	3.9	4.0	3.9	47.4	48.3	46.0
Age group						
15-24	4.0	4.1	3.8	55.4	55.9	52.7
25-34	4.1	4.2	4.1	55.2	55.6	55.2
35-44	4.1	4.3	4.1	53.0	54.4	52.9
45-54	3.9	4.0	4.0	48.9	50.4	49.9
55-64	3.8	3.9	3.9	44.8	45.6	45.6
65-74	3.7	3.8	3.7	37.9	39.4	39.9
75 and over	3.3	3.4	3.5	29.1	30.2	32.1

The 15 to 24 age group is the only group in which we observed a general decline in BDS and SDM scores in the 12 years since 2012. For this age group, mean BDS scores increased slightly from 4 in 2012 to 4.1 in 2016, before falling to 3.8 in 2024. Mean SDM scores increased slightly from 55.4 in 2012 to 55.9 in 2016 but then fell to 52.7 in 2024.

Predictors of cognitive ability

This section reports regression results of the characteristics that jointly explain cognitive ability scores. Table 6.2 shows these results for both the BDS and SDM scores as outcomes.

Consistent with the descriptive evidence shown in Figures 6.1 and 6.2, the age group estimates suggest very strong age patterns in cognitive ability, with much lower cognitive ability scores among older persons compared to younger people. For example, on the 0 to 7 scale, the BDS score for males aged 75 and older was about 0.49 points lower than that for males in the 15 to 24 age group. For the SDM measure, females and males aged 75 and older had 20.43 points and 21.41 points, respectively, lower cognitive ability scores than those aged 15 to 24.



A higher level of completed education was, unsurprisingly, related to higher cognitive ability scores. For instance, males with at least a bachelor's degree scored about 0.54 BDS points and 4.47 SDM points higher than males with less than a bachelor's degree.

In terms of the SDM measure, employed people had significantly higher scores than people who were unemployed or not in the labour force. Among females, BDS scores were also higher among employed people compared to those who were unemployed.

Individuals' cognitive ability scores were positively related to the occupational status of their parents when they were 14 years of age. Thus, the higher the occupation status of their parents, the higher the cognitive ability scores of the individual, on average. For the SDM task, cognitive ability appears more strongly related to the occupational status of the father.

Cognitive ability scores were higher for partnered individuals than for non-partnered individuals. On the SDM task, for example, partnered males scored around 1.2 points higher than non-partnered males. BDS scores were lower for males with young children relative to males who do not have young children.

Except for females' BDS scores, in all other cases cognitive ability scores were significantly lower among persons with a disability as compared to people with no disability. There was a meaningful association between mental health and cognitive ability. Males in poor mental health had BDS scores, on average, 0.10 points (on the 0 to 7 scale) lower than males not suffering from poor mental health. The SDM scores of females in poor mental health were, on average, 1.12 points (on the 0 to 110 scale) lower than those of females not in poor mental health.

Among males, being physically active on a regular basis was associated with better SDM scores. Males who engage in physical activity at least once a week had around 0.35 points higher SDM scores compared to males who take part in physical activity less than once a week.

Social engagement is an important predictor of cognitive ability. People who do at least some volunteering and those who are members of a club or hobby group scored significantly higher on both cognitive ability measures. The relationship between cognitive ability and frequency of social connection with friends or family is positive as well, although mainly among females. For example, females who see friends or family at least once a week had about 0.15 BDS points and around 0.73 SDM points higher scores relative to females who see friends or family less than monthly.

Male immigrants from the main English-speaking countries scored around 0.62 points higher on the SDM task relative to Australian-born males. In contrast, the BDS and SDM scores were significantly lower among immigrants from other countries compared to those among Australian-born individuals.

Performance on the cognitive ability tests is strongly associated with English language ability. Compared to people who reported speaking 'good English', the cognitive ability scores of people with poor English were about 0.62 to 0.68 points (BDS measure) and between 4.23 and around 4.44 points (SDM measure) lower. This finding does not suggest that non-native English speakers have lower cognitive abilities, but instead that the cognitive ability tests (which are conducted in English) are likely biased towards native English speakers.

Cognitive ability scores were, on average, lower among residents living in non-urban areas compared to people residing in major urban or other urban areas, especially in terms of the SDM task.

The estimates of the wave indicators suggest that, for females and males and based on both measures, overall cognitive ability scores were, on average, higher in 2016 than in 2012. There were generally no significant differences in cognitive ability when comparing 2024 to 2012, although the BDS score for females was roughly 0.06 points lower in 2024 than in 2012.

Table 6.2: Factors associated with cognitive ability, by sex, 2012 to 2024

	BDS		SDM	
	Females	Males	Females	Males
<i>Age group (Reference category: 15–24)</i>				
25–34	0.104	<i>ns</i>	<i>ns</i>	–1.547
35–44	0.097	0.075	–2.270	–3.562
45–54	0.068	<i>ns</i>	–5.223	–6.958
55–64	<i>ns</i>	–0.131	–8.226	–10.012
65–74	<i>ns</i>	–0.281	–12.759	–14.584
75 and over	–0.221	–0.489	–20.428	–21.409
Bachelor’s degree or higher	0.354	0.536	2.692	4.474
<i>Labour force status (Reference category: Employed)</i>				
Unemployed	–0.208	<i>ns</i>	–2.911	–2.464
Not in the labour force	–0.173	<i>ns</i>	–2.815	–2.002
Father’s occupational status when respondent was 14	0.005	0.005	0.035	0.030
Mother’s occupational status when respondent was 14	0.002	0.002	0.006	0.015
Partnered	0.059	0.114	0.771	1.209
Has children < 15 in household	<i>ns</i>	–0.067	<i>ns</i>	<i>ns</i>
Disability	<i>ns</i>	–0.130	–1.907	–2.571
In poor mental health	–0.082	–0.103	–1.115	–0.717
Physical activity at least once a week	<i>ns</i>	<i>ns</i>	<i>ns</i>	0.353
Volunteering	0.103	0.082	0.837	0.704
Member of a club or hobby group	0.076	0.077	0.982	1.102
<i>Social connection (Reference category: Less than once a month)</i>				
At least once a month	0.121	<i>ns</i>	0.727	<i>ns</i>
At least once a week	0.154	0.076	0.731	0.431
<i>Immigrant status (Reference category: Australian-born)</i>				
Immigrant, main English-speaking countries	<i>ns</i>	<i>ns</i>	<i>ns</i>	0.623
Immigrant, other countries	–0.257	–0.292	–1.449	–1.435
Poor English language skills	–0.680	–0.615	–4.436	–4.233
<i>Region of residence (Reference category: Non-urban)</i>				
Major urban	0.088	0.074	1.220	2.217
Other urban	<i>ns</i>	<i>ns</i>	0.792	0.672
<i>Wave year (Reference category: 2012)</i>				
2016	0.074	0.057	0.806	0.802
2024	–0.058	<i>ns</i>	<i>ns</i>	<i>ns</i>
Constant	3.408	3.477	52.843	49.523
Number of observations	18,724	16,246	18,123	15,707

Notes: This table presents ordinary least squares estimates from a regression model of the predictors of cognitive ability, measured by the BDS (on a 0 to 7 scale) and SDM (on a 0 to 110 scale) measures. See the Technical Appendix for an explanation of these models. *ns* indicates the estimate is not significantly different from 0 at the 10% level.

Changes in cognitive ability task scores over eight years

For the eight-year period from 2016 to 2024, Figures 6.3 and 6.4 depict individual-level changes in mean BDS and SDM scores, respectively, by sex and for each age group.

Apart from a small increase in mean BDS scores for males in the 15 to 24 age group, the mean BDS scores for all other sub-groups declined over the period 2016 to 2024. In terms of the SDM task, the mean scores for all groups declined during the period, although the change for 15- to 24-year-olds was tiny.

As expected, the magnitude of cognitive decline generally increases with age, and this pattern is clearest for the SDM scores. There are some gender differences in cognitive decline both within and across age groups, especially in relation to the BDS task scores. For example, among people who were in the 35 to 44 age group in 2016, mean BDS scores declined by about 0.11 points for females and around 0.27 points for males. BDS scores further fell by about 0.29 points for females who were aged 65 to 74 in 2016, and for males in this age group the decline was around 0.15 points. The largest decline in BDS scores of about 0.41 points is observed for females aged 75 or older in 2016. Finally, among people aged 75 and older in 2016, mean cognitive decline as measured by SDM scores was 7.62 points for females and 7.17 points for males.

Figure 6.3: Mean individual-level change in BDS scores between 2016 and 2024

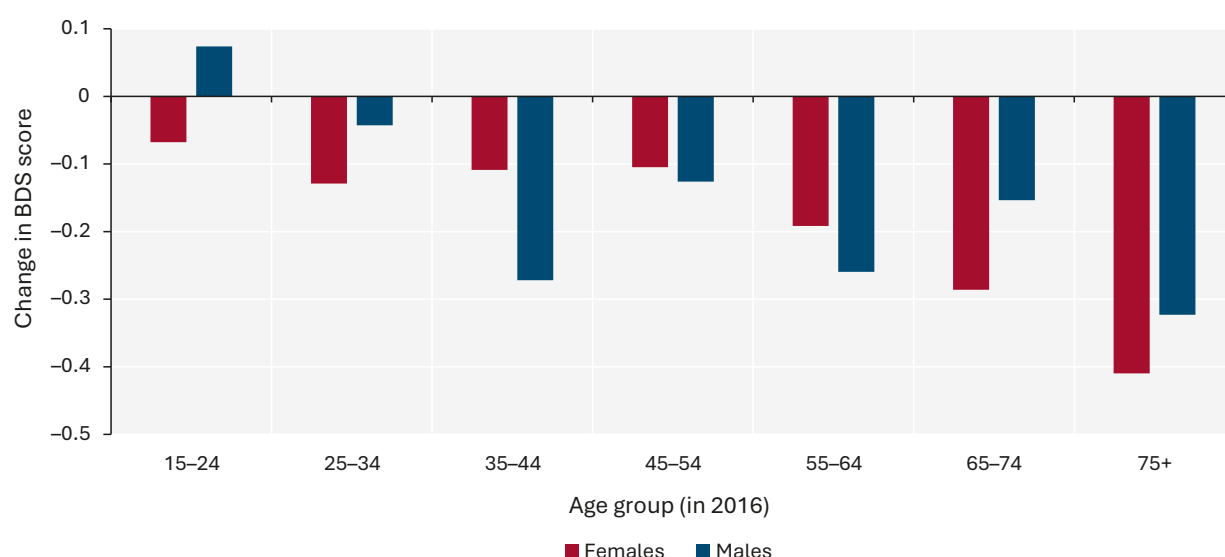
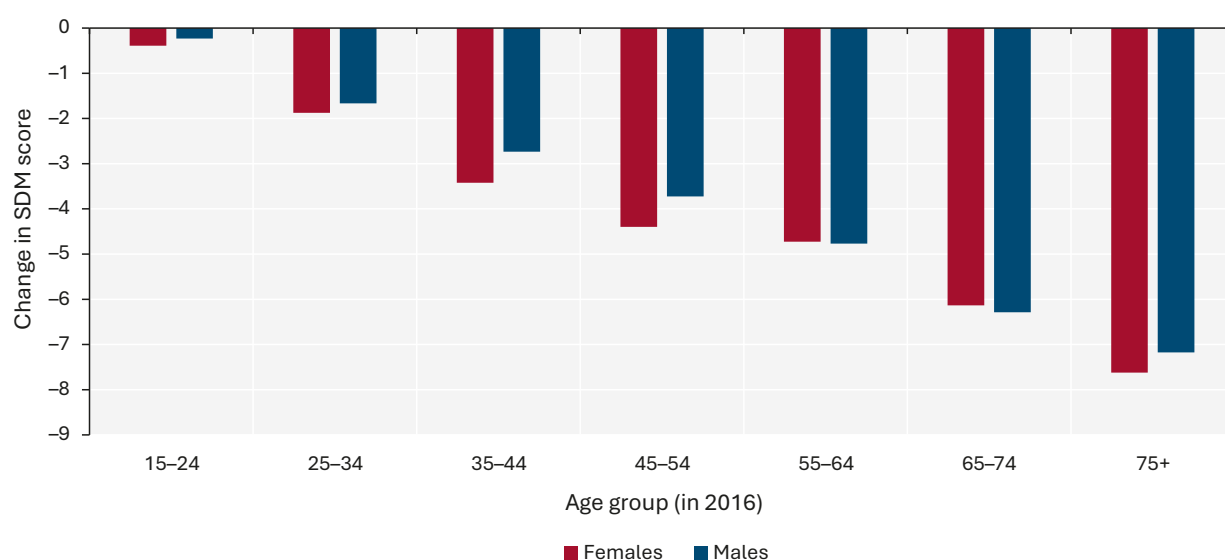


Figure 6.4: Mean individual-level change in SDM scores between 2016 and 2024



Cognitive activities and cognitive ability

Table 6.3 reports correlations between cognitive ability and the frequency of engaging in several cognitive activities. For the latter, respondents were asked to indicate how often they do each of the activities. Responses range from 'never' to 'every day or most days', resulting in a 1 to 7 scale, with higher scores suggesting more frequent engagement with the specific activity.

The correlations between cognitive activities and cognitive ability are generally quite low. Across both cognitive ability measures, a higher frequency of watching television programs or movies is correlated with lower cognitive ability scores. For the BDS, doing all other cognitive activities more often is related to better cognitive ability scores. The strongest correlation for both females (0.108) and males (0.154) is for writing, such as reports, letters and stories.

For SDM, cognitive ability is, perhaps counterintuitively, negatively correlated with frequency of reading magazines or newspapers. This could in part be because older people tend to be more likely to engage in this specific activity (results not shown here), with cognitive ability generally decreasing with age (see Figure 6.2). The correlation between SDM and frequency of doing puzzles or playing word games is negative for females but positive for males. For all other cognitive activities, SDM scores are positively correlated with frequency of engaging in such activities.

Because many of these cognitive activities can vary depending on a person's age, and the direction of association between cognitive ability and cognitive activities is not clear, no strong conclusions should be drawn from these results.

Table 6.3: Correlations between cognitive ability scores and frequency of cognitive activities

	BDS		SDM	
	Females	Males	Females	Males
Watch television programs or movies	-0.014	-0.020	-0.089	-0.086
Read books	0.071	0.105	<i>ns</i>	0.015
Read magazines or newspapers	0.035	0.062	-0.101	-0.043
Do puzzles (crosswords, Sudoku) or play word games (Scrabble)	0.078	0.106	-0.047	0.043
Play other games, such as board, card or computer games	0.067	0.097	0.097	0.257
Write (e.g., reports, letters, stories or journal entries)	0.108	0.154	0.157	0.184
Attend educational lectures or courses	0.074	0.111	0.230	0.275
Do art or craft or other artistic pursuits (e.g., playing musical instruments)	0.064	0.089	0.094	0.149
Visit museums or art galleries	0.062	0.067	0.064	0.069

Notes: Correlations are based on information from Waves 12 and 16. These are the only two waves in which questions on both cognitive activities and the cognitive ability tasks were asked; information on cognitive activities was obtained in Wave 20 but not in Wave 24, whereas the cognitive ability tasks were included in Wave 24 but not in Wave 20. *ns* indicates the correlation coefficient is not significantly different from 0 at the 10% level.



Predictors of cognitive decline

Given the suggestive evidence in Figures 6.3 and 6.4 of significant cognitive decline over eight years, Table 6.4 shows regression results of the potential determinants of such within-individual change.

Table 6.4: Predictors of person-level change in cognitive ability task scores over eight years (2016 to 2024)

	BDS		SDM	
	Females	Males	Females	Males
<i>Age group in 2016 (Reference category: 15–24)</i>				
25–34	–0.157	–0.144	–1.013	–0.996
35–44	<i>ns</i>	–0.279	–2.655	–2.618
45–54	–0.169	–0.190	–3.250	–3.252
55–64	<i>ns</i>	–0.300	–3.795	–4.002
65–74	–0.234	–0.228	–4.741	–5.125
75 and over	–0.425	–0.317	–6.611	–5.302
Bachelor’s degree or higher in 2016	<i>ns</i>	<i>ns</i>	–0.754	<i>ns</i>
Employed in 2016	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Household equivalised income in 2016 (\$0,000, December 2024 prices)	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Partnered in 2016	<i>ns</i>	<i>ns</i>	<i>ns</i>	–0.689
Had children < 15 in household in 2016	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Acquired a disability between 2016 and 2024	<i>ns</i>	<i>ns</i>	<i>ns</i>	–0.873
In poor mental health in 2016	0.107	<i>ns</i>	<i>ns</i>	<i>ns</i>
Separated from spouse or partner between 2016 and 2024	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Suffered a serious personal injury or illness between 2016 and 2024	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Spouse or child died between 2016 and 2024	<i>ns</i>	<i>ns</i>	<i>ns</i>	–1.342
Fired or made redundant between 2016 and 2024	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Any illicit drug use between 2016 and 2024	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Smoker in 2016	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Drank alcohol on 5 or more days per week in 2016	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Physical activity at least once a week in 2016	<i>ns</i>	<i>ns</i>	<i>ns</i>	0.561
Volunteered in 2016	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Member of a club or hobby group in 2016	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
<i>Social connection in 2016 (Reference category: Less than once a month)</i>				
At least once a month	–0.132	<i>ns</i>	<i>ns</i>	<i>ns</i>
At least once a week	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Number of observations	4,169	3,463	4,191	3,439

Notes: The table presents ordinary least squares estimates from regression models of the predictors of changes in cognitive ability scores, measured by the BDS (on a 0 to 7 scale) and SDM (on a 0 to 110 scale). See the Technical Appendix for an explanation of these models. *ns* indicates the estimate is not significantly different from 0 at the 10% level.

Ageing is, unsurprisingly, strongly predictive of cognitive decline, with the magnitude of decline increasing as we move from younger to older groups. For instance, compared to males aged 15 to 24, the BDS scores of males aged 45 to 54 and 55 to 64 fell by 0.19 and 0.30 points, respectively. Among females aged 45 to 54 and 55 to 64 relative to females in the 15 to 24 group, SDM scores worsened, on average, by 3.25 and 3.80 points, respectively.

Among the other factors that were significantly associated with cognitive decline, having a bachelor's degree was, perhaps surprisingly, a negative predictor for females' SDM scores. There is some evidence that having poor mental health in 2016 was a positive predictor of females' BDS scores, whereas females who saw friends or family at least monthly had more negative decline than those who saw friends or family less than monthly.

Among males, there were some factors associated with changes in cognitive ability. Being partnered (SDM score) was a negative predictor of cognitive decline, and males who acquired a disability experienced a greater cognitive decline. Cognitive ability worsened by about 1.34 points among males who experienced the death of their spouse or child. Frequent physical activity was, for males, a protective factor against cognitive decline (based on SDM scores).

Other than age, it is noteworthy that few of the included variables were predictive of within-individual cognitive decline. One possible reason for this could be that, in addition to ageing being a crucial factor in explaining cognitive decline, other unobserved variables not captured by the HILDA Survey could also be associated with cognitive decline.



Cognitive ability and financial outcomes

The analyses in this section demonstrate the potential importance of cognitive abilities for good financial outcomes. Financial literacy (see Box 10.1, page 131) and financial wellbeing (see Box 10.2, page 135) are the outcomes considered, with Table 6.5 containing the summarised regression results.

A 1-point higher BDS score on the 0 to 7 scale is associated with about 0.16 points higher financial literacy, all else being equal. Similarly, financial literacy is, on average, 0.03 points higher for each 1-point increase in the SDM score on its 0 to 110 scale. For every additional point increase in the BDS score, financial wellbeing improves, on average, by 0.43 points, and a 1-point improvement in the SDM score improves financial wellbeing by about 0.16 points on the 0 to 100 scale, holding other factors constant.

These results underscore the importance of cognitive ability in predicting aspects related to financial decision-making and financial outcomes. In this case, higher cognitive abilities are, on average, associated with greater financial literacy and higher financial wellbeing.

Table 6.5: Association of cognitive ability with financial literacy and financial wellbeing

	Financial literacy (0–5)		Financial wellbeing (0–100)	
	(1)	(2)	(3)	(4)
BDS (0–7)	0.162	–	0.432	–
SDM (0–110)	–	0.025	–	0.164
Number of observations	26,877	26,189	11,249	11,296

Notes: This table presents ordinary least squares estimates from a regression model of cognitive ability as a predictor of financial literacy (columns (1) and (2)) and financial wellbeing (columns (3) and (4)). See the Technical Appendix for an explanation of these models. The regressions for financial literacy are based on Waves 16 and 24, as these are the only two waves that included simultaneously both financial literacy and cognitive ability questions. The regressions for financial wellbeing are based on Wave 24. Although the financial wellbeing items were also administered in 2020, the cognitive ability questions were not asked in 2020. All models also control for age, sex, education, labour force status, partnership status, migrant status, Indigenous status and region of residence. *ns* indicates the estimate is not significantly different from 0 at the 10% level.

Chapter 7

Labour market mismatches



Key findings

- In 2024, 49.5% of workers held qualification levels higher than the job requires (i.e., they were overeducated) and 25.7% were unable to fully utilise their skills in their job (i.e., they were overskilled).
- Both types of mismatches are more prevalent among younger workers below 25 years of age, certain occupations (e.g., sales workers, labourers), and industries (e.g., accommodation and food services).
- Being born in a non-English speaking country and having a casual contract are associated with higher probabilities of both overeducation and overskilling.
- Job mismatches are associated with lower job and life satisfaction and a higher probability of job quitting, with overskilling generally having stronger negative effects than overeducation.
- Overeducation is a more persistent state than overskilling, with 64.7% of overeducated workers remaining so after four years, compared to 39.6% for overskilled workers.

Finding a position that perfectly matches one's qualifications and skill set can be difficult. Searching and applying for jobs requires time and money, changing jobs often takes a lot of effort, and suitable jobs can be rare in the region of residence. Therefore, many workers may settle for a less-than-optimal match. Furthermore, some qualifications obtained overseas may not be acknowledged in Australia, leading immigrant workers to accept jobs requiring a lower level of education. Finally, the labour market is constantly changing as new technology evolves, so that demand for some jobs declines, while other jobs are changing in nature and require new sets of skills.

As a consequence, many Australians experience a mismatch between the requirements or contents of their job and their education and skills. This chapter examines two types of labour market mismatches: qualification mismatch, where there is a mismatch between acquired level of education and the level of education necessary to do the job; and skill mismatch, where there is a mismatch between the worker's skill set and the skills required on the job (see Box 7.1).

The HILDA Survey contains information on the highest educational qualification of each respondent, which is collected in detail when respondents enter the panel and then updated every year as respondents acquire new qualifications. Additionally, every four years since 2012, the survey also contains a question on the minimum level of education necessary to satisfactorily complete a respondent's job. This information on the actual and the required minimum level of education has been compared to generate a measure of overeducation. Furthermore, every year in the self-completion questionnaire (SCQ), the HILDA Survey collects information on whether the respondent utilises many of their skills and abilities in their current job. This information has been used to create a measure of overskilling. The chapter focuses on workers aged 18 to 64 years.¹⁴

The first section looks at the development of actual educational qualifications, required education, and education and skill mismatches over time. The subsequent sections investigate the determinants and outcomes of such mismatches, as well as the persistence of mismatches.

¹⁴ Most workers younger than 18 years will still be in school. By contrast, workers who keep working past the age pension eligibility age might do so exactly because they have a well-matched job.

Box 7.1: HILDA Survey measure of labour market mismatches

This chapter utilises two measures of labour market mismatches: perceived *overeducation* and perceived *overskilling*.

Overeducation is defined as having a higher level of formal education than is required for the job. While people's actual level of qualification is known for every wave, information on the necessary level of education has been collected in Waves 12, 16, 20 and 24 with the following question: *What do you think is the minimum level of education necessary to satisfactorily carry out your (main) job?* Possible answer categories are 'Less than Year 10/No formal education required', 'Year 10 or Year 11', 'Year 12 (completion of high school)', 'Certificate I or II', 'Certificate III or IV', 'Diploma or Advanced Diploma', 'Bachelor's degree', 'Graduate Certificate or Diploma', 'Masters degree' and 'Doctorate'. In line with the Level of Highest Educational Attainment (HEAP) classification by the Australian Bureau of Statistics (ABS, 2021b), Certificate I and II are classified as 'less than Year 10'.

Overskilling is defined as being unable to fully utilise one's skills and abilities in the current job. In every wave of the HILDA Survey, a question has been included in the SCQ asking respondents about the extent of their agreement with the following statement: *I use many of my skills and abilities in my current job*. Response options range from 1 (strongly disagree) to 7 (strongly agree), with a higher score implying a better skill match. A person is categorised as 'overskilled' if they provide a response of 4 or lower (also see Wen and Maani, 2022; Mavromaras et al., 2013).

Note that both *overeducation* and *overskilling* are subjective measures of mismatch that reflect the perception of the worker; therefore, they might not always be congruent with the actual education and skills requirements of a job.

Trends in education and skill mismatches

Table 7.1 shows how both the prevalence of different educational qualifications in the population and the perceived minimum level of education required for workers' jobs have developed over time. Focusing first on actual qualifications, in 2024, the largest group were individuals who had completed a bachelor's or honours degree (21.7%), closely followed by individuals with a Certificate III or IV (21.2%). By contrast, both the two highest degrees (doctorate and master's) and the two lowest degrees (Year 11 or 10 and Year 9 or below) are less common.

Comparing the distributions of educational qualifications in 2001 and 2024 shows a clear upward trend towards higher educational qualifications. The proportions of individuals with a doctorate, master's or bachelor's/honours degree rose by 103.2%, 320.8% and 60.9%, respectively. Conversely, the proportion of people who had completed at a maximum Year 9 declined by 76.6% and that of people with a maximum Year 11 or 10 decreased by 58.3%.

Splitting the HILDA period into two halves (2001 to 2012 versus 2012 to 2024) shows that, for most categories, the trend has gone in the same direction in both sub-periods—a consistent increase in the prevalence of tertiary degrees and a consistent decrease in the proportion of people who have completed at a maximum Year 11 or 10 or Year 9 or below. However, the middle categories (Advanced diploma/Diploma; Certificate III or IV, Year 12) first saw a notable increase in their prevalence between 2001 and 2012 and then a slight decline between 2012 and 2024.

Turning to the required minimum level of educational qualifications shows that this distribution does not match that of the actual qualification levels. For example, in 2024, only 2.6% of individuals worked in a job requiring a master's degree—which is 6.7 percentage points lower than the actual share of people holding such degrees (9.3%). Similarly, only 2.9% of jobs require a graduate diploma or certificate, although 6.2% of people hold this qualification. By contrast, fewer people have a bachelor's degree than is required (21.7% versus 25.3%). On the other end of the spectrum, 14.7% of people's jobs only require a maximum of Year 9 of schooling. However, only 2.5% of people actually have this level, with the remainder having a higher level of qualification—a 12.2 percentage-point gap.

Table 7.1: Trends in actual and required levels of education—Persons aged 18 to 64 years, 2001 to 2024 (%)

		2001	2006	2012	2016	2020	2024	% change		
								2001–2012	2012–2024	2001–2024
Doctorate	Actual	0.6	0.8	0.8	1.1	1.2	1.3	33.9	51.8	103.2
	Required			0.6	0.8	0.8	0.7		19.3	
Master's	Actual	2.2	2.8	5.3	6.0	6.7	9.3	138.5	76.5	320.8
	Required			1.5	2.0	2.2	2.6		78.6	
Grad diploma, grad certificate	Actual	4.5	5.1	5.5	5.7	6.1	6.2	22.4	12.3	37.6
	Required			2.7	2.2	2.7	2.9		8.2	
Bachelor's or honours	Actual	13.5	14.6	17.5	18.0	19.8	21.7	29.5	24.3	60.9
	Required			19.9	21.9	24.0	25.3		27.1	
Adv diploma, Diploma	Actual	8.9	9.1	9.5	10.1	10.4	9.3	7.0	-2.3	4.5
	Required			8.8	9.0	8.8	7.8		-12.2	
Cert III or IV	Actual	18.3	20.4	22.0	23.7	22.7	21.2	20.3	-3.6	16.0
	Required			15.9	17.2	17.0	16.8		5.6	
Year 12	Actual	18.0	19.0	19.0	18.5	19.0	18.8	5.7	-1.1	4.5
	Required			17.1	16.5	17.1	16.5		-3.2	
Year 11 or 10	Actual	23.1	20.3	15.2	12.8	11.0	9.6	-34.4	-36.4	-58.3
	Required			16.7	15.2	13.6	12.7		-23.8	
Year 9 or below	Actual	10.8	7.9	5.2	4.1	3.1	2.5	-52.2	-51.2	-76.6
	Required			16.9	15.3	13.9	14.7		-12.8	

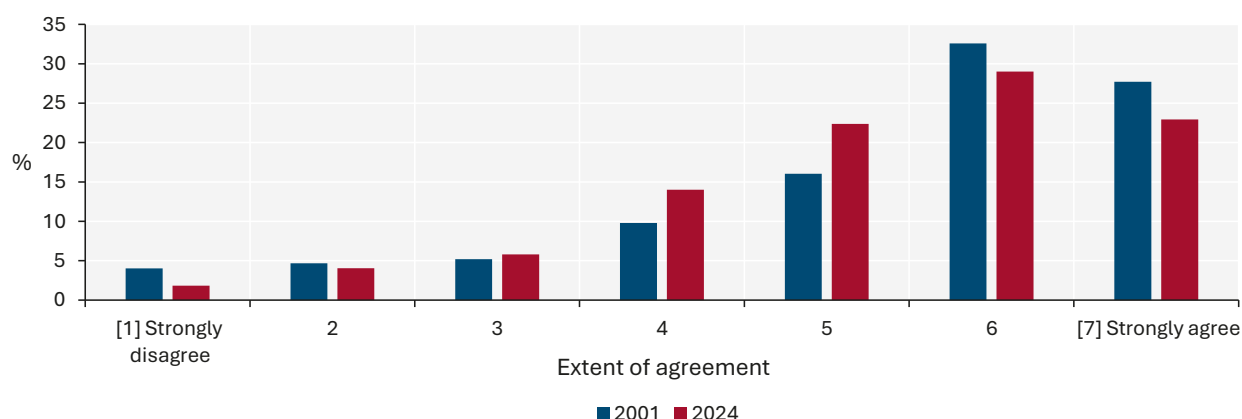
Notes: Actual educational levels relate to the general population (including non-employed persons); required educational levels relate to jobs held by employed persons. Percentage changes were calculated from more precise values and so may slightly differ from what can be calculated using the rounded values presented in the table.

Looking at the trend in the required minimum levels of qualification over time shows that these requirements have also increased. Among bachelor's and master's degrees, the percentage increase in the proportion of jobs requiring this qualification has been comparable to the percentage increase in the proportion of workers holding that qualification. For example, the proportion of jobs requiring a master's degree rose by 78.6% over the 2012 to 2024 period, while the proportion of people holding a master's degree increased by 76.5%. However, among the lower educational qualifications, the decline in jobs requiring such educational levels has been slower than the decline in the people holding at a maximum such an educational level. This suggests that an increasing proportion of people working in such jobs have educational levels that are higher than required.



Besides formal qualifications, another way of looking at the quality of a job match is via the question of whether a worker's skill set matches the skills required for the job. Figure 7.1 presents workers' levels of agreement with the statement 'I use many of my skills and abilities in my current job' for 2001 and 2024. It shows that, in both years, most workers tend to agree that they use many of their skills and abilities by choosing a value between 5 and 7 on the 1 to 7 scale. However, high levels of agreement have declined over time. The share of workers choosing a 7 and thus strongly agreeing declined from 27.7% to 22.9% between 2001 and 2024, and that of workers choosing a 6 declined from 32.6% to 29%. By contrast, the share of workers choosing a 4 or 5 increased.

Figure 7.1: Perceived level of skill match—Workers aged 18 to 64

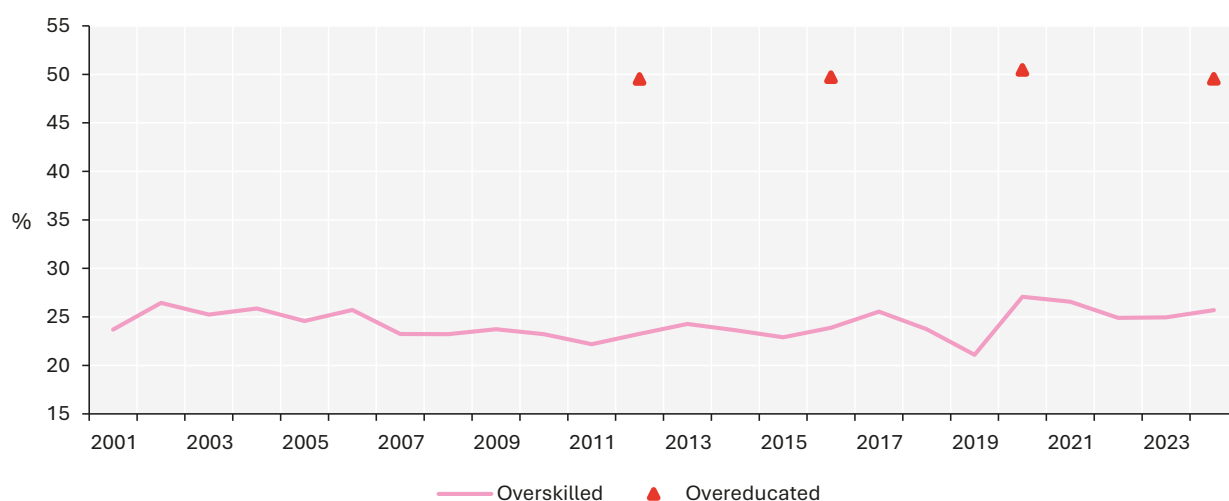


Note: The figure shows agreement with the statement 'I use many of my skills and abilities in my current job'.

Figure 7.2 presents trends in the prevalence of overeducation and overskilling (see Box 7.1 for details on how to calculate those measures). Given information on the minimum educational level required for the job was only collected in select waves, the proportion of overeducated workers could only be calculated for the years 2012, 2016, 2020 and 2024. The figure shows that in 2024, 49.5% of workers were overeducated, that is, their educational level was higher than the minimum level required for the job. Interestingly, there has not been much change in this proportion over time: between 2012 and 2020, the proportion of overeducated workers increased slightly from 49.5% to 50.5%, before slightly declining.

The proportion of overskilled workers has been much lower than the proportion of overeducated workers throughout the period. After its lowest recorded level in 2019 (21.1%), it showed a slight upwards trend and reached its peak during the pandemic years, at 27.1% in 2020 and 26.6% in 2021, before declining to 24.9% in 2022 and then slightly trending upwards again to reach 25.7% in 2024.

Figure 7.2: Proportion of workers experiencing job mismatches—Workers aged 18 to 64 years



Characteristics associated with job mismatches

This subsection investigates the worker and job characteristics associated with a greater probability of experiencing a job mismatch. Table 7.2 presents the proportion of overeducated and overskilled workers by sex and age group. Focusing on overeducation first, the bottom row shows only a small gender difference, with close to half of both men and women being overeducated. By contrast, the differences in the age groups are more pronounced, especially among women. For women, the prevalence of overeducation is highest among the youngest age group, at 56.5%, and then declines steadily with age to reach 45.3% among those aged 55 to 64. By contrast, among men, both the youngest and the oldest age groups have relatively high proportions of overeducated workers.

Table 7.2: Prevalence of overeducation and overskilling—Workers aged 18 to 64, by age category and sex, 2024 (%)

	Overeducated			Overskilled		
	Men	Women	Total	Men	Women	Total
18–24 years	52.1	56.5	54.1	35.8	36.6	36.2
25–34 years	47.5	49.3	48.3	27.4	24.5	26.0
35–44 years	48.8	49.0	48.9	20.4	22.8	21.6
45–54 years	50.3	48.5	49.4	22.5	23.9	23.2
55–64 years	51.1	45.3	48.4	26.7	24.4	25.6
Total	49.7	49.4	49.5	25.8	25.6	25.7

With respect to overskilling, the youngest age group stands out as having by far the highest proportion of overskilled workers, at 35.8% for men and 36.6% for women. The proportion of overskilled workers then drops as age increases, reaching its lowest value for both men and women in the middle age group of 35 to 44 years before increasing again for the older age groups.

In a next step, we combine the two dimensions of job mismatch and distinguish workers that are matched based on both measures, overeducated but not overskilled, overskilled but not overeducated, and both overeducated and overskilled. The prevalence of these four groups, separately by age group, is shown in Table 7.3. Given the relatively small gender differences uncovered in Table 7.2, this information is presented jointly for men and women. It shows that 40.4% of workers are matched on both measures, so neither overeducated nor overskilled. More than one-third (34.4%) are overeducated only, about one in 10 (9.9%) are overskilled only, and 15.3% are both overeducated and overskilled. Comparing across age groups shows that the youngest age group has the highest prevalence of workers who are both overeducated and overskilled, at 24%. By contrast, the middle age group of 35 to 44 years has the lowest prevalence of a dual job mismatch, at 11.9%.



Table 7.3: Prevalence of job mismatches—Workers aged 18 to 64, by age category, 2024 (%)

	Matched	Overeducated (only)	Overskilled (only)	Overeducated and overskilled	Total
18–24 years	34.7	29.3	12.0	24.0	100.0
25–34 years	42.0	33.6	9.2	15.3	100.0
35–44 years	42.1	37.1	8.9	11.9	100.0
45–54 years	41.5	35.7	9.5	13.4	100.0
55–64 years	39.0	34.7	10.9	15.4	100.0
Total	40.4	34.4	9.9	15.3	100.0

Figure 7.3 presents the prevalence of overeducation and overskilling in 2024 separately by occupation. It shows that the proportion of workers experiencing such mismatches varies greatly between occupations, with sales workers and labourers, as well as machinery operators and drivers, exhibiting higher than average proportions of both overeducation and overskilling. By contrast, technicians and trades workers, as well as professionals, exhibit low proportions of both types of mismatches.

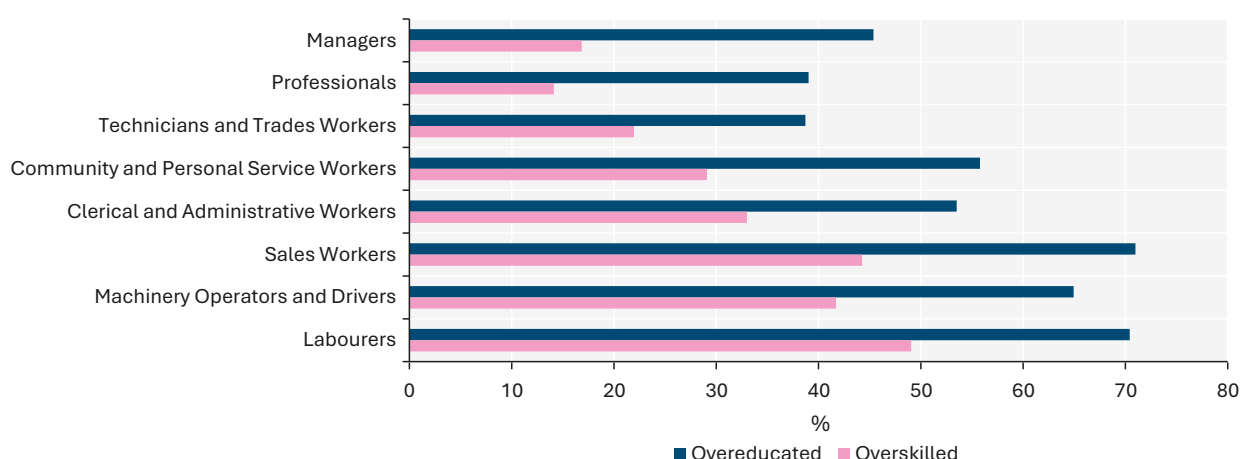
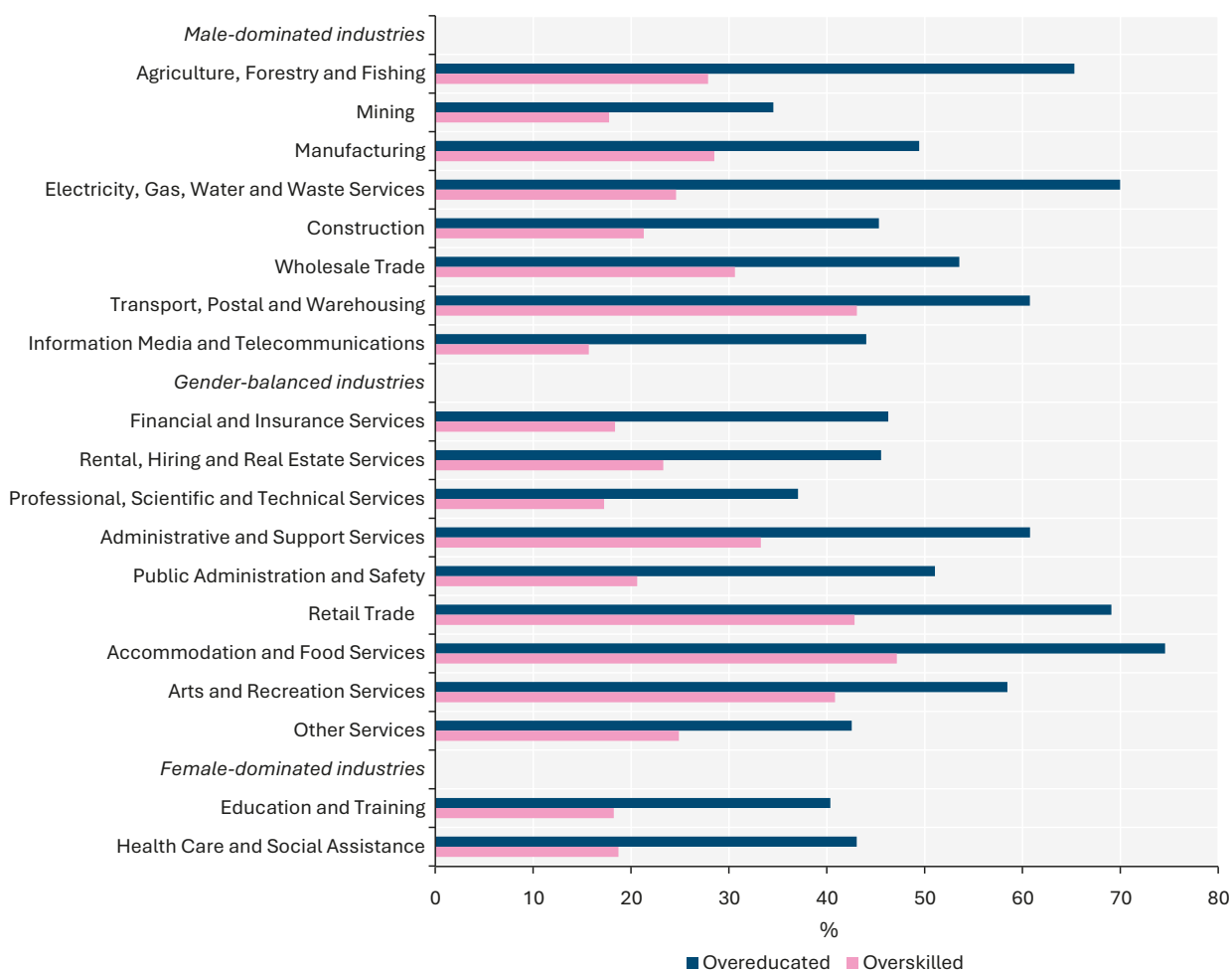
Figure 7.3 : Prevalence of job mismatches by occupation—Workers aged 18 to 64, 2024

Figure 7.4 presents the prevalence of overskilling and overeducation in 2024 separately by industry. To see whether there are differences by the proportion of female workers in the industry, the industries are sorted into three categories: ‘male-dominated’ industries that have at least 60% male workers; ‘gender-balanced’ industries with between 41% and 59% female workers; and ‘female-dominated’ industries that have at least 60% female workers. These cutoffs are in line with prior literature (e.g., Workplace Gender Equality Agency, 2022; Jobs and Skills Australia, 2025).

Again, large differences are apparent. Workers in the accommodation and food services sector have the highest prevalence of both overeducation (74.6%) and overskilling (47.2%). Workers in the mining sector are the least likely to be overeducated, although the prevalence is still 34.5%, while workers in the IT sector are the least likely to be overskilled, at 15.7%. Mismatches are also relatively rare in the only two female-dominated industries education and training and health care and social assistance.



Figure 7.4: Prevalence of job mismatches by industry—Workers aged 18 to 64, 2024



There are many other factors besides sex, age, occupation and industry that might determine the quality of a person's labour market match. Therefore, Table 7.4 presents results from two separate logistic regression models investigating the association between various worker and job characteristics and the probabilities of being overeducated and overskilled.

Box 7.2: Classification of type of employment contract

Three types of employment contract are distinguished in this report.

Fixed-term contracts, defined as employment contracts that end at a specified date or upon completion of a specific task.

Casual employment is defined by the Fair Work Commission as employment with no firm advance commitment from the employer to ongoing work and by an entitlement to a casual loading (Fair Work Ombudsman, 2024). Alternatively, casual employment is often identified on the basis of the absence of entitlement to paid leave, which is a common feature of casual employment (e.g., Australian Bureau of Statistics, 2018). From an employee perspective, the payment of a casual loading, the absence of paid leave entitlements and/or irregularity of hours are all indicators of employment on a casual basis. In the HILDA Survey, casual employment status is determined based on employee self-reports of employment contract type. In 2024, the HILDA Survey data show that 95% of people who identified as being employed on a casual basis did not have paid leave entitlements, while 85% of those without paid leave entitlements identified as being employed on a casual basis.

Permanent/ongoing employment, whereby permanent employees typically have leave and other entitlements, and usually have a guaranteed minimum number of hours per week.

Table 7.4: Determinants of job mismatches—Workers aged 18 to 64

	Overeducation	Overskilling
Men	0.018	<i>ns</i>
Partnered	<i>ns</i>	-0.024
Has children < 18 in household	<i>ns</i>	-0.006
<i>Age (Reference category: 18–24 years)</i>		
25–34 years	<i>ns</i>	<i>ns</i>
35–44 years	0.027	-0.016
45–54 years	<i>ns</i>	-0.032
55–64 years	-0.026	-0.052
Has work-limiting health condition	<i>ns</i>	<i>ns</i>
Lives outside mainland capital cities	-0.017	-0.023
First Nations	-0.037	<i>ns</i>
<i>Immigrant status (Reference category: Australian-born)</i>		
Main English-speaking countries	<i>ns</i>	<i>ns</i>
Other countries	0.085	0.025
Speaks English less than very well	<i>ns</i>	0.053
Works full-time hours	-0.042	-0.079
<i>Occupation (Reference category: Professionals)</i>		
Managers	0.04	0.035
Technicians and Trades Workers	<i>ns</i>	0.059
Community and Personal Service Workers	0.107	0.096
Clerical and Administrative Workers	0.118	0.164
Sales Workers	0.201	0.146
Machinery Operators and Drivers	0.214	0.221
Labourers	0.222	0.244
<i>Industry (Reference category: Construction)</i>		
Agriculture, Forestry and Fishing	0.100	0.044
Mining	0.056	0.033
Manufacturing	<i>ns</i>	0.071
Electricity, Gas, Water and Waste Services	<i>ns</i>	0.049
Wholesale Trade	0.038	0.084
Retail Trade	0.094	0.110
Accommodation and Food Services	0.152	0.096
Transport, Postal and Warehousing	0.054	0.102
Information Media and Telecommunications	<i>ns</i>	0.071
Financial and Insurance Services	<i>ns</i>	0.024
Rental, Hiring and Real Estate Services	<i>ns</i>	0.027
Professional, Scientific and Technical Services	-0.093	<i>ns</i>
Administrative and Support Services	0.051	0.096
Public Administration and Safety	0.069	0.023
Education and Training	<i>ns</i>	-0.028
Health Care and Social Assistance	-0.053	<i>ns</i>
Arts and Recreation Services	0.063	0.029
Other Services	<i>ns</i>	<i>ns</i>
<i>Employment type (Reference category: Permanent employee)</i>		
Fixed-term employee	<i>ns</i>	<i>ns</i>
Casual employee	0.055	0.047
Self-employed	0.036	-0.017
Public sector	<i>ns</i>	<i>ns</i>
Tenure with employer < 1 year	0.014	-0.010
<i>Survey year (Reference category: 2012 (Overeducation) or 2001–2004 (Overskilling))</i>		
2016	<i>ns</i>	
2020	0.019	
2024	0.022	
2005–2009		<i>ns</i>
2010–2014		<i>ns</i>
2015–2019		<i>ns</i>
2020–2021		0.042
2022–2024		0.034
Number of observations	39,002	188,109

Notes: This table presents mean marginal effects from logit regression models of the predictors of being overeducated or overskilled. See the Technical Appendix for an explanation of these models. Main English-speaking countries comprise Canada, Ireland, New Zealand, South Africa, UK and USA. *ns* indicates the estimate is not significantly different from 0 at the 10% level.



The results show that many factors are associated with the probabilities of overeducation and overskilling in the same direction. Being aged 55 to 64 years, living outside the mainland capital cities and working full-time hours come with reduced probabilities of experiencing both types of mismatches. By contrast, being born overseas in a country other than the main English-speaking countries (rather than being an Australian-born person) and having a casual contract (rather than a permanent contract) come with higher probabilities of job mismatches (see Box 7.2 for a classification of employment contracts). Compared to professionals, almost all occupations come with greater probabilities of both types of job mismatches, with the exception of technicians and trades workers, who are more likely to be overskilled but no more likely to be overeducated. Similarly, there is a range of industries with higher probabilities of both types of job mismatches compared to construction, such as retail trade, accommodation and food services or transport, postal and warehousing.

Notable differences between the probabilities of overeducation and overskilling are that being male is positively associated only with overeducation, while being partnered, having children and having short job tenure are negatively associated only with overskilling. Being a First Nations Australian is only associated with a lower probability of overeducation compared to non-Indigenous people. Workers aged 35 to 44 years and the self-employed are more likely to be overeducated but less likely to be overskilled than their reference groups. Compared to construction workers, there is a range of industries where workers have a greater probability of overskilling but not of overeducation, such as information media and telecommunications and manufacturing.

Contrary to the simple trends presented in Figure 7.2, the regression models indicate that the probability of both types of job mismatches is significantly higher in 2020 to 2024 than in earlier years. Further analyses (not shown) suggest that this result is mainly driven by the inclusion of occupation and industry in the models. This implies that, over time, more people have moved into occupations and industries where mismatches are relatively uncommon, which keeps the overall mismatch rate roughly flat, even though the risk of overeducation and overskilling has increased within at least some occupations and industries. Put differently, once we compare workers in similar kinds of jobs, people in 2020 to 2024 are more likely to be overeducated or overskilled than people doing comparable jobs in earlier years.

Outcomes and persistence of job mismatches

Experiencing a job mismatch might negatively affect workers' wellbeing, for example, since workers might be bored or feel undervalued or underpaid in their jobs. Therefore, a series of separate regression models estimates the association between being mismatched and satisfaction with a range of job aspects, life satisfaction, and the probability of voluntarily leaving the job within the next year.¹⁵ In order to understand potential cumulative effects of overskilling and overeducation, this analysis differentiates between workers who are overeducated only, overskilled only, and both overeducated and overskilled, compared to workers who are neither overeducated nor overskilled.

The results, presented in Table 7.5, show that both types of job mismatches are associated with worse wellbeing outcomes. Both overeducation and overskilling come with lower satisfaction with pay, the work itself, employment opportunities, the job overall, and with an increased perceived probability of voluntarily leaving the job within the next year. However, the coefficients for overskilling are in all cases much larger than those for overeducation. In several areas, being both overeducated and overskilled at the same time further strengthens the associations. For example, being overeducated only comes with a reduction in satisfaction with the work itself of 0.1 points on a 0 to 10 scale, while being overskilled comes with more than a 0.7-point reduction, and being both overskilled and overeducated comes with about a 1.0-point reduction. Similarly, being overeducated (only) comes with about a 2.3 percentage point increase in the perceived probability of quitting, compared with about a 4.6 percentage point increase for being overskilled (only) and about a 9.5 percentage point increase for being mismatched on both dimensions.

Besides these employment-related areas, overeducation and overskilling are also associated with a reduction in life satisfaction, although this reduction is very small for overeducation (only). The decline is more sizable—around a quarter of a point—if the worker is overskilled only or both overskilled and overeducated.

Table 7.5: Association of job mismatches with job and life satisfaction and probability of quitting—Workers aged 18 to 64

Mismatch type (Reference category: Matched)	Satisfaction (0–10 scale)					Perceived probability of quitting (0–100 scale)
	Pay	Work itself	Employment opportunities	Job overall	Life	
Overeducated (only)	–0.085	–0.100	–0.095	–0.091	–0.027	2.276
Overskilled (only)	–0.384	–0.743	–0.572	–0.488	–0.244	4.596
Overeducated and overskilled	–0.458	–1.014	–0.687	–0.728	–0.267	9.525
Number of observations	34,089	34,098	33,650	34,096	34,098	29,809

Notes: This table presents coefficients from ordinary least squares regression models of the association of overeducation and overskilling with various outcomes based on pooled data from 2012, 2016, 2020 and 2024. See the Technical Appendix for an explanation of these models. The satisfaction models are based on all workers, while the probability of quitting model is based on employees only. Models also control for sex, partnered, presence of child below 18 years, age, work-limiting health condition, location, country of origin, First Nations identity, English-language skills, full-time hours, occupation, industry, employment type, public sector, tenure below one year, and survey year. All estimates are significantly different from 0 at the 10% level.

Given the negative associations of job mismatches with a range of employment-related outcomes and life satisfaction, the question arises as to whether these mismatches are transitory or more lasting states for workers. Therefore, Table 7.6 provides four-year transition rates between job (mis)match categories. This reflects how the job mismatch situation varies for the same person from one year to four years later. The table focuses on people who were aged 18 to 60 in the initial year so that they were still aged below 65 four years later.

¹⁵ Note that these cross-sectional models do not allow us to establish causality. Although job mismatches are likely to reduce worker satisfaction, the reverse may also hold, in that dissatisfied workers might be more likely to perceive a job mismatch.

The table shows that those who are matched on both dimensions in one year—so are neither overeducated nor overskilled—have a high likelihood of staying that way: 62.6% are still (or again) in a matching job four years later. However, overeducation is also a relatively persistent state: 53.4% of those who are overeducated (only) are still overeducated (only) in their jobs four years later, and an additional 12.9% are then both overeducated and overskilled. Only 20.7% have changed into a matching job.

Table 7.6: Transitions into and out of job mismatches—Persons aged 18 to 60 in first year (%)

Situation in current year	Situation four years later					
	Matched	Over-educated (only)	Overskilled (only)	Over-educated and overskilled	Not working	Total
Matched	62.6	16.8	8.6	3.7	8.3	100.0
Overeducated (only)	20.7	53.4	3.5	12.9	9.5	100.0
Overskilled (only)	40.4	11.4	27.0	10.2	11.0	100.0
Overeducated and overskilled	16.9	29.0	8.6	32.4	13.2	100.0
Not working	12.0	12.0	4.1	9.5	62.4	100.0
Total	32.8	26.5	7.5	11.4	21.8	100.0

Overskilling is a more transient state than overeducation; nevertheless, 27% of those who were overskilled (only) in one year are still (or again) overskilled (only) four years later, and another 10.2% are then both overskilled and overeducated. However, the largest group, 40.4%, have changed into a matched job. A similar pattern can be seen for those who are both overeducated and overskilled. Only 32.4% are still in this state four years later, and 8.6% are then overskilled only. Most of those who have moved out of this dual job mismatch category, however, have not become well matched (only 16.9% have become matched) but become overeducated (only) (29%). What is more, overskilled people (both alone and in conjunction with overeducation) are more likely than others to leave employment. For example, 13.2% of those who are mismatched on both dimensions are no longer working four years later, compared to only 8.3% of those who are well-matched.

While Table 7.6 shows movements between combined mismatch states (overeducated only, overskilled only, and both), it does not directly show the extent of persistence of overeducation and overskilling in their own right. In an additional analysis, we have therefore looked at transitions out of overeducation and overskilling separately. Specifically, we looked at (a) how many people who were overeducated in one year were still overeducated four years later, regardless of whether they were overskilled, and (b) how many people who were overskilled in one year were still overskilled four years later, regardless of whether they were overeducated.

This analysis confirms that overeducation is more persistent than overskilling. Of all workers who were overeducated in one year, 64.7% were still overeducated four years later and 10.8% had left employment. By contrast, of all workers who were overskilled in one year, 39.6% were still overskilled four years later and 12.3% had left employment.

In summary, overeducation tends to persist long-term for most workers, while overskilling is more likely to resolve over time. However, overskilled workers are somewhat more likely than overeducated workers to leave employment over a four-year period.



Chapter 8

Economic disadvantage



Key findings

- Poverty increased sharply in 2021 and 2022 but declined in 2023 and remained unchanged in 2024.
- Financial stress indicators have risen since 2022, especially for single parents and single adults.
- Housing stress reached a record high in 2024. Renters, single parents and older singles have the highest rates of housing stress.
- Reliance on income support has fallen markedly since 2001 but, among working-age people, remains highest for single parents.
- The share of income spent on non-discretionary items has risen since 2021, most for singles and single parents.

The HILDA Survey collects information on a variety of contributors to economic wellbeing, facilitating examination of multiple dimensions of economic disadvantage in Australia. This chapter presents analyses of a number of these dimensions, examining income-based poverty, financial and housing stress, patterns of reliance on Australian Government cash benefits and the share of household income spent on essential, non-discretionary items.

Income poverty

A wide variety of definitions or measures of poverty have been employed by economic and social researchers. As in previous volumes of this report, we examine two measures commonly applied to the study of poverty in developed countries, both of which conceive of poverty as *relative* deprivation or socioeconomic disadvantage, and which measure deprivation in terms of inadequacy of *income* (see Box 8.1). Consistent with the approach of the Organisation for Economic Co-operation and Development (OECD) and other international bodies, the first measure defines relative income poverty as having a household income below 50% of median income. The second measure is similarly defined but relates to income net of housing costs—that is, income after deducting housing costs.



Box 8.1: Relative income poverty

A person is in *relative income poverty* if they are unable to afford the goods and services needed to enjoy a normal or mainstream lifestyle in the country in which they live (OECD, 2019). In this report, we apply two alternative definitions of relative poverty. Under the first definition, a person is in relative income poverty if household equivalised disposable income is less than 50% of the median household equivalised disposable income. The second measure is similarly defined but relates to income net of housing costs—that is, income after deducting housing costs.

The ‘after-housing’ poverty measure addresses a criticism of the measure based on total income—that it does not take into account the potentially large variation in housing costs across people, leading some people with low housing costs to be classified as poor, when they are not, and others with high housing costs to be classified as not poor, when in fact they have very little left over after paying for their housing. Most important in this regard is that many home owners (particularly those with little or no mortgage debt) have low housing costs, while renters often have high housing costs. An approach for addressing this criticism is to examine income net of housing costs—that is, income after deducting mortgage or rent payments on the home. For example, this is the approach favoured by the Australian Council of Social Service and the Social Policy Research Centre at the University of New South Wales in their two-yearly poverty report (Davidson et al., 2020).

Note that, while the after-housing measure addresses the issue of variation in housing costs across people, it has its own problems. First, housing costs are, like expenditures on all goods and services, the outcome of *choices* made by individuals. To the extent that some people choose to have high housing costs, we may classify people as poor who are not in fact poor—that is, some people may choose to spend a lot on housing, despite having available lower-cost (but still adequate) housing. Indeed, part of the amenity associated with higher expenditure on housing may be lower expenditure requirements for other items, such as transport.

A second problem is that the OECD equivalence scale used to adjust household incomes for household composition (see Box 2.7 in Chapter 2) is intended to apply to *total* income, not income after deduction of housing costs. A significant part of the economies of scale of households that underpin the OECD scale derive from sharing housing costs among household members. It is therefore likely that poverty is relatively overestimated among smaller households and underestimated among larger households when examining after-housing poverty—that is, the downward adjustment of the incomes of larger households is too small when applying the OECD scale to after-housing income. For this reason, as per last year’s report, poverty estimates for after-housing income are also produced using an equivalence scale that reduces the economies of scale. Essentially, the assumed economies of scale are reduced by 50% for people aged 15 and over, while the income ‘burden’ of children aged under 15 is maintained at 60% of a person aged 15 and over. This means that total household income is divided by 1 plus 0.75 (instead of 0.5) for each person aged 15 and over after the first person, plus 0.45 (instead of 0.3) for each child aged under 15.

This alternative equivalence scale provides an indication of how inferences are affected by taking into account the lower economies of scale available for after-housing-costs income, but note that further research is required to determine the appropriate scale for this income measure. Nonetheless, it is notable that the poverty measure that uses this equivalence scale produces results consistent with other indicators of financial resources, such as the measure of financial stress also examined in this chapter.

Cross-sectional poverty rates

Figure 8.1 presents relative income poverty rates in each year covered by the HILDA Survey. Our income measure is equivalised income; thus, the relative poverty lines presented in Table 8.1 can be interpreted as the minimum annual income after taxes and government benefits (and after deduction of housing costs in the case of the measure based on income net of housing costs) that a single-person household would require to avoid relative income poverty. Poverty rates refer to the proportion of people (not households) living in poverty.

As with previous reports, the after-housing poverty measure is also implemented using a different equivalence scale (see Box 8.1). This scale, recognising that much of the economies of scale underpinning the OECD scale stem from the sharing of housing costs, reduces the economies of scale by dividing household income by 1 plus 0.75 for each person aged 15 and over after the first person, plus 0.45 for each child aged under 15.

The estimated poverty rate is approximately 1 to 2 percentage points higher for income net of housing costs than for total disposable income when using the standard OECD equivalence scale. For the after-housing measure using the adjusted equivalence scale, the poverty rate lies between the two other poverty measures—although, between 2011 and 2019, the two measures based on after-housing income produced very similar poverty rates.

For all three poverty measures, the proportion of the population below the relative poverty line has fluctuated over time, ranging between 9.9% and 13.5% for total income, 11.4% and 14.6% for after-housing income using the OECD equivalence scale, and 11.4% and 14% for after-housing income using the adjusted equivalence scale. All measures trended downwards between 2007 and 2013 but then trended upward up until 2019. Poverty fell sharply in 2020, reflecting the early effects of the income supports introduced in March and April of 2020, but increased sharply in the subsequent two years. Indeed, in 2022, all measures were at their highest or equal-highest level observed over the 2001 to 2024 period. The poverty rate declined for all three measures in 2023. In 2024, the poverty rate based on total income remained unchanged, but increased for the after-housing measures, likely reflecting rising housing costs for renters between 2023 and 2024.

Figure 8.1: Percentage of the population in relative income poverty

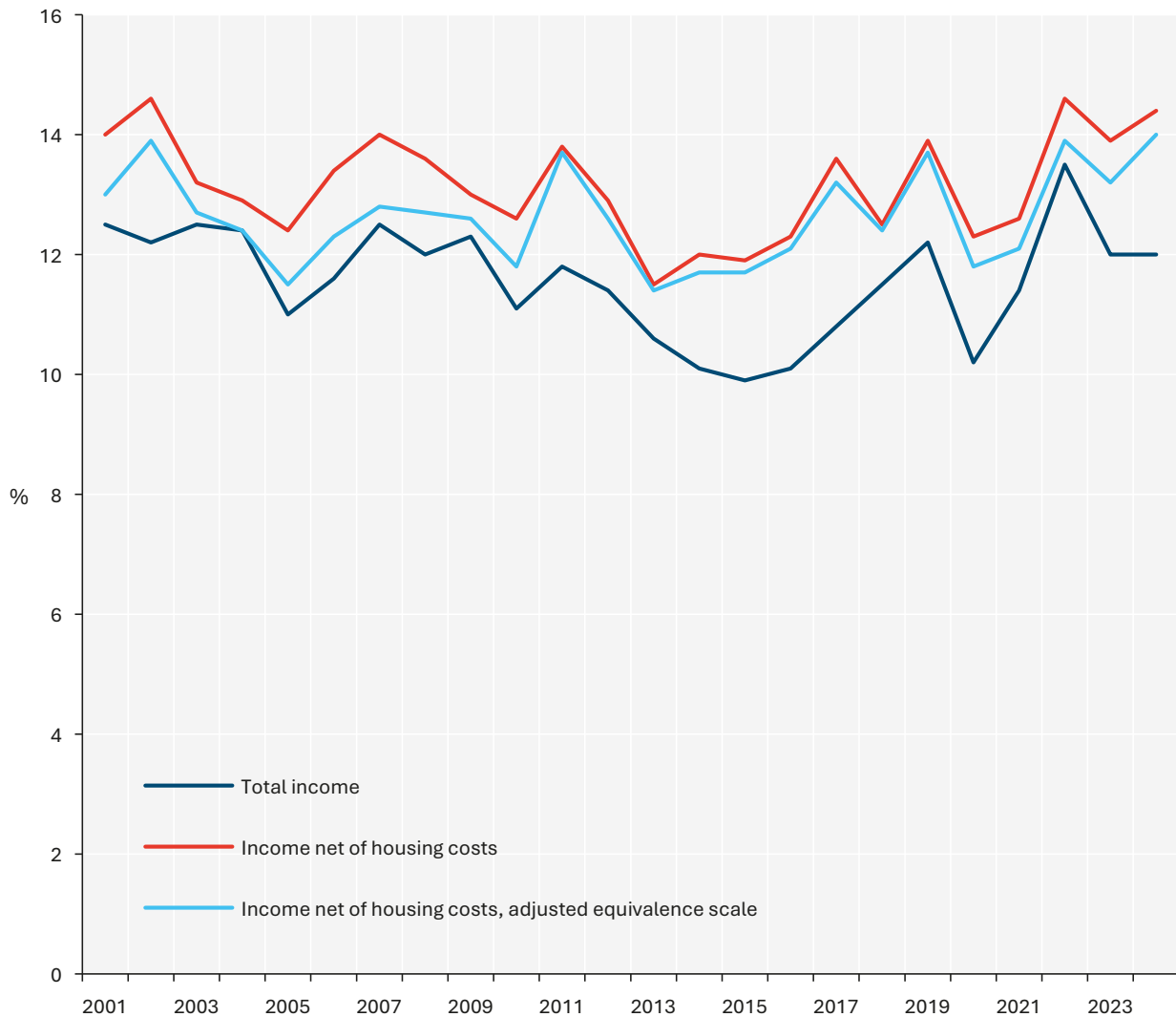


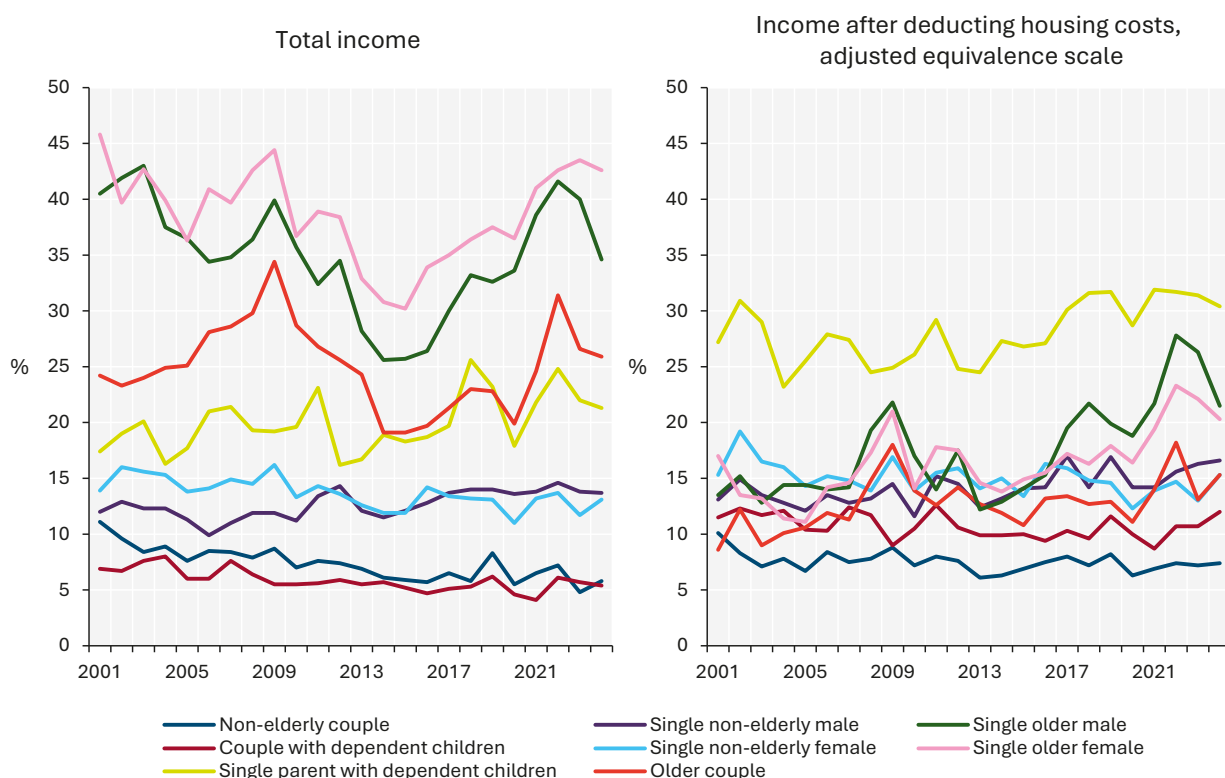
Table 8.1: Poverty lines for selected household types, 2001 and 2024 (\$, December 2024 prices)

	Total income		Income net of housing costs		Income net of housing costs, adjusted equivalence scale	
	2001	2024	2001	2024	2001	2024
Single person	23,023	33,156	19,662	26,856	15,938	22,024
Couple	34,534	49,733	29,493	40,285	26,298	36,339
Single parent with 2 children	36,836	53,049	31,460	42,970	32,674	45,148
Couple with 2 children	48,347	69,627	41,291	56,398	39,049	53,958

Poverty by family type

Figure 8.2 shows that relative poverty rates vary substantially by family type (see Box 2.9 in Chapter 2), although there is greater variation for total income than for income net of housing costs. Particularly notable is that poverty rates for older people are considerably reduced in moving from a poverty measure based on total income to a poverty measure based on income net of housing costs. This reflects the low housing costs of many older people. Indeed, only single-parent families stand out as having a consistently high poverty rate once the adjusted equivalence scale is used. That said, older people experienced the sharpest rises in poverty between 2020 and 2022, irrespective of the poverty measure. The rise was particularly large for single older men and women. Non-elderly couples without dependent children have consistently low poverty rates, irrespective of the year or poverty measure.

Figure 8.2: Relative poverty rates by family type



Child poverty

Child poverty is a particular concern for policy-makers because of the damage poverty may cause to children's future productive capacity and life prospects more generally. Figure 8.3 presents child poverty rates for dependent children aged under 18, in total and separately for children in couple-parent families and children in single-parent families.

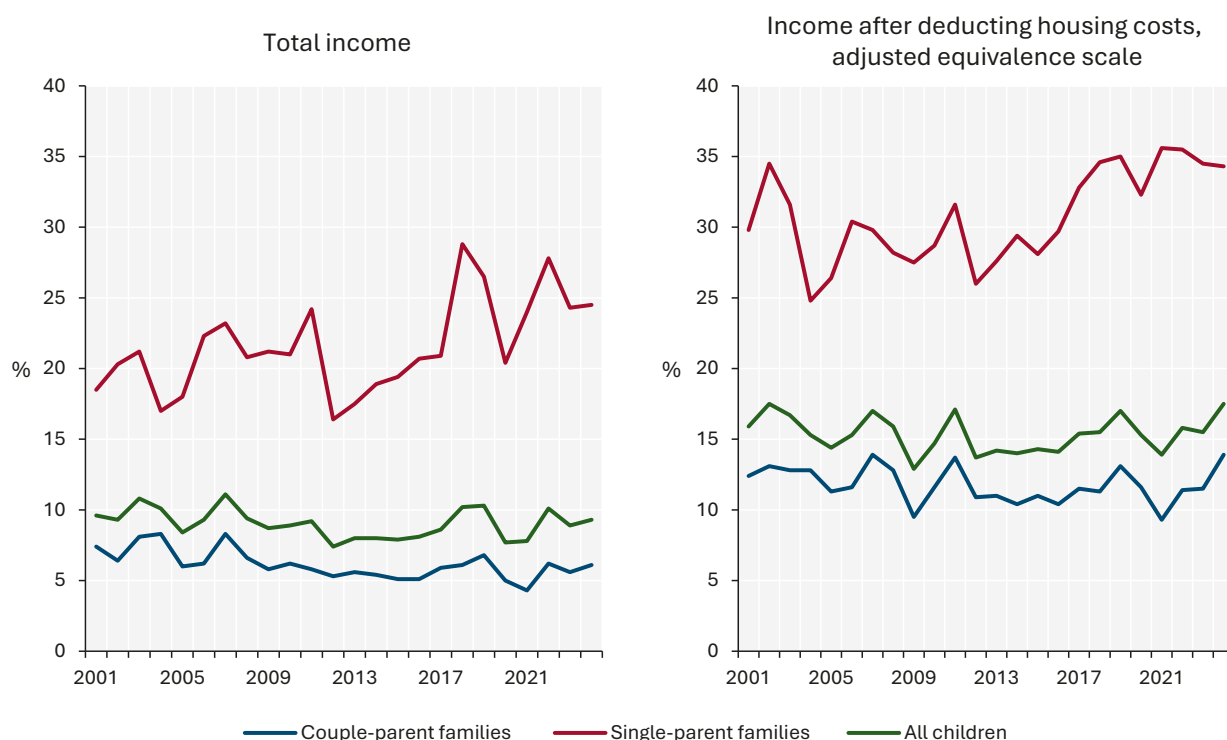
The overall child poverty rate for total income is consistently below the community-wide poverty rate, in most years below 10%. However, the poverty rate for income after deducting housing costs is slightly higher than the community-wide rate, indicating that housing costs tend to be larger for families with children.

Consistent with the evidence in Figure 8.2, poverty is considerably more prevalent among children in single-parent families than among children in couple-parent families. In most years, the poverty rate for children in single-parent families is over twice the poverty rate for children in couple-parent families. The poverty rate is also more volatile from one year to the next for single-parent families. This is largely because many single-parent families have incomes placing them just under or just above the poverty line, so that relatively small changes in income can produce relatively large changes in poverty rates. That said, over the entire 24 years to 2024, the poverty rate has hovered around 20% for total income and around 30% for income after housing costs (using the adjusted equivalence scale). Moreover, since 2018, the poverty rate for children in single-parent families has mostly been above 25% for total income and close to 35% for income net of housing costs.

Long-term poverty

While poverty experienced for a short period of time is undesirable, there is a great deal more public policy concern attached to long-term or entrenched poverty. Table 8.2 considers the amount of time people spend in poverty over a 10-year period. Poverty measures based on both total income and income net of housing costs (with the adjusted equivalence scale) are examined, and separate estimates are produced for men and women in each of two age groups (18 to 55 at the start of the period and 65 and over at the start of the period) and in each of two 10-year periods (2001 to 2010 and 2015 to 2024). The first age group broadly corresponds to people who were ‘working-age’ adults for the entire period (aged 27 to 64 at the end of the period) and the second age group broadly corresponds to people who were of ‘retirement age’ for the entire period.

Figure 8.3: Child poverty rates by family type—Dependent children aged under 18



Considering first the younger age group, for the poverty measure based on total income, approximately 73% of men and 68% of women aged 18 to 55 in 2001 did not experience income poverty in that year or in any of the subsequent nine years, necessarily implying that approximately 27% of men and 32% of women did experience poverty in at least one of those years. For 17.4% of men and 19.2% of women, poverty was experienced in only one or two years, and a further 5.4% of men and 5.8% of women experienced poverty in three or four of the 10 years. Highly persistent or recurrent poverty was confined to the 4.6% of men and 6.7% of women who were in poverty in at least five of the 10 years.

The 10 years from 2015 to 2024 saw slightly lower proportions of working-age people experience poverty at any stage over the 10-year period, although persistent poverty (five or more of the 10 years) increased for men from 4.6% to 5.4%.

For the measure of poverty based on income net of housing costs, higher proportions of both men and women of working age experienced poverty in at least one of the 10 years, but patterns are otherwise similar to those found for the total-income poverty measure. The main exception is that, comparing the 2001 to 2010 period with the 2015 to 2024 period, the proportion of men experiencing poverty in seven or more years did not change for the net-of-housing-costs measure, whereas it increased slightly for the total-income measure.

For people aged 65 and over at the start of the 10-year period, poverty is both more prevalent and more persistent. Indeed, for women, it was more common to be in poverty (based on total income) in seven or more of the 10 years from 2001 to 2010 than it was to avoid poverty in all 10 years—28.3% were in poverty in seven or more years, whereas only 24% were never in poverty.

Similar to the findings for working-age people, older men are generally less likely to experience persistent poverty than older women.¹⁶ The decline in experience of poverty between the 2001 to 2010 period and the 2015 to 2024 period evident for 'working-age' people is also evident for older people. Moreover, for total disposable income, a substantial decline in entrenched poverty among older people is evident: the proportion experiencing poverty in seven or more years fell from 22.6% to 13.2% for men, and from 28.3% to 20.3% for women.

Table 8.2: Experience of poverty over a 10-year period (%)

	Number of years in poverty					Total
	0	1 or 2	3 or 4	5 or 6	7 or more	
People aged 18-55 at the start of the 10-year period						
Total income						
2001-2010						
Men	72.5	17.4	5.4	2.1	2.5	100.0
Women	68.3	19.2	5.8	3.7	3.0	100.0
2015-2024						
Men	76.2	14.7	3.7	2.4	3.0	100.0
Women	72.8	17.1	4.7	2.7	2.7	100.0
Income net of housing costs						
2001-2010						
Men	63.4	24.2	6.7	2.7	3.0	100.0
Women	58.4	26.0	7.9	4.4	3.3	100.0
2015-2024						
Men	65.7	21.4	6.4	3.6	3.0	100.0
Women	62.3	23.4	7.0	4.0	3.3	100.0
People aged 65 and over at the start of the 10-year period						
Total income						
2001-2010						
Men	28.7	26.1	12.6	10.0	22.6	100.0
Women	24.0	23.2	16.2	8.3	28.3	100.0
2015-2024						
Men	36.1	28.1	13.5	9.1	13.2	100.0
Women	26.2	27.6	14.7	11.2	20.3	100.0
Income net of housing costs						
2001-2010						
Men	47.9	33.2	9.8	3.3	5.8	100.0
Women	46.8	36.9	7.8	2.5	6.0	100.0
2015-2024						
Men	50.9	32.2	7.9	3.8	5.3	100.0
Women	46.3	33.6	9.0	4.9	6.3	100.0

Notes: Income net of housing costs is equivalised using the adjusted equivalence scale (see Box 8.1). Cells may not add up to row totals due to rounding.

¹⁶ Figure 8.2 shows single older men have had higher rates of poverty than single older women since 2017, which appears to conflict with the finding in Table 8.2 that they had lower experience of poverty between 2015 and 2024. However, the populations examined in Figure 8.2 and Table 8.2 differ. Figure 8.2 shows poverty rates for those aged 65 and over in the relevant year, whereas the estimates in Table 8.2 relate to people who were aged 65 and over in 2015 and were alive for the full 10-year period.

In contrast to working-age adults, the proportion of older people experiencing poverty at some stage of the 10-year period is considerably lower for income net of housing costs than for total income. This is unsurprising given their high rate of outright home ownership. For older men, as with the total-income poverty measure, the proportion experiencing (any) poverty over 10 years based on income net of housing costs was lower in the later decade. However, the proportion of older women experiencing poverty in the 10-year period based on after-housing income did not decline. Indeed, the proportion of older women in poverty for five or more of the 10 years based on income net of housing costs was higher in the 2015 to 2024 decade, rising from 8.5% to 11.2%.

Long-term poverty experiences of children are considered in Table 8.3 by examining the number of years children were in poverty in the first 10 years of their lives. This requires identification of poverty status in each of the first 10 years of each child's life, and, as such, the table examines children born in the period from 1 July 2000 to 30 June 2015. Three birth cohorts are compared: those born between 1 July 2000 and 30 June 2005; those born between 1 July 2005 and 30 June 2010; and those born between 1 July 2010 and 30 June 2015.



The upper panel of the table, examining poverty based on total income, shows that 68.2% of children born between 1 July 2000 and 30 June 2005 were not living in poverty in any of their first 10 years of life, while this increased to 73.9% for those born between 1 July 2005 and 30 June 2010 and to 75.8% for those born between 1 July 2010 and 30 June 2015. For the earliest cohort, 19.3% were in poverty for one or two years, 7.6% were in poverty for three or four years, 3.3% were in poverty for five or six years, and 1.6% were in poverty for seven or more of the 10 years. For the most recent cohort, there were lower proportions in poverty in one to four years, but a higher proportion in poverty in five or more of the 10 years.

For the poverty measure based on income net of housing costs, there was similarly a lower rate of experience of any poverty in the first 10 years of life for the most recent cohort and a highest rate for the earliest cohort. However, persistent poverty was most prevalent among the middle cohort, with the proportion in poverty in five or more years 13.2% (7.2 + 6.0) for the earliest cohort, 14.1% (8.0 + 6.1) for the middle cohort and 13.6% (7.8 + 5.8) for the most recent cohort.

Table 8.3: Experience of poverty in the first 10 years of life (%)

	Number of years in poverty					Total
	0	1 or 2	3 or 4	5 or 6	7 or more	
<i>Before-housing costs poverty measure</i>						
Born 1 July 2000 to 30 June 2005	68.2	19.3	7.6	3.3	1.6	100.0
Born 1 July 2005 to 30 June 2010	73.9	15.5	5.5	2.8	2.2	100.0
Born 1 July 2010 to 30 June 2015	75.8	12.0	5.9	3.8	2.5	100.0
<i>After-housing costs poverty measure</i>						
Born 1 July 2000 to 30 June 2005	48.2	29.6	9.1	7.2	6.0	100.0
Born 1 July 2005 to 30 June 2010	55.5	20.6	9.8	8.0	6.1	100.0
Born 1 July 2010 to 30 June 2015	58.2	21.9	6.3	7.8	5.8	100.0

Notes: Income net of housing costs is equivalised using the adjusted equivalence scale (see Box 8.1). Cells may not add up to row totals due to rounding.

Financial stress

While income approaches remain the most widely used basis for defining and measuring inadequacy in material living standards, other measures potentially provide useful—and even superior—information on individuals' economic wellbeing. Measures of 'financial stress' provide one such piece of alternative information.

Experience of financial stress refers to an inability to meet basic financial commitments because of a shortage of money. Measures of financial stress therefore provide direct evidence of the adequacy of economic resources of individuals and households. In each wave, the self-completion questionnaire (SCQ) contains a question on whether, *because of a shortage of money*, the respondent had experienced each of seven events, such as not paying the rent or mortgage on time or going without meals, which facilitates the construction of measures of financial stress. (Box 8.2 itemises all seven events.)

Box 8.2: HILDA Survey measure of financial stress

In each wave, the SCQ contains the following question:

Since January [survey year] did any of the following happen to you because of a shortage of money?

- a. *Could not pay electricity, gas or telephone bills on time*
- b. *Could not pay the mortgage or rent on time*
- c. *Pawned or sold something*
- d. *Went without meals*
- e. *Was unable to heat home*
- f. *Asked for financial help from friends or family*
- g. *Asked for help from welfare/community organisations*

Respondents are asked to indicate which of the seven events had occurred. Experience of any one of these events can be considered an experience of financial stress, although some events, such as going without meals, probably indicate more severe stress than other events, such as inability to pay bills on time. In this report, no distinction is made between the indicators, but the condition is imposed that two or more of the indicators must be experienced for a person to be classified as in financial stress.



Box 8.3: Timing of the recent rise in the cost of living

Figures B3.1 and B3.2 below show how key measures of the cost of living have evolved since the December quarter of 2019. The Consumer Price Index increased by approximately 19.7% between the December quarter of 2019 and the September quarter of 2024 (noting that most of the Wave 24 interviews were conducted between July and October of 2024). Over the same period, the rent price index increased by approximately 16.8%.

The Reserve Bank of Australia's (RBA) 'cash rate target' is the primary determinant of mortgage interest rates in Australia. It increased considerably between April 2022 and June 2023, with one further increase occurring in November 2023. Note, however, that important to evaluating the effects of the increases in the cash rate is the share of home debt subject to a fixed interest rate. Fixed interest rates on mortgages were generally considerably lower than variable interest rates in the second half of 2022 and in 2023. Ung (2024) reports that the proportion of outstanding home debt subject to a fixed interest rate peaked at approximately 37% in early 2022 and was still at approximately 30% at the end of 2022. However, this had fallen to approximately 20% by the middle of 2023 and is likely to have since fallen further.

Figure B3.1: Cumulative increase in prices since the December quarter 2019

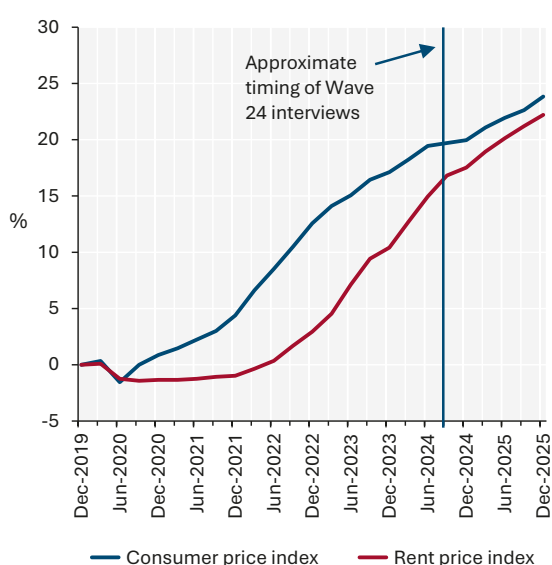
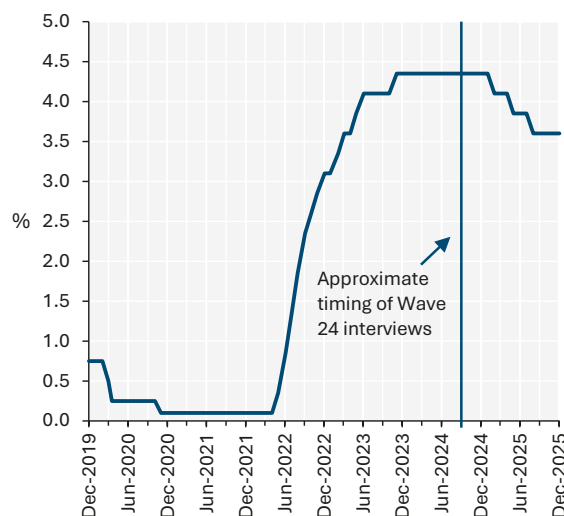


Figure B3.2: Reserve Bank of Australia cash rate target



Sources: Australian Bureau of Statistics (ABS) (2025) and <<https://www.rba.gov.au/statistics/cash-rate/>>.

Figure 8.4 shows the prevalence of each of these seven indicators of financial stress among people aged 15 and over between 2001 and 2024.¹⁷ Inability to pay electricity, gas or telephone bills on time and asking for financial help from friends or family are the most commonly occurring of the seven indicators, followed by inability to pay the rent or mortgage on time. In most years, inability to heat the home is the least-common indicator.

Prevalence rates tended to decline for all indicators up until around 2008 and then increased up to 2011. Between 2011 and 2017, the prevalence of each indicator tended to remain steady or steadily declined. Between 2019 and 2020, there was a significant drop in the proportion of people reporting asking for financial help from friends or family, but upticks in the proportion asking for help from welfare or community organisations and the proportion unable to pay the mortgage or rent on time.

Since 2021, there have been increases in rates of all of the indicators of financial stress, with rises mostly occurring between 2022 and 2023. The biggest increase since 2021 has been for asking for help from family or friends. Rising cost-of-living pressures, particularly in 2023 (see Box 8.3), are no doubt a contributor to the rise in prevalence of indicators of financial stress.

¹⁷ Estimates are not available for 2010.



Figure 8.4: Proportion of people experiencing each indicator of financial stress

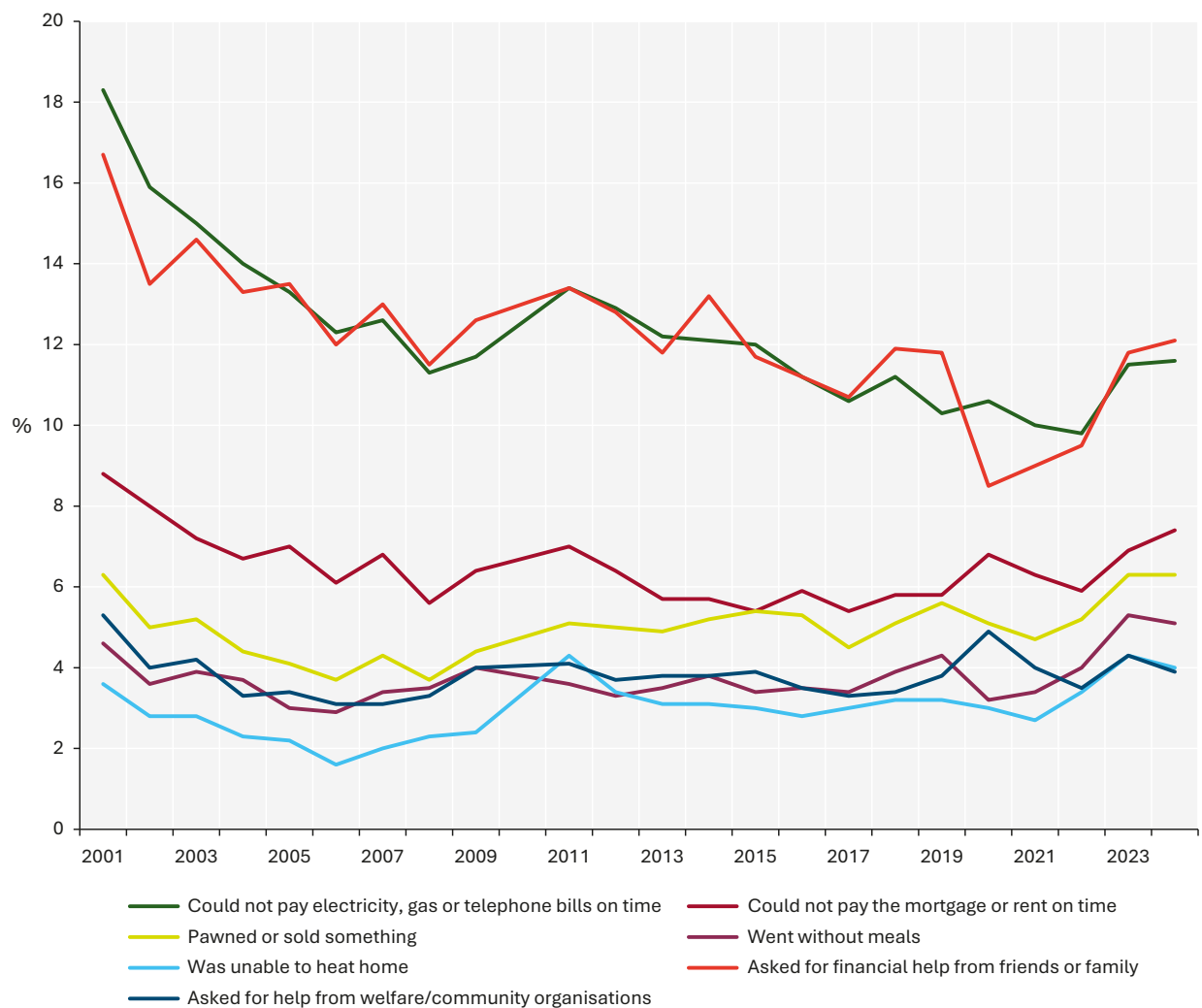
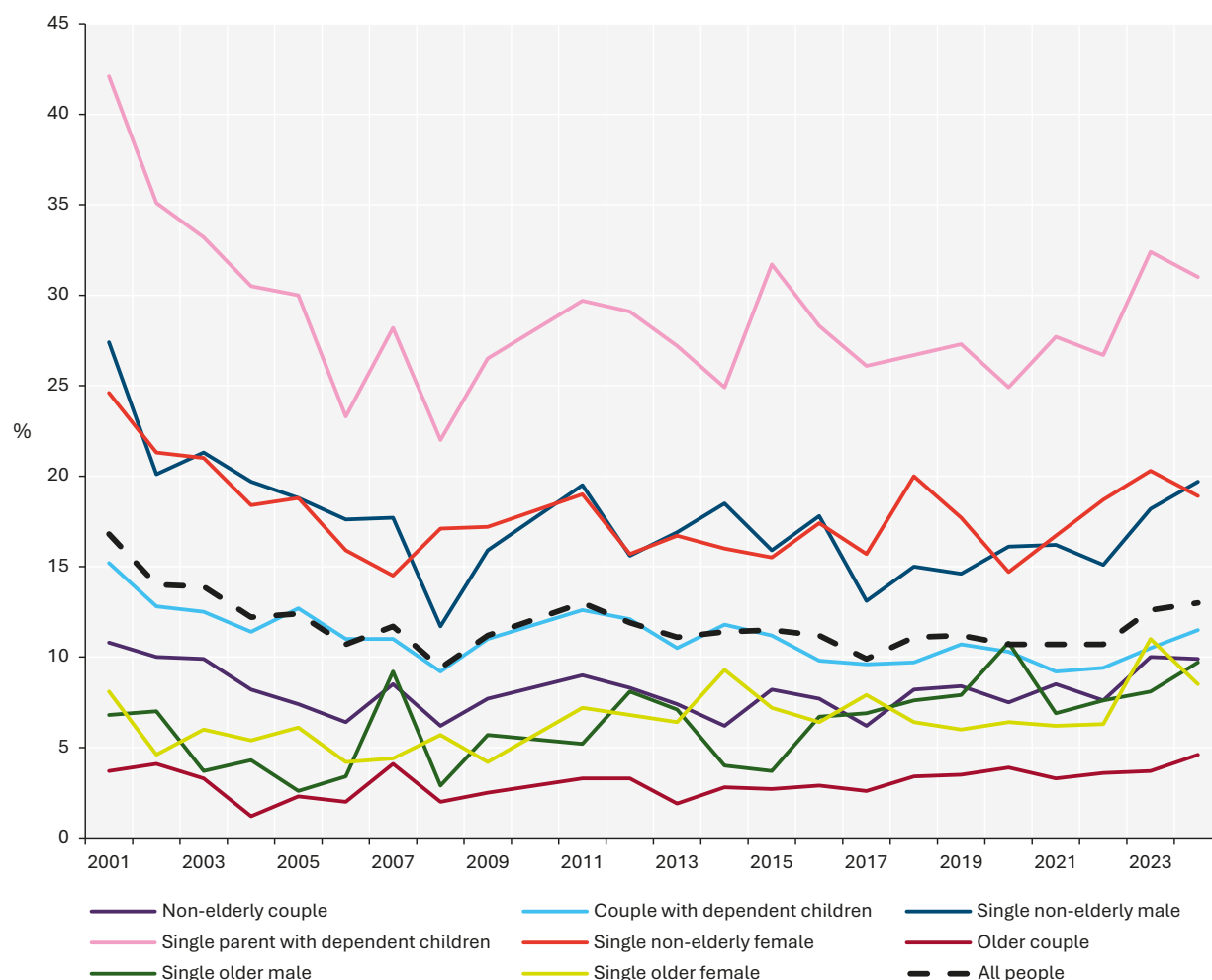


Figure 8.5 examines the proportion of people aged 15 and over experiencing a measure of financial stress—specifically, experiencing two or more of the seven indicators shown in Figure 8.4. The figure presents estimates for all people and for each of eight family types (see Box 2.9 in Chapter 2 for an explanation of the family types).

Figure 8.5: Proportion of people experiencing two or more indicators of financial stress, by family type



Levels of prevalence of financial stress are very different across family types. Single-parent families stand out as particularly prone to financial stress, while non-elderly single people also have relatively high prevalence rates. The trend in financial stress over time is quite similar across most family types, tending to decrease in prevalence up until 2008, increasing between 2008 and 2011, remaining relatively stable up until 2022 and then increasing in 2023.

Similar to the finding on poverty rates when examining income net of housing costs with the equivalence scale adjusted for reduced economies of scale (Figure 8.2), older people have very low rates of financial stress. This may reflect not only their low housing costs, but also their relatively high wealth beyond housing (see Wilkins et al., 2024) and their lower expenditure needs (the latter partly a reflection of government in-kind assistance and subsidies targeted to older people).

Housing stress

A further indicator of low economic wellbeing is housing stress, a situation where a family with a modest income faces housing costs that are very high relative to income. A widely accepted definition of housing stress (see Box 8.4) is a situation in which housing costs are more than 30% of household income, and the household is in the bottom 40% of the income distribution. The main housing costs are rent and mortgage repayments, but in principle there are other housing costs, such as council rates, body corporate or owners' corporation fees, repairs and maintenance costs, and home building insurance, that should be included. However, studies of housing stress typically do not include maintenance, repair and insurance costs, while the HILDA Survey did not collect data on expenditure on council rates and body corporate fees until Wave 22. These additional housing costs are therefore not included in the housing costs measure employed in this report.



Box 8.4: Housing stress

Various measures of housing stress have been proposed, but a common measure (e.g., Rowley and Ong, 2012) is the so-called '30-40' rule: a household is in housing stress if housing costs are more than 30% of income and household income places the household in the bottom 40% of the (equivalised) income distribution.

A point of contention in the implementation of the 30-40 rule is whether to use gross (pre-tax) or disposable (post-tax) income, particularly for the determination of the ratio of housing costs to income. However, given that disposable income is more relevant to a household's living standard than gross income, and that different households with the same gross income will have different disposable incomes (e.g., a single parent with the same gross income as a couple who each earn half the household's income will have a lower disposable income), the disposable income criterion is employed in this report.

Figure 8.6 presents the proportion experiencing housing stress each year, in total and disaggregated by family type. Among all people, the prevalence of housing stress trended upward between 2001 and 2011, reaching 11.1%. The rate of housing stress subsequently declined, but again reached 11.1% in 2017 before declining up until 2021, when the rate of housing stress reached its lowest level observed in the HILDA Survey period (7.4%). There has since been a marked rise in housing stress, with the rate reaching a record high of 11.2% in 2024, reflecting the effects of rising rents and interest rates (see Box 8.3).

In common with the findings for financial stress (and indeed for poverty), single-parent families have the highest rates of housing stress. They experienced particularly large increases in housing stress prevalence between 2009 and 2010, between 2016 and 2017 and between 2021 and 2023. Since 2010, the rate of housing stress among single-parent families has remained considerably above the 2009 rate.

Single older men and women had relatively low rates of housing stress at the start of this century but have both experienced rising rates of housing stress since then. Growth in housing stress has been particularly high for single older men, who since 2021 have had the highest rate of housing stress after single-parent families.

Couples without children, both elderly and non-elderly, have the lowest levels of housing stress. Couples with dependent children have also had relatively low rates of housing stress in recent years, although there was a substantial rise between 2021 and 2024.

Figure 8.6: Proportion of people experiencing housing stress, by family type

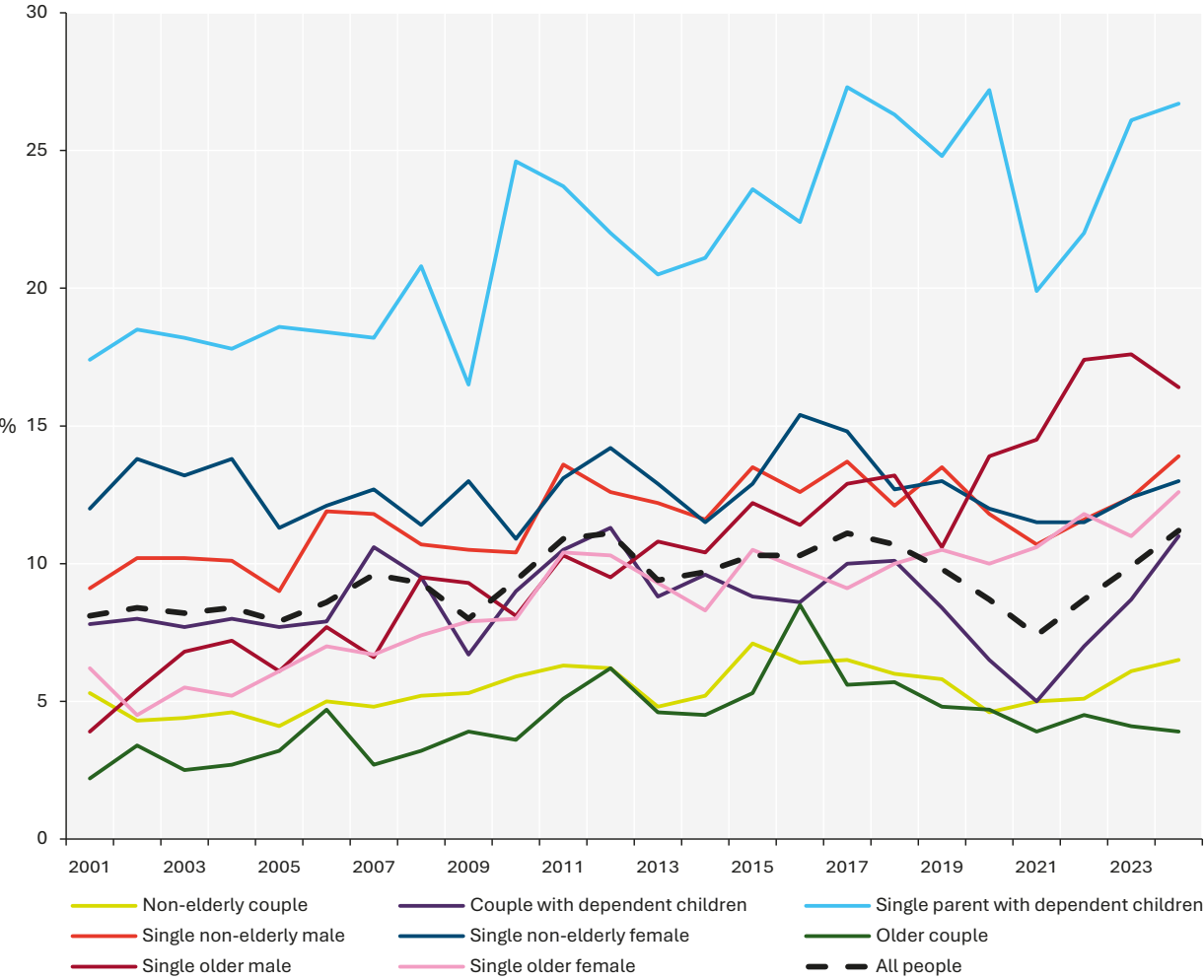


Figure 8.7 compares rates of housing stress by housing tenure type, showing that housing stress is highest for renters and lowest for those who own their home with a mortgage (noting that outright home owners are excluded from the figure because our measure of housing costs is zero for them). Housing stress among renters of social housing was relatively low up until 2005 but has since increased considerably. Indeed, sharp rises in housing stress among renters of social housing between 2021 and 2023 meant they had their highest ever rate of housing stress in 2023, 24.2%, which was also higher than for any of the other housing tenure types in that year.

Figure 8.7: Proportion of people experiencing housing stress, by housing tenure type



For owners with a mortgage, the rate of housing stress has been considerably lower than for renters over most of this century. It reached an all-time low of 4.6% in 2021, but subsequently increased to 9.6% in 2024, the highest it has been since 2017. The 2021 to 2024 period has also seen a substantial rise in housing stress among renters of private housing, reaching 23.1% in 2024.¹⁸ This largely reflects strong growth in market rents over this period (see Box 8.3).

Receipt of Australian Government cash benefits

The social security system (see Box 8.5) plays an important role in supporting many Australians, although long-term reliance on Commonwealth Government income support payments is often associated with long-term poverty, social exclusion and other adverse outcomes for recipients and their children.

The HILDA Survey is an important data source for understanding income support receipt, since the longitudinal nature of the data enables the study of the duration, intensity and dynamics of benefit receipt. Importantly, it is possible to identify entrenched reliance and the factors associated with it. The HILDA Survey is therefore a key data source for policy-makers seeking to address long-term reliance.

¹⁸ In this chapter, in order to ensure all individuals are assigned to one of the three housing tenure types, private renters include those living rent-free and those renting from a caravan park or an employer.

Box 8.5: The Australian social security system

The Australian social security system contains two broad categories of cash benefits. In the first category are benefits known as *income support payments*, which are intended to represent the primary source of income of recipients. Income support payments comprise the Age Pension, Disability Support Pension, Carer Payment, Parenting Payment (Single and Partnered), JobSeeker Payment, Youth Allowance and Department of Veterans' Affairs Service Pension, as well as several other less common payment types. In the second category are *supplementary government benefits* (non-income support payments), which include Family Tax Benefit (Parts A and B) and Carer Allowance.^a Studies of reliance on government benefits in Australia typically focus on receipt of income support payments but include non-income support payments in assessments of the extent of reliance on government cash benefits of income support payment recipients. This is the approach taken in this report.

^a Paid Parental Leave is not treated as a government cash benefit for the purposes of this report.

Income support receipt and reliance on cash benefits over a one-year timeframe

Figures 8.8 and 8.9 respectively present cross-sectional estimates of income support receipt and benefit reliance for 'working-age' people, defined here as people aged 18 to 64.¹⁹ In the financial year ending 30 June 2024, 24.2% of individuals aged 18 to 64 were living in a household that received income support at some stage of the year. This is substantially lower than the peak of 31.9% reached in 2020 and 2021 during the COVID-19 pandemic. It is also considerably lower than at the start of the HILDA Survey in 2001, when 38.4% of people were living in a household that had received income support.

Figure 8.9 presents estimates of benefit reliance for two definitions (as explained in Box 8.6): more than 50% of annual household income comes from benefits; and more than 90% of annual household income comes from benefits. As would be expected, the proportion of the population classified as benefit-reliant is higher for the 50% threshold than for the 90% threshold. Both of the two measures of reliance have declined substantially over the 2001 to 2024 period. Since peaking in 2002, both measures have decreased by almost 50%—from 13% to 6.8% for the 50% threshold and from 7.4% to 3.8% for the 90% threshold.

Figure 8.10, examining family types (see Box 2.9 in Chapter 2), shows that benefit reliance among working-age people is very much associated with living in single-parent families. For each year from 2001 to 2024, the figure presents the proportion of individuals in each family type obtaining more than 50% of financial-year household income from government benefits. In all years, single-parent families have considerably higher rates of benefit reliance than other family types, although there has been a considerable decline since 2002, falling from 44.7% to 26.3% in 2024.

Individuals in couple families, with or without dependent children, have the lowest rates of benefit reliance, and have also exhibited declines in benefit reliance over most of the 2001 to 2024 period. Between 2002 and 2024, the proportion of people who were benefit-reliant fell from 8.4% to 2.7% for couples with dependent children, and from 10.9% to 2.9% for couples without dependent children.

Single men and women have benefit-reliance rates somewhat higher than couples. Single men had a lower rate of reliance than single women up until 2016, but since then have had a similar rate of reliance. Overall, the gap between couples (with or without dependent children) and single people (without dependent children) has risen over the HILDA Survey period.

¹⁹ The definition of 'working age' is ultimately arbitrary, since there is a wide range of ages at which people actually retire (and indeed a wide range of ages at which people start working and/or complete their education). The minimum age of eligibility for the Age Pension is a potential threshold for delineating the upper boundary of working age, but this has increased over the HILDA Survey period from 65 to 67 for men and from 61.5 to 67 for women. To be able to validly describe trends over time, a fixed threshold is required. While the current Age Pension age of 67 could be used as an alternative threshold, even as recently as 2023, the mean age at retirement was less than 65 (Lass et al., 2025). Moreover, it is arguable that reaching the age of eligibility for the Age Pension has become less important to retirement decisions over the HILDA Survey period, since increasing numbers of people are accumulating sizeable superannuation balances, which can be accessed without penalty at 60 years of age.

Figure 8.8: Receipt of income support payments by persons aged 18 to 64

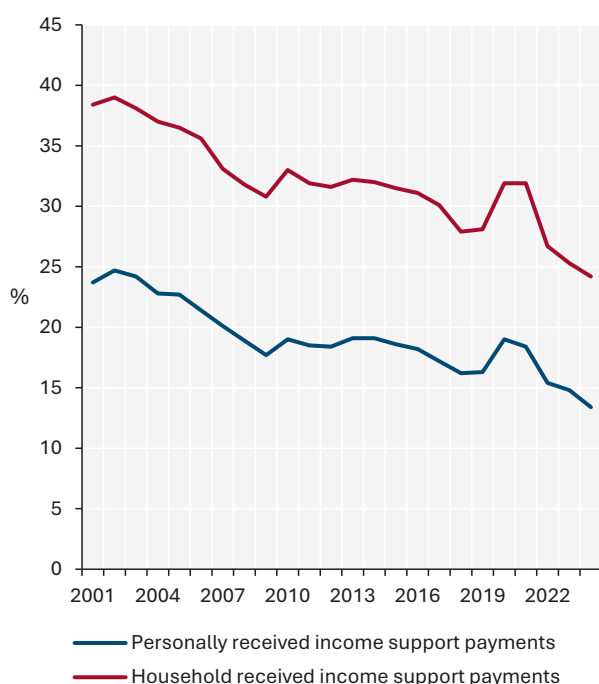
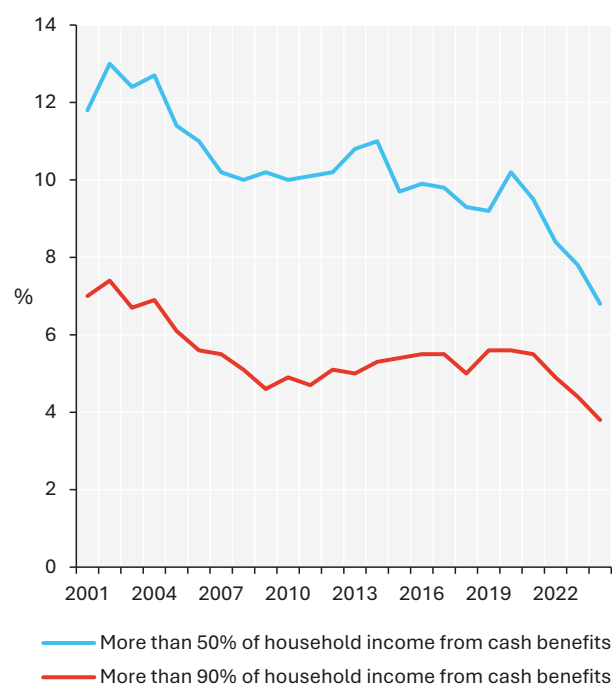


Figure 8.9: Reliance on Australian Government cash benefits among persons aged 18 to 64



Box 8.6: Definitions of reliance on Australian Government cash benefits

Reliance on government benefits is usually conceived of as a situation in which the payments—in Australia often referred to as social security payments—represent the primary or main source of income for a household. In this report, two alternative specific definitions of benefit reliance are adopted:

- (1) the household receives income support payments and more than 50% of household income comes from income support and non-income support payments;
- (2) the household receives income support payments and more than 90% of household income comes from income support and non-income support payments.

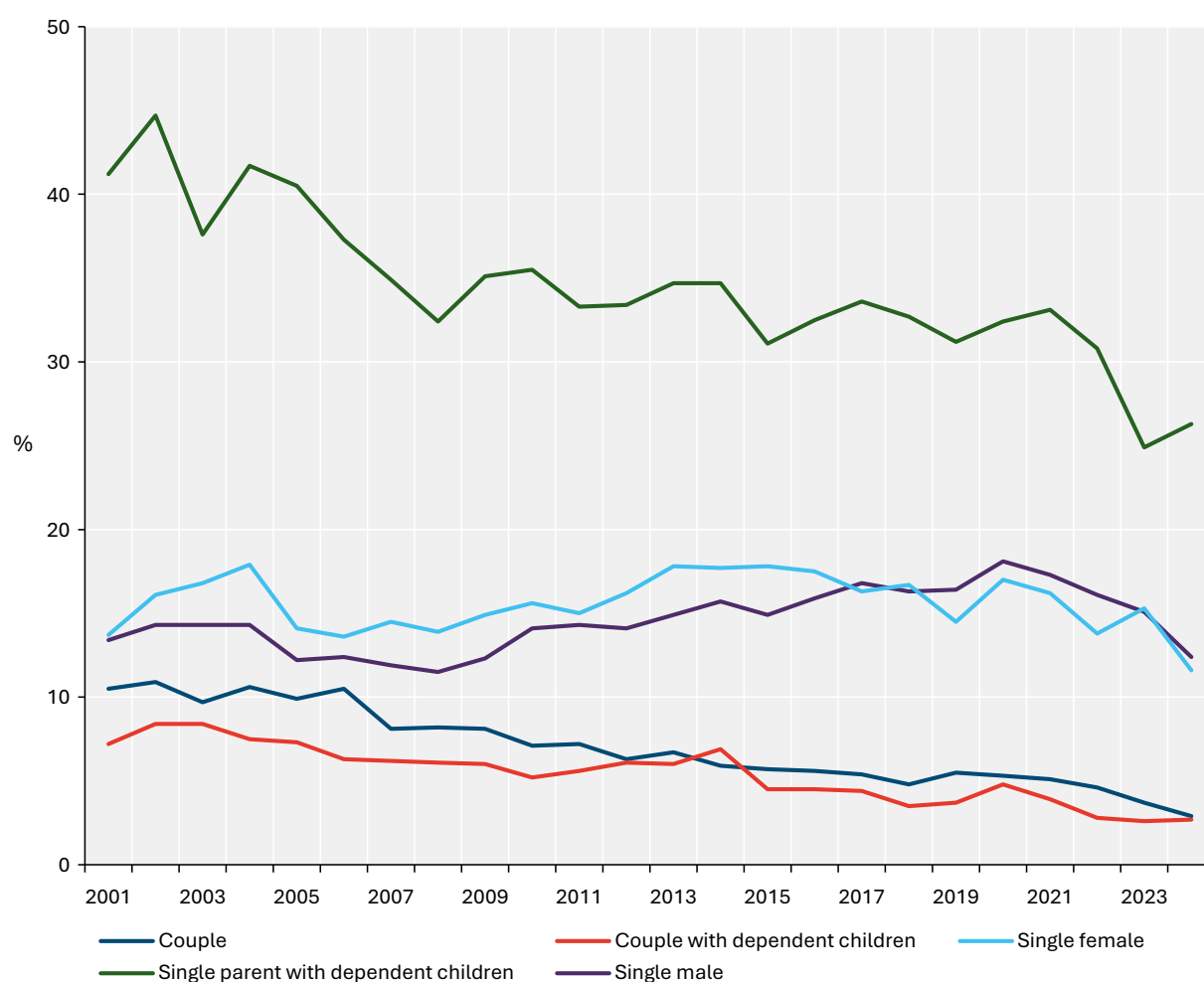
Income support receipt and reliance on cash benefits over 10 years

Drawing on the longitudinal nature of the HILDA Survey data provides significant insights into long-term contact with the income support system. Table 8.4 examines contact with the system over a 10-year period, presenting the proportion of people who at some stage in the 10-year period personally received an income support payment (personal contact), and the proportion who at some stage were living in a household in which at least one member received an income support payment (household contact).

The population examined is restricted to people who were aged 18 to 64 for the entire 10-year period (and therefore aged 18 to 55 at the start of the 10-year period and aged 27 to 64 at the end of the period). Estimates are disaggregated by sex and age group and, as in the analysis of poverty presented in Table 8.1, two 10-year periods are examined: 2001 to 2010 and 2015 to 2024.

The bottom-right cell of the top panel of the table shows that 63.9% of the working-age population had direct (personal) or indirect (household) contact with the income support payment system at some stage between 2001 and 2010. Moreover, 40.7% of this cohort *personally* received income support payments at some stage between 2001 and 2010. Given that approximately 20% of working-age individuals received income support in any given year of this period (see Figure 8.8), this indicates that the income support system was indeed providing temporary rather than long-term support for many recipients and was potentially playing a very important safety-net role. Contact with the income support system was lower over the 10 years from 2015 to 2024 (lower panel of Table 8.4), but still substantial, with 53.8% having household contact and 32.6% having personal contact.

Figure 8.10: Reliance on Australian Government cash benefits of people aged 18 to 64 years, by family type



Note: A person is defined to be benefit-reliant if more than 50% of their household annual income comes from Australian Government benefits.

Rates of household contact with the income support system are high across all age groups. Personal contact with the income support system varies more by sex, age group and time period than does household contact.

For men, over the 2001 to 2010 period, personal contact was highest for those initially (in 2001) aged 18 to 24 and lowest among those initially aged 25 to 34. The rate of personal contact then increases as we move up the age distribution, rising from 27.1% of the 25 to 34 age group to 35.6% of the 45 to 55 age group. In the 2015 to 2024 period, the 18 to 24 age group continued to have the highest rate of receipt for men, but the lowest rate of receipt shifted to the 35 to 44 age group.

In both of the 10-year periods, rates of personal contact with the income support system are higher for women than men in all age groups, but particularly among those aged under 45. This is partly due to women being a high proportion of single parents. That said, the gap between men and women was considerably smaller in all age groups other than the 18 to 24 group in the 2015 to 2024 period due to greater declines in women's personal contact with the income support system.

The extent of working-age individuals' contact with, and reliance on, the income support system over a 10-year period is examined in Table 8.5. The upper panel of the table shows the distribution of the number of years in which the individual's household received income support. Measuring the extent of contact with the system by the number of years in which one's household received income support payments, it is evident that the majority of working-age people have either no or only temporary contact with the system. Over the 2001 to 2010 period, 69.3% of men and 63.2% of women had contact with the system in three or fewer of the 10 years, while over the 2015 to 2024 period, 75.9% of men and 70.4% of women had contact with the system in three or fewer of the 10 years.

The bottom panel of Table 8.5 examines the extent of benefit reliance over a 10-year period, presenting the mean proportion of household income deriving from cash benefits over the 10 years for all people and the proportion of the population who were reliant on benefits over the 10-year period as a whole (defined as obtaining more than 50% of household income over the 10 years from benefits). On average, working-age men derived 11.4% of household income from benefit payments between 2001 and 2010, while working-age women on average derived 15% of household income from benefits. These figures dropped to 9% and 11.3%, respectively, in the 2015 to 2024 period. The proportion who were benefit-reliant over the 10-year period as a whole also fell, from 10.3% to 6.4% for women, and from 7% to 6.4% for men.

Table 8.4: Income support receipt over 10 years, by sex and age group at the start of the 10-year period (%)

	Age group at the start of the 10-year period				All aged 18-55 in initial year
	18-24	25-34	35-44	45-55	
2001-2010					
Men					
Personal receipt	46.7	27.1	29.3	35.6	33.1
Household receipt	78.5	58.3	60.4	59.9	62.4
Women					
Personal receipt	60.8	51.0	46.8	41.1	48.2
Household receipt	75.2	60.1	64.1	67.1	65.5
People					
Personal receipt	53.5	38.9	38.3	38.4	40.7
Household receipt	76.9	59.2	62.3	63.6	63.9
2015-2024					
Men					
Personal receipt	43.1	24.0	21.9	26.5	27.4
Household receipt	68.7	45.9	41.1	54.1	50.8
Women					
Personal receipt	60.6	37.2	32.8	29.6	37.6
Household receipt	75.8	49.2	50.8	58.9	56.6
People					
Personal receipt	51.7	30.7	27.5	28.1	32.6
Household receipt	72.2	47.5	46.1	56.6	53.8

Table 8.5: Household receipt of Australian Government cash benefits over 10 years—People aged 18 to 55 at the beginning of the 10-year period (%)

	2001–2010		2015–2024	
	Men	Women	Men	Women
<i>Number of years of household income support receipt</i>				
0	37.7	34.6	49.3	43.4
1–3	31.6	28.6	26.6	27.0
4–6	13.1	14.2	9.1	10.7
7–9	8.5	11.3	6.0	7.9
10	9.1	11.3	9.0	11.0
Total	100.0	100.0	100.0	100.0
<i>Mean proportion of household income from government benefits</i>				
	11.4	15.0	9.0	11.3
<i>Proportion obtaining more than 50% of 10-year household income from government benefits</i>				
	7.0	10.3	4.8	6.4

Note: Cells may not add up to column totals due to rounding.

Income support receipt and reliance on cash benefits of people aged 65 and over

While many people continue to work in paid employment beyond 65 years of age (and the Age Pension age has been 67 since 1 July 2023), as shown in Figure 8.11, even in recent years most people aged 65 and over were retired. We would correspondingly expect reliance on Australian Government cash benefits to be relatively high among this age group.

Figures 8.11 and 8.12 show that income support receipt and benefit reliance is indeed considerably higher among people aged 65 and over than among people aged 18 to 64 (Figures 8.8 and 8.9). There has, however, been a substantial decline in income support receipt, particularly since 2014, while benefit reliance has also declined. In 2014, 79.4% of people aged 65 and over received an income support payment; by 2024, this had dropped to 60.5%.

Using the 50% threshold, reliance on cash benefits of people aged 65 and over has tended to decline steadily over most of the HILDA Survey period. In 2003, 58.6% of this age group relied on welfare for more than 50% of their income; by 2024, this figure had fallen to 39.9%. Later retirement and increases in superannuation holdings are the main drivers of this decline, with the increases in the Age Pension age also likely to have played a role (including via their impacts on age of retirement). Also evident is a decline in reliance using the 90% threshold, but most of the decline occurred between 2003 and 2009 and between 2021 and 2024. Between 2010 and 2021, the proportion reliant based on this measure remained between approximately 26% and 29%.



Figure 8.11: Rates of retirement and personal income support receipt of persons aged 65 and over

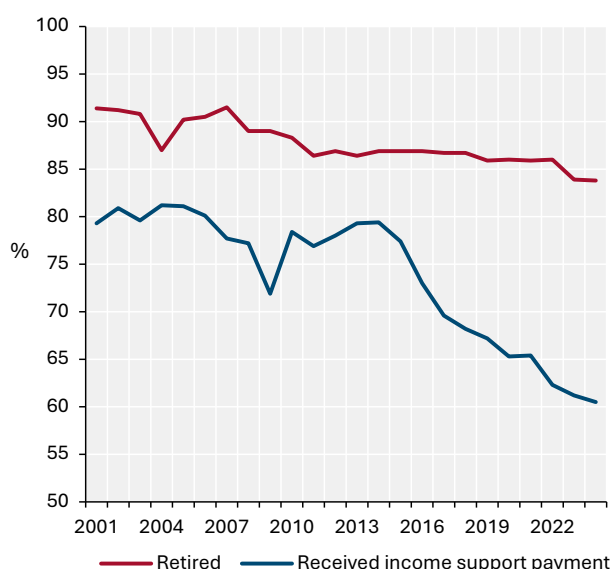
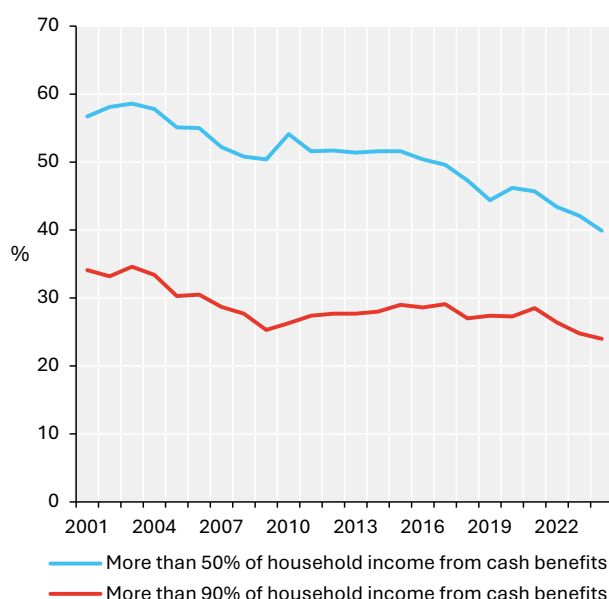


Figure 8.12: Reliance on Australian Government cash benefits among persons aged 65 and over



Household expenditure

The HILDA Survey has, from its inception, collected information on household expenditure. Most of the information is collected in the SCQ. The items measured have changed over time, but in all waves since 2006 they have included expenditure on: groceries; alcohol; tobacco; meals eaten out; taxis and public transport; motor vehicle fuel; motor vehicle repairs and maintenance; clothing; telephone and internet services; health insurance; other insurance; fees paid to health practitioners; medicines; electricity and gas bills; education fees; child care; home repairs, renovations and maintenance; rent on primary residence; and mortgage repayments.

While the HILDA Survey captures a considerable share of household expenditure, it does not provide a comprehensive picture of household expenditure decisions. Expenditure on entertainment and sport, personal and household services such as haircuts and cleaning, health and beauty products, cars, computers and related devices, home audio-visual equipment, household appliances and household furniture are among the items not captured.²⁰

This limitation notwithstanding, the household expenditure data collected by the HILDA Survey can provide valuable insights into economic circumstances and behaviour. This is because most of the expenditure items collected can be interpreted as 'non-discretionary', meaning householders typically regard them as essential expenditures and/or difficult to reduce in the short run. In the context of substantial variation in the cost of living in recent years (see Box 8.3), it is important to understand how these non-discretionary expenditures have been affected, and more particularly how the share of household income spent on them has evolved.

Table 8.6 presents the share of household income spent on 'non-discretionary' items and on food eaten at home (excluding take-away food) over the 2019 to 2024 period. Non-discretionary items are defined as all items collected by the HILDA Survey (as itemised above) other than alcohol, tobacco and meals eaten out (thus, food expenditure is a subset of non-discretionary expenditure). Expenditure on food eaten at home is not separately identified from non-food groceries in the SCQ, but it is measured in the household questionnaire. The analysis of food expenditure presented here therefore draws on the information collected in the household questionnaire.

²⁰ Expenditure on infrequently purchased items, such as motor vehicles, holidays and consumer durables, is not amenable to accurate measurement via an annual SCQ. Wilkins and Sun (2010) show that, when the HILDA Survey attempted to measure some of these expenditure items (between 2006 and 2010), it produced considerable underestimates of expenditure compared with the Australian Bureau of Statistics' (ABS) Household Expenditure Survey. Expenditure on entertainment was also found to be under-reported.

Table 8.6: Mean share of household income spent on non-discretionary items by household type (%)

	2019	2020	2021	2022	2023	2024	Change 2021-2024 (percentage points)
All non-discretionary items							
Non-elderly couple	49.6	47.5	45.1	45.6	48.0	49.0	3.9
Couple with dependent children	53.9	50.1	48.4	50.1	53.3	54.3	5.9
Single parent with dependent children	60.9	58.7	56.5	59.2	60.2	62.6	6.1
Single non-elderly person	72.8	69.6	64.8	68.3	69.8	72.6	7.8
Older couple	53.7	54.5	57.2	58.4	58.4	58.8	1.6
Single older person	68.8	67.5	69.7	71.9	75.4	74.1	4.4
Other household type	42.3	37.4	38.1	40.7	43.5	47.7	9.6
All households	57.9	55.3	53.8	55.7	58.1	59.4	5.6
Food eaten at home							
Non-elderly couple	9.3	9.0	8.5	8.3	8.3	8.8	0.3
Couple with dependent children	9.4	9.4	9.4	9.2	9.4	9.8	0.4
Single parent with dependent children	12.9	12.6	12.6	13.1	12.8	13.3	0.7
Single non-elderly person	12.0	12.4	12.2	11.8	12.9	12.5	0.3
Older couple	15.8	14.9	16.1	17.5	16.7	17.9	1.8
Single older person	15.9	17.1	18.2	18.5	17.4	17.1	-1.1
Other household type	10.3	9.0	8.8	9.5	10.3	9.5	0.7
All households	11.4	11.4	11.5	11.5	11.7	11.9	0.4

Between 2021 and 2024, when the cost of living rose appreciably, the share of household income spent on non-discretionary items, on average, increased by 5.6 percentage points. Note, however, that the expenditure share of non-discretionary items was considerably lower in 2021 than in 2019, the last year before the arrival of the COVID-19 pandemic. Nonetheless, the share of income devoted to non-discretionary items in 2024 was, on average, higher than in 2019. Expenditure on food eaten at home (excluding take-away) likewise increased as a share of income between 2021 and 2024, and was likewise above the 2019 level in 2024.

Comparing across household types (see Box 8.7), the share of income spent on non-discretionary items is consistently highest for single people and is also relatively high for single-parent households. Patterns of change over time are similar across household types, although couples without children (whether non-elderly or older) have had less growth than other households in the non-discretionary expenditure share of income.

Box 8.7: Household types

The following seven household types are distinguished in this chapter: (1) non-elderly couple, defined to be a couple (married or de facto) without dependent children with at least one member of the couple under 65 years of age; (2) couple with at least one dependent child living with them (regardless of the ages of the members of the couple, and regardless of the presence of other household members); (3) single parent living with at least one dependent child (again, regardless of the age of the single parent and the presence of other household members); (4) single non-elderly (aged under 65) person; (5) older couple, where both people are over 65 years of age; (6) single older (aged 65 and over) person; and (7) other household type, which includes multiple-family and group households. See also Box 2.3 in Chapter 2 for explanation of how household types are determined in the HILDA Survey.

Chapter 9

Food insecurity



Key findings

- Food insecurity affected 13.7% of people aged 15 and over in 2020. This rose to 17.9% in 2024.
- Food insecurity is strongly associated with poverty, income support receipt and financial stress.
- Single-parent families, and all families with children aged under 10, are at an elevated risk of food insecurity. Disability, poor health and smoking are also strong predictors of food insecurity.
- Food insecurity is highly persistent: over half of those experiencing food insecurity in 2020 also experienced food insecurity in 2024.

An important dimension of disadvantage is 'food insecurity', which refers to the inability to obtain adequate food. In Wave 20, for the first time the HILDA Survey included a question in the self-completion questionnaire designed to provide a measure of food insecurity known as the Food Insecurity Experience Scale (FIES) (see Box 9.1). The question asked respondents whether, because of a lack of money, there was a time in the last 12 months that each of eight events relating to food access occurred. This question was repeated in Wave 24.



Box 9.1: The Food Insecurity Experience Scale

The FIES is a short multi-item scale developed by the United Nations' Food and Agriculture Organization (Ballard et al., 2013) with a view to measuring severity of food insecurity based on people's responses to questions about constraints on their ability to obtain adequate food. The FIES questions focus on self-reported food-related behaviours and experiences associated with increasing difficulties in accessing food due to resource constraints.

The question administered in Waves 20 and 24 of the HILDA Survey is as follows:

During the last 12 months, was there a time when, because of a lack of money:

1. You were worried you would not have enough food to eat?
2. You were unable to eat healthy and nutritious food?
3. You ate only a few kinds of foods?
4. You had to skip a meal?
5. You ate less than you thought you should?
6. Your household ran out of food?
7. You were hungry but did not eat?
8. You went without eating for a whole day?

Together, the FIES items compose a scale designed to cover a range of severity of food insecurity. Typically, FIES data are analysed by applying the 'one-parameter logistic model' (Rasch, 1960), which is widely used in health, education and psychology studies and provides the statistical basis for experience-based food security measurement. However, a simple sum of affirmative responses to the eight questions (producing a measure ranging from 0 to 8) will produce the same ranking of individuals' severity of food insecurity.

Prevalence of food insecurity

Figure 9.1 presents the proportion of people aged 15 and over experiencing each of the eight events in 2020 and 2024. In both years, the most commonly experienced event was eating only a few kinds of foods, applying to 8.9% of people in 2020 and 12.8% of people in 2024. Next most-common was inability to eat healthy and nutritious food, applying to 7.3% of people in 2020 and 9.8% of people in 2024. Least-commonly experienced was the household running out of food, applying to 3.1% of people in 2020 and 4% of people in 2024. The prevalence of each event increased markedly between 2020 and 2024, as did the proportion of people reporting at least one of the events, rising from 13.7% to 17.9%.

Figure 9.1: Prevalence of food insecurity among persons aged 15 and over

During the last 12 months, was there a time when, because of a lack of money ...

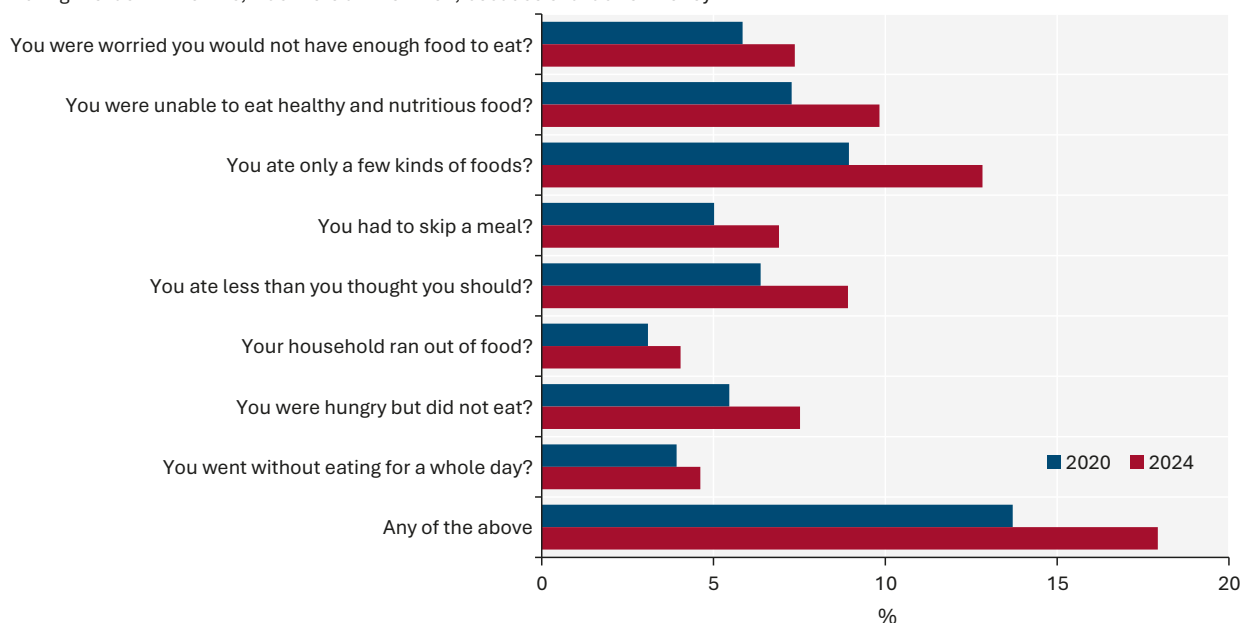
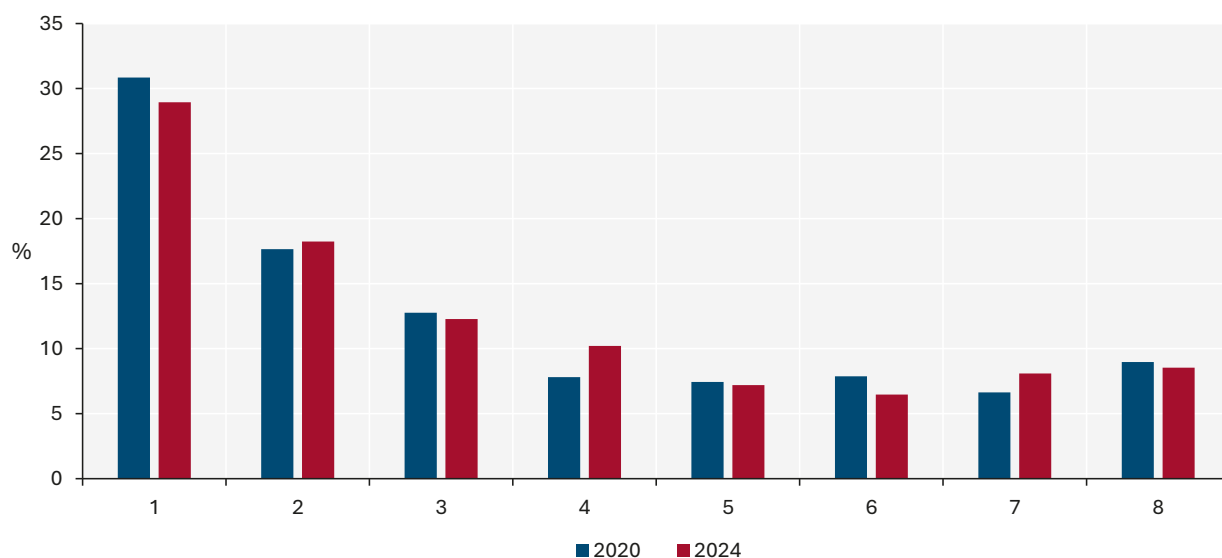


Figure 9.2 examines the distribution of the number of indicators of food insecurity reported by people with at least one indicator present. It is most common for only one indicator to be present; nonetheless, approximately 70% of people have more than one indicator present. Between 2020 and 2024, there was a slight decline in the proportion experiencing only one indicator, and therefore a slight increase in the proportion experiencing more than one indicator. The largest increase was in the proportion experiencing four indicators.

Figure 9.2: Distribution of number of indicators of food insecurity—Persons aged 15 and over with at least one indicator of food insecurity



Association between food insecurity and other indicators of disadvantage

Table 9.1 considers how experience of food insecurity is associated with other indicators of socioeconomic disadvantage—namely, income support receipt, poverty and financial stress. It shows the proportion experiencing any indicator of food insecurity, and the proportion experiencing three or more indicators of food insecurity, by whether their household is receiving income support payments (see Box 8.5, Chapter 8), whether they are in income poverty (both before and after housing costs; see Box 8.1, Chapter 8) and whether they have experienced two or more indicators of financial stress (see Box 8.2, Chapter 8). Estimates are presented for both 2020 and 2024.



A positive association between experience of food insecurity and other measures of disadvantage is evident for all four measures. This is reflected in the greater prevalence of food insecurity for those experiencing the other measures of disadvantage. For example, in 2020, 9% of those in households not receiving income support payments experienced one or more indicators of food insecurity, compared with 20.8% of those in households receiving income support payments.

The association is strongest with financial stress. For example, in 2020, the proportion of people experiencing any indicator of food insecurity was 57.2% for those who experienced financial stress and 8.4% for those who did not. Similarly, 41.4% of those who experienced financial stress had three or more indicators of food insecurity present, compared with only 2.9% of those who did not experience financial stress. Also of note is that food insecurity is more strongly associated with the poverty measure based on income net of housing costs than the measure based on total income, which is consistent with after-housing income being more appropriate than total income for assessing disadvantage.

Patterns are similar in 2020 and 2024, the main difference being greater prevalence of food insecurity among all groups in 2024.

Table 9.1: Proportion of people experiencing food insecurity, by whether experiencing other indicators of disadvantage, 2020 and 2024 (%)

	2020		2024	
	Any indicator of food insecurity	3 or more indicators of food insecurity	Any indicator of food insecurity	3 or more indicators of food insecurity
Household receiving income support payments				
No	9.0	3.7	14.0	6.9
Yes	20.8	12.2	26.2	15.0
In income poverty				
No	12.2	6.1	16.4	8.5
Yes	26.0	15.2	28.7	16.4
In income poverty after housing costs				
No	11.8	5.7	15.7	7.9
Yes	29.9	18.4	32.7	20.0
Experience of financial stress				
No	8.4	2.9	10.6	3.6
Yes	57.2	41.4	67.1	48.9

The connection between food insecurity and income is further considered in Table 9.2, which examines how the share of household income spent on food eaten at home and on non-discretionary items (as defined in Chapter 8) differs by level of food insecurity. Three levels of food insecurity are distinguished: no indicators of food insecurity; one or two indicators of food insecurity; and three or more indicators of food insecurity.

The mean share of household income spent on food eaten at home is indeed lowest for those not experiencing food insecurity and highest for those experiencing three or more indicators of food insecurity. For example, in 2024, the food share of income was 10.8% for those with no indicators of food insecurity, 12.7% for those with one or two indicators and 13.6% for those with three or more indicators. Food insecurity is also positively associated with the share of income spent on non-discretionary items (which include food eaten at home). In 2024, this expenditure share was 52.7% for those with no indicators of food insecurity, 60.1% for those with one or two indicators and 63.1% for those with three or more indicators.

Table 9.2: Mean proportion of household income spent on food eaten at home and on non-discretionary items, by severity of food insecurity, 2020 and 2024 (%)

	Food eaten at home		All non-discretionary expenditure	
	2020	2024	2020	2024
No indicators of food insecurity	10.2	10.8	48.9	52.7
1 or 2 indicators of food insecurity	12.3	12.7	57.7	60.1
3 or more indicators of food insecurity	13.3	13.6	60.3	63.1

Association between food insecurity and demographic characteristics

The association between demographic characteristics and severity of food insecurity is investigated by estimating regression models of the determinants of the sum of affirmative responses to the eight food insecurity questions. Higher values of this measure correspond to more severe food insecurity, with a value of 0 corresponding to no food insecurity and a value of 8 corresponding to the most severe level of food insecurity that can be identified by the questions.²¹ Models are estimated separately for 2020 and 2024 to allow investigation of whether associations changed over the four-year period.

The estimation results are presented in Table 9.3. Comparing across family types, people in single-parent families have the highest food insecurity, other factors held constant. In 2020, being in a single-parent family acted to increase the food insecurity score by 0.380 compared with being in a non-elderly couple, while in 2024, it acted to increase the score by 0.585. Single non-elderly males and females also have relatively high food insecurity. Food insecurity is lowest among older people, whether single or partnered. The presence of children aged under 15 is also associated with greater food insecurity in both 2020 and 2024.

First Nations Australians have greater food insecurity, and this association approximately doubled in strength between 2020 and 2024: other factors held constant, being a First Nations Australian was associated with an increase in the food insecurity score of 0.207 in 2020 and 0.435 in 2024.

People with university qualifications have lower food insecurity, all else being equal, while disability (see Box 3.1, Chapter 3), poor general health and poor mental health (see Box 2.13, Chapter 2) are all associated with greater food insecurity. Poor mental health is a particularly strong predictor of food insecurity, and the association increased in strength between 2020 and 2024: it acted to increase the food insecurity score by 0.575 in 2020 and by 0.758 in 2024.

²¹ The FIES is intended to be constructed from a Rasch model (Ballard et al., 2013). However, regression coefficient estimates obtained using the sum-score measure are qualitatively very similar to those obtained using the Rasch model measure. Note also that Tobit models were estimated to address the large number of individuals with a score of 0 for the food insecurity measure. Estimates from these models were larger in magnitude but qualitatively the same. The results from the ordinary least squares model using the sum-score measure are reported here because they are easier to interpret.

Differences by population density of region of residence are small or insignificant, other factors held constant. Unsurprisingly, there is a strong association between household equivalised income and food insecurity, with higher income associated with less food insecurity. Further, even after controlling for income (and other factors), household receipt of income support payments is associated with an increase in the food insecurity score of approximately 0.2.

Comparing across housing tenure types, renting—particularly of social housing—is associated with greater food insecurity, while owning one’s home outright is associated with the lowest food insecurity. There is no evidence of an association between alcohol consumption and food insecurity, but being a regular smoker is associated with substantially greater food insecurity, acting to increase the food insecurity score by almost 0.6 in both 2020 and 2024.

Table 9.3: Associations between demographic characteristics and food insecurity, 2020 and 2024

	2020	2024
<i>Family type (Reference category: Non-elderly couple)</i>		
Couple with dependent children	ns	-0.121
Single parent	0.380	0.585
Single non-elderly male	0.275	0.390
Single non-elderly female	0.265	0.317
Older couple	-0.308	-0.382
Single older male	-0.280	-0.300
Single older female	-0.406	-0.424
Number of dependent children	ns	ns
<i>Age of youngest dependent child (Reference category: No dependent children aged under 15)</i>		
Under 5	0.176	0.300
5–9	0.220	0.275
10–14	0.144	0.177
First Nations	0.207	0.435
<i>Educational attainment (Reference category: No post-school qualifications)</i>		
University degree	-0.100	-0.134
Other post-school qualification	ns	ns
Has a moderate or severe disability	0.311	0.253
In poor general health	0.283	0.349
In poor mental health	0.575	0.758
<i>Region of residence (Reference category: Major urban)</i>		
Other urban	-0.078	ns
Other region	ns	-0.113
<i>Quintile in the distribution of household equivalised income (Reference category: Middle quintile)</i>		
Bottom quintile	0.298	0.304
Second quintile	0.121	0.158
Fourth quintile	ns	-0.083
Top quintile	-0.069	-0.132
Household in receipt of income support payments	0.216	0.202
<i>Housing tenure type (Reference category: Owner outright)</i>		
Owner with mortgage	0.110	0.095
Renter of private housing	0.364	0.536
Renter of social housing	0.531	0.568
Regular smoker	0.553	0.583
Regular drinker	ns	ns
Number of observations	14,847	15,145

Notes: This table reports coefficient estimates from ordinary least squares models of the determinants of severity of food insecurity. See the Technical Appendix for an explanation of these models. The measure of severity is equal to the sum of affirmative responses to the eight FIES questions. The estimated models contained a constant (not reported). *ns* indicates the estimate is not significantly different from 0 at the 10% level.

Persistence of food insecurity

Figure 9.3 considers the persistence of food insecurity between 2020 and 2024. The figure shows, for people who experienced at least one indicator of food insecurity in 2020, the proportion experiencing at least one indicator in 2024. Persistence is shown for all people aged 15 and over in 2020 and disaggregated by family type in 2020.

The figure shows a high degree of persistence in food insecurity between 2020 and 2024. Of those aged 15 and over in 2020 who experienced at least one indicator of food insecurity, 55.7% experienced at least one indicator in 2024. Persistence is highest for people in single-parent families (77.4%) and lowest for older couples (38.7%).

Figure 9.3: Persistence of food insecurity between 2020 and 2024, by family type

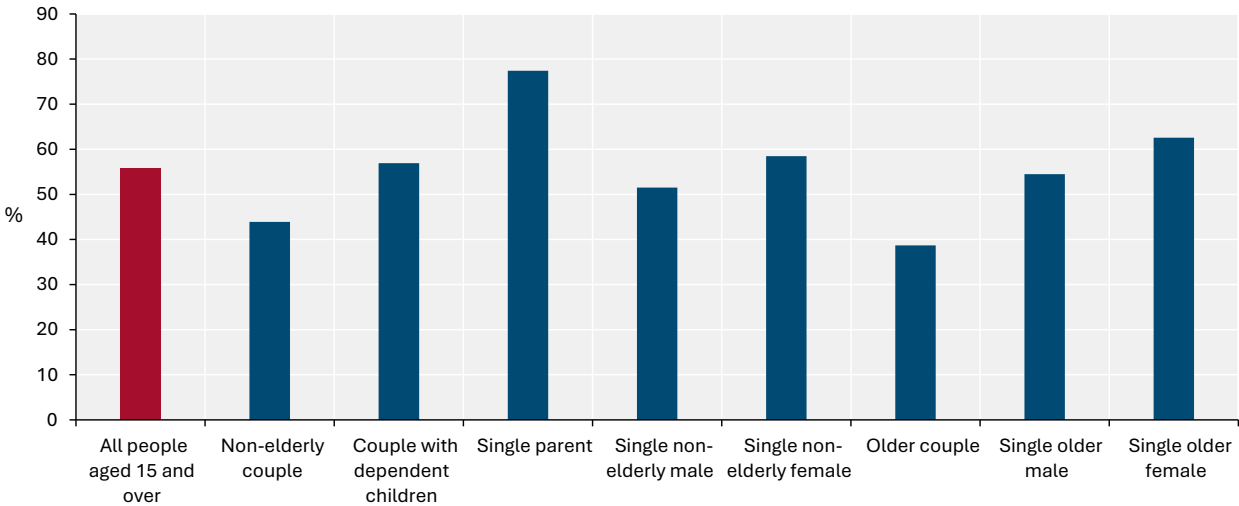


Table 9.4 examines in more detail than Figure 9.3 the association between persistence of food insecurity between 2020 and 2024 and demographic characteristics (measured in 2020). It presents, for people who experienced at least one indicator of food insecurity in 2020, ‘mean marginal effects’ estimates of the probability they experienced at least one indicator of food insecurity in 2024. For example, the estimate of 0.135 for single-parent families indicates that, other factors held constant, being in a single-parent family in 2020, on average, increases the probability of experiencing food insecurity in 2024 by 0.135, or 13.5 percentage points, compared with being in a non-elderly couple.

Consistent with Figure 9.3, the estimate of 0.135 for single-parent families shows persistence is higher among those in single-parent families than those in non-elderly couples. The estimate of 0.119 for single non-elderly females is also consistent with the relatively high persistence rate evident in Figure 9.3. However, no other estimates for family type are statistically significant—including for older couples, who in Figure 9.3 had the lowest persistence rate.

Persistence is relatively high for families with children aged under 10 in 2020: holding other factors constant, the presence of children aged under 10, on average, increases the probability of still being food insecure in 2024 by approximately 25 percentage points.

Persistence is significantly higher for those in the bottom three income quintiles in 2020, while a further adverse effect is found for those in households receiving income support payments. Health and health behaviour in the form of smoking are also statistically significant predictors of persistent food insecurity. Poor general health, on average, increases the probability of food insecurity persisting by 0.071, poor mental health, on average, increases this probability by 0.091 and being a smoker, on average, increases it by 0.106.

No statistically significant differences in persistence are evident by First Nations status, level of educational attainment, disability status, region of residence or housing tenure type, while regular consumption of alcohol is also not associated with a significant difference in persistence.

Table 9.4: Associations between demographic characteristics and the persistence of food insecurity between 2020 and 2024

	Estimate
<i>Family type (Reference category: Non-elderly couple)</i>	
Couple with dependent children	ns
Single parent	0.135
Single non-elderly male	ns
Single non-elderly female	0.119
Older couple	ns
Single older male	ns
Single older female	ns
Number of dependent children	ns
<i>Age of youngest dependent child (Reference category: No dependent children aged under 15)</i>	
Under 5	0.242
5-9	0.270
10-14	ns
First Nations	ns
<i>Educational attainment (Reference category: No post-school qualifications)</i>	
University degree	ns
Other post-school qualification	ns
Has a moderate or severe disability	ns
In poor general health	0.071
In poor mental health	0.091
<i>Region of residence (Reference category: Major urban)</i>	
Other urban	ns
Other region	ns
<i>Quintile in the distribution of household equivalised income (Reference category: Top 2 quintiles)</i>	
Bottom quintile	0.113
Second quintile	0.137
Middle quintile	0.102
Household in receipt of income support payments	0.082
<i>Housing tenure type (Reference category: Owner outright)</i>	
Owner with mortgage	ns
Renter of private housing	ns
Renter of social housing	ns
Regular smoker	0.106
Regular drinker	ns
Number of observations	1,388

Notes: This table reports mean marginal effects estimates from probit models of the probability of experiencing food insecurity in 2024 for those who experienced food insecurity in 2020. See the Technical Appendix for an explanation of these models. *ns* indicates the estimate is not significantly different from 0 at the 10% level.



Chapter 10

Financial literacy and financial wellbeing



Financial literacy and financial wellbeing

Ferdi Botha

Key findings

- Overall levels of financial literacy have remained relatively stable between 2016 and 2024.
- Financial literacy is, on average, higher among males than among females.
- Financial wellbeing declined between 2020 and 2024.
- Financial behaviours and financial attitudes, such as savings habits and time preferences for savings and spending, are the most important predictors of financial wellbeing.

Having good financial outcomes allows people to provide for themselves in the present and the future. Achieving good financial outcomes requires individuals to have some degree of financial literacy to support sound financial decision-making. Being able to make sound financial decisions, and people's attitudes and habits in relation to their finances, can strongly influence their overall financial wellbeing, that is, the degree to which people have control over their finances, the extent of their financial freedom and financial security, and whether they can enjoy life because of the way they are managing their finances.

This chapter reports on levels of financial literacy and financial wellbeing in the Australian population. Though strongly related—both are central components of individuals' financial lives and other important outcomes—these concepts are distinct, with financial literacy generally considered an important predictor of financial wellbeing.

This chapter first provides an overview of changes in financial literacy between 2016 and 2024, the distribution of correct responses to the financial literacy items, and an investigation into the factors that jointly explain financial literacy. The chapter then reports on changes in financial wellbeing between 2020 and 2024, the underlying financial wellbeing components explaining these changes, and the determinants of financial wellbeing in a multivariate setting.



Financial literacy

This sub-section describes the standard items used to measure financial literacy (see Box 10.1) and shows the average financial literacy scores in the waves that included these items. The section also reports on the distributions of correct responses to the financial literacy items for sub-groups of interest and finally reports the regression results of the factors that jointly predict higher and lower levels of financial literacy.

Box 10.1: HILDA Survey measure of financial literacy

The following five questions, respectively covering numeracy, inflation, portfolio diversification, risk versus returns and money illusion, were administered in the interview component in Waves 16, 20 and 24:

1. *[Numeracy] Suppose you put \$100 into a no-fee savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account and you don't withdraw any money. How much would be in the account at the end of the first year, once the interest payment is made? [Correct answer: \$102]*
2. *[Inflation] Imagine now that the interest rate on your savings account was 1% per year and inflation was 2% per year. After one year, would you be able to buy more than today, exactly the same as today, or less than today with the money in this account? [Correct answer: Less]*
3. *[Diversification] Do you think that the following statement is true or false? 'Buying shares in a single company usually provides a safer return than buying shares in a number of different companies.' [Correct answer: False]*
4. *[Risk-return] Again, please tell me whether you think the following statement is true or false: An investment with a high return is likely to be high risk. [Correct answer: True]*
5. *[Money illusion] Suppose that by the year 2028 your income has doubled, but the prices of all the things you buy have also doubled. In 2028, will you be able to buy more than today, exactly the same as today, or less than today with your income? [Correct answer: Exactly the same]*

An overall measure of financial literacy is calculated as simply the sum of correct answers to these five questions, ranging from 1 (low financial literacy) to 5 (high financial literacy).

Changes in mean financial literacy, 2016 to 2024

Table 10.1 reports the average financial literacy scores between 2016 and 2024 by sex and by age group. In all years that these questions were asked, mean financial literacy was higher among males than among females. Among females, financial literacy fell from 3.7 to 3.5 between 2016 and 2020 but increased to 3.8 in 2024. There is a similar pattern among males, for whom mean financial literacy declined from 4.2 in 2016 to 4 in 2020, before rising again to 4.2 in 2024.

In all three years, persons aged 15 to 24 reported the lowest mean financial literacy as compared to older age groups. Average financial literacy scores were also consistently low among people aged 65 and over, as well as among 25- to 34-year-olds. Apart from the 65 and older group, mean financial literacy worsened among people in all age groups from 2016 to 2020. However, consistent with the observed gendered pattern, among all age groups average financial literacy again improved in 2024.

Table 10.1: Mean financial literacy scores, by sex and age group, 2016 to 2024 (0–5 scale)

	2016	2020	2024
Sex			
Females	3.7	3.5	3.8
Males	4.2	4.0	4.2
Age group			
15–24	3.4	3.0	3.5
25–34	3.9	3.6	4.1
35–44	4.1	3.9	4.2
45–54	4.2	4.1	4.2
55–64	4.2	4.1	4.2
65 and over	3.8	3.8	4.0

Correct answers to financial literacy items

Broken down by sex and age group, Table 10.2 reports the proportion of individuals in the latest available wave that answered each financial literacy question (see Box 10.1) correctly.

It is notable that none of the questions was answered correctly by all persons, regardless of the subgroup considered. Among all individuals, 86.1% and 84.7%, respectively, answered the risk-return and numeracy items correctly. Only 75.5% answered the question on diversification correctly, whereas the money illusion and inflation questions were correctly answered by 77% and 78.8%, respectively.

With each question, a higher proportion of males answered correctly than did females. The gender gap in the prevalence of correct answers is largest for the numeracy (78.9% for females and 90.9% for males) and inflation (73.4% for females and 84.7% for males) questions, and smallest for the money illusion (75.4% for females and 78.7% for males) question.

Compared to all other age groups, those in the 15 to 24 age group had the lowest proportion of correct answers for each question. This youngest age group also did particularly badly on the diversification (61.2% gave the correct answer) and inflation (65.4% gave the correct answer) questions. People aged 65 and over performed relatively poorly on the money illusion question, with only 66.7% answering it correctly. The proportion of people who answer correctly generally increases with age, although for most questions the prevalence of correct responses starts to fall once people reach 65.

Table 10.2: Proportion answering each financial literacy question correctly, by sex and age group, 2024 (%)

	Numeracy	Inflation	Diversification	Risk-return	Money illusion
All persons	84.7	78.8	75.5	86.1	77.0
Sex					
Females	78.9	73.4	71.8	81.8	75.4
Males	90.9	84.7	79.6	90.8	78.7
Age group					
15–24	72.3	65.4	61.2	74.3	80.3
25–34	84.2	77.6	76.0	85.7	82.9
35–44	88.5	79.2	78.7	88.7	80.8
45–54	89.5	80.8	80.5	87.7	80.7
55–64	88.8	85.0	79.0	89.4	76.7
65 and over	84.2	82.0	76.0	88.9	66.7



Table 10.3 reports the proportion of people who provided different numbers of correct responses. Among all persons, 2.4% did not answer any of the five questions correctly, and less than half (48.2%) answered all five questions correctly. Whereas 55.6% of males provided correct responses to all financial literacy questions, 41.4% of females did so.

The number of correct responses also reflect the observed age differences in financial literacy. Among people aged 15 to 24, 4.6% got all questions wrong, 18.9% had one or two correct, and only a third answered all questions correctly. The highest proportions of correct responses to all questions were among people aged 45 to 64 (54.3% to 55.1%). Among those aged 65 and over, 3.1% did not answer any of the five questions correctly.

Table 10.3: Number of correct responses to financial literacy questions, by sex and age group, 2024 (%)

	None	1 or 2	3 or 4	All 5
All persons	2.4	10.0	39.5	48.2
Sex				
Females	3.3	13.2	42.1	41.4
Males	1.4	6.5	36.5	55.6
Age group				
15–24	4.6	18.9	43.2	33.3
25–34	1.8	9.7	39.6	48.9
35–44	1.4	8.1	38.9	51.7
45–54	1.6	7.3	36.9	54.3
55–64	1.8	7.4	35.7	55.1
65 and over	3.1	9.4	41.6	46.0

Characteristics associated with financial literacy

Table 10.4 reports the regression results of the factors associated with financial literacy. The male indicator in the second column suggests that financial literacy scores are, on average, about 0.44 points higher for males than for females, all else being equal.

People in the 15 to 34 age range have, on average, lower financial literacy than those aged 35 to 44. In contrast, financial literacy scores among those aged 45 or older are significantly greater than people aged 35 to 44. For instance, females aged 55 to 64 have a financial literacy score of 0.27 points higher compared to females aged 35 to 44.

As expected, higher education is associated with greater financial literacy. For example, females with at least a bachelor's degree have a financial literacy score of 0.65 points higher than females with less than a bachelor's degree.

In terms of labour force status, both the unemployed and those not in the labour force have significantly lower financial literacy than employed people. The financial literacy score of unemployed females, for instance, is 0.37 points lower than that of employed females. Similarly, males not in the labour force have a 0.33 point lower financial literacy score than employed males.

Financial literacy is, on average, higher among partnered individuals relative to non-partnered individuals. Compared to people with no children below 15 years of age living in the same household, financial literacy is significantly lower among people with at least one resident child younger than 15.

Given the nature of the financial literacy items, limited English language ability could adversely affect people's understanding of the questions and hence their responses. The evidence is consistent with this likelihood: financial wellbeing is 1.3 to 1.4 points lower among individuals with poor English.

Among both females and males, First Nations people have, on average, lower assessed financial literacy scores than non-Indigenous people.

There is no significant difference in financial literacy between Australian-born people and immigrants from the main English-speaking countries. Compared to Australian-born individuals, the financial literacy scores of immigrants from other countries are significantly lower.

People living in non-urban areas have lower financial literacy scores than those residing in major urban or other non-major urban areas.

The coefficients of the wave year indicators reveal interesting patterns. Among females, financial literacy scores were, on average, 0.25 points lower in 2020 than in 2016, whereas there is no significant difference in financial literacy scores between 2016 and 2024. This suggests that, among females, following a decline in financial literacy between 2016 and 2020, financial literacy returned to 2016 levels. Among males, financial literacy scores declined by roughly 0.13 points between 2016 and 2020. However, financial literacy scores were 0.06 points higher in 2024 than in 2016. Among males, therefore, financial literacy also declined between 2016 and 2020, but measured financial literacy was slightly higher in 2024 than in 2016.

Table 10.4: Factors associated with financial literacy, by sex, 2016 to 2024

	All	Females	Males
Male	0.440		
<i>Age group (Reference category: 35–44)</i>			
15–24	–0.539	–0.654	–0.400
25–34	–0.223	–0.257	–0.181
45–54	0.091	0.099	0.088
55–64	0.203	0.268	0.142
65 and over	0.104	0.106	0.128
Bachelor's degree or higher	0.582	0.649	0.494
<i>Labour force status (Reference category: Employed)</i>			
Unemployed	–0.356	–0.365	–0.354
Not in the labour force	–0.312	–0.309	–0.325
Partnered	0.210	0.227	0.201
Has children < 15 in household	–0.107	–0.112	–0.090
Poor English	–1.419	–1.439	–1.326
First Nations	–0.585	–0.625	–0.531
<i>Immigrant status (Reference category: Australian-born)</i>			
Immigrant, main English-speaking countries	<i>ns</i>	<i>ns</i>	<i>ns</i>
Immigrant, other countries	–0.364	–0.424	–0.289
<i>Region of residence (Reference category: Non-urban)</i>			
Major urban	0.197	0.221	0.171
Other urban	0.120	0.150	0.086
<i>Wave year (Reference category: 2016)</i>			
2020	–0.194	–0.253	–0.125
2024	0.025	<i>ns</i>	0.060
Constant	3.602	3.599	4.026
Number of observations	45,922	24,674	21,248

Notes: This table presents ordinary least squares estimates from a regression model of the predictors of financial literacy on the 0 to 5 scale. See the Technical Appendix for an explanation of these models. *ns* indicates the estimate is not significantly different from 0 at the 10% level.

Financial wellbeing

Financial wellbeing is defined as ‘the extent to which people both perceive and have (i) financial outcomes in which they meet their financial obligations, (ii) financial freedom to make choices that allow them to enjoy life, (iii) control of their finances, and (iv) financial security—now, in the future, and under possible adverse circumstances’ (Comerton-Forde et al., 2018, p. 6). As a rigorously validated measure of financial wellbeing, the short form Commonwealth Bank—Melbourne Institute Reported Financial Wellbeing Scale (see Box 10.2) was administered for the first time in Wave 20 of the HILDA Survey and again in Wave 24.

Box 10.2: Measuring financial wellbeing

To measure financial wellbeing, Waves 20 and 24 of the self-completion questionnaire contained the 5-item version of the Commonwealth Bank—Melbourne Institute Reported Financial Wellbeing Scale (Botha et al., 2020). Respondents were asked how well each of the following two statements describe them or their situation, with responses ranging from 1 (‘not at all’) to 5 (‘completely’):

a. I can enjoy life because of the way I’m managing my money

b. I could handle a major unexpected expense

Respondents were also asked the extent to which they agree or disagree with each of the following three statements when it comes to how they think and feel about their finances, with responses ranging from 1 (‘disagree strongly’) to 5 (‘agree strongly’):

c. I feel on top of my day-to-day finances

d. I am comfortable with my current levels of spending relative to the funds I have coming in

e. I am on track to have enough money to provide for my financial needs in the future

The financial wellbeing score is calculated by summing the five items and multiplying the sum by 5, as follows: $[(a - 1) + (b - 1) + (c - 1) + (d - 1) + (e - 1)] * 5$. The score ranges from 0 (low financial wellbeing) to 100 (high financial wellbeing).

This subsection first reports the changes in average perceived financial wellbeing scores from 2020 to 2024 which, given substantial increases in cost-of-living pressures since 2020, provides an overview of how financial wellbeing changed within this context. The subsection then reports and discusses the individual characteristics that determine financial wellbeing and exploits the longitudinal component of the HILDA Survey to look at the characteristics of people who experienced large changes in financial wellbeing.



Changes in financial wellbeing, 2020 to 2024

Table 10.5 reports the mean financial wellbeing scores by sex and age group for 2020 and 2024. Average financial wellbeing declined for both females (from 60.1 points to 58.5 points) and males (from 61.2 points to 60.2 points).

Apart from the 65 and older group, average financial wellbeing for all other age groups was lower in 2024 than in 2020. For example, financial wellbeing declined from 59 to 56.7 points among 25- to 34-year-olds, and from 58.9 to 56.4 points among 35- to 44-year-olds.

Table 10.5: Mean financial wellbeing scores, by sex and age group, 2020 and 2024 (0–100 scale)

	2020	2024
Sex		
Females	60.1	58.5
Males	61.2	60.2
Age group		
15–24	55.7	53.7
25–34	59.0	56.7
35–44	58.9	56.4
45–54	59.0	57.7
55–64	61.9	61.0
65 and over	68.0	68.2

Given the evidence suggests a fall in financial wellbeing from 2020 to 2024, Table 10.6 shows the proportion of response categories to each financial wellbeing item for both 2020 and 2024. This makes it possible to observe how responses to each item changed and which individual components might explain the decline in financial wellbeing.

The proportion of people who could enjoy life ‘not at all’ or ‘very little’ due to their money management (item 1) increased from 11.3% in 2020 to 12.7% in 2024. In 2020, 62.1% agreed or strongly agreed that they felt on top of everyday finances (item 3), but in 2024 this fell to 58.5%. There were quite large changes in rates of agreement with the statement of feeling comfortable with current spending relative to funds coming in (item 4). For instance, whereas in 2020 60% of people agreed or strongly agreed with this statement, only 53.8% did so in 2024. These results imply that worsening perceptions of meeting shorter-term ‘every day’ financial outcomes explain a sizable shift in the reported decline in financial wellbeing over the four-year period.

In 2020, 22% could handle a major unexpected expense ‘not at all’ or ‘very little’ (item 2). This proportion of people rose to 25.2% in 2024, suggesting increasing difficulties in the ‘rainy day’ domain related to having sufficient emergency funds available.

There was a general worsening in perceptions of how well people are providing for their future (‘one day’) financial needs (item 5), with fewer people agreeing or strongly agreeing with the statement in 2024 (49.2%) than in 2020 (50.4%). Whereas in 2020 18.9% disagreed or strongly disagreed that they were on track to have enough money to provide for their future financial needs, this proportion rose to 20.6% in 2024.



Table 10.6: Distribution of responses to each financial wellbeing item, 2020 and 2024 (%)

	Not at all	Very little	Somewhat	Very well	Completely	Total
<i>1. I can enjoy life because of the way I'm managing my money</i>						
2020	3.8	7.5	41.6	35.9	11.2	100.0
2024	4.1	8.6	39.9	34.6	12.9	100.0
<i>2. I could handle a major unexpected expense</i>						
2020	9.7	12.3	40.1	26.7	11.2	100.0
2024	11.2	14.0	37.6	25.1	12.2	100.0
	Disagree strongly	Disagree	Neither agree nor disagree	Agree	Agree strongly	Total
<i>3. I feel on top of my day-to-day finances</i>						
2020	3.2	8.0	26.8	47.7	14.4	100.0
2024	3.5	9.8	28.3	45.1	13.4	100.0
<i>4. I am comfortable with my current levels of spending relative to the funds I have coming in</i>						
2020	3.4	12.3	24.4	47.6	12.4	100.0
2024	3.8	15.3	27.2	43.0	10.8	100.0
<i>5. I am on track to have enough money to provide for my financial needs in the future</i>						
2020	5.9	13.0	30.8	39.5	10.9	100.0
2024	6.3	14.3	30.3	38.5	10.7	100.0

Notes: Cells may not add up to row totals due to rounding. Items 1, 3 and 4 reflect 'every day' outcomes, item 2 reflects 'rainy day' outcomes, and item 5 reflects 'one day' outcomes.

Box 10.3: Measuring savings behaviour

To gain an understanding of individuals' savings behaviour, respondents are asked: *Which of the following statements comes closest to describing your (and your family's) savings habits?* Potential responses include (i) don't save: usually spend more than income, (ii) don't save: usually spend about as much as income, (iii) save whatever is left over at the end of the month—no regular plan, (iv) spend regular income, save other income, (v) save regularly by putting money aside each month.

Box 10.4: Measuring savings and spending horizons

To capture time preferences in relation to savings and spending, respondents are asked: *In planning your savings and spending, which of the following time periods is most important to you?* Possible responses are (i) the next week, (ii) the next few months, (iii) the next year, (iv) the next two to four years, (v) the next five to 10 years, (vi) more than 10 years ahead.

Predictors of financial wellbeing

This section investigates the characteristics that jointly predict perceived financial wellbeing in a multivariate setting. The regression results are reported in Table 10.7.

For most variables, which are indicators, the displayed coefficient is interpreted as the change in financial wellbeing (ranging from 0 to 100) for that specific category relative to the omitted reference category. The exceptions are financial literacy and the SF-36 mental health measure, which are all treated as continuous variables. The financial literacy coefficient is interpreted as the change in financial wellbeing for each additional point increase in the financial literacy score (i.e., answering one additional financial literacy question correctly). The mental health coefficients reflect the change in financial wellbeing for every 1-point increase or improvement in mental health on the 0 to 100 scale.

The coefficient on the male indicator in the second column suggests that males report a financial wellbeing score of 0.53 points higher than females, all else being equal.

Among females, those aged 45 to 54 and 55 to 64 report lower and higher financial wellbeing, respectively, compared to those in the 15 to 24 age group. Males aged 25 to 34 have higher financial wellbeing than males aged 15 to 24. Financial wellbeing is highest among people aged 65 and older, with females in this age group reporting 6.9 points higher financial wellbeing than females aged 15 to 24, and males aged 65 and older report, on average, 5.4 points higher financial wellbeing than males aged 15 to 24.

Higher education is, on average, associated with higher financial wellbeing. Individuals with a bachelor's degree have 2 to 3 points higher financial wellbeing as compared to those with less than a bachelor's degree.

Labour force status and financial wellbeing are strongly associated, with unemployed people reporting the lowest financial wellbeing. For example, employed females report about 5.3 points higher financial wellbeing compared to unemployed females. Among males, financial wellbeing is 7.2 points higher for those not in the labour force relative to those who are unemployed.

As a potentially important resource variable that determines a person's financial wellbeing, as expected the results show that people with a higher real household income tend to also have higher financial wellbeing. Persons in the top household income quintile, for instance, have about 6.5 to 6.9 points higher financial wellbeing relative to those in the bottom household income quintile.

Financial behaviours and attitudes are very important predictors of financial wellbeing, with very large associations with financial wellbeing. In terms of savings habits (see Box 10.3), the financial wellbeing of people who reported spending their regular income but saving any remaining income is 13.6 to 16.7 points higher compared to those who do not save at all. Furthermore, compared to people who do not save, those who save regularly with a clear savings plan report a financial wellbeing score of between 17.5 to 19.1 points higher.

As expected, there is a positive relationship between financial literacy and financial wellbeing, with a 1-point higher financial literacy score associated with roughly 0.8 points higher financial wellbeing.

Having longer savings and spending horizons (see Box 10.4) is strongly associated with higher financial wellbeing, with the size of the association slightly lower than that of savings habits. The longer the time horizon, the higher is a person's financial wellbeing. For example, people who view the next five or more years as most important in making decisions about savings and spending have a financial wellbeing score of about 11.1 to 12 points higher than people who view the next week as most important for savings and spending decisions.

Having better mental health is associated with higher financial wellbeing, with each 1-point increase in the mental health score corresponding to 0.3 points higher financial wellbeing. Note, however, that the direction of association is not clear, as a worsening in mental health can also reduce financial wellbeing (e.g., Botha and Ribar, 2025).

Financial wellbeing is higher among partnered people than among non-partnered people. For partnered women, financial wellbeing is, on average, almost 2 points higher than that of non-partnered women. The financial wellbeing of partnered men is 1 point higher compared to non-partnered men.

Those with resident children aged younger than 15 report, on average, about 1 to 1.2 points lower financial wellbeing than people without resident children in this age range.

Individuals living in single-parent households have lower financial wellbeing than individuals not living in single-parent households.

There are no financial wellbeing discrepancies between people in private rentals and people in social housing. However, the financial wellbeing of outright homeowners (without a mortgage) is substantially higher—by between 5.6 to 5.9 points—than that of renters. Although homeowners with a mortgage also report higher financial wellbeing than private renters, note that the regression models do not adjust for unobserved personal characteristics that may be correlated with being a mortgage holder. Homeowners with a mortgage could have positive characteristics that allowed them to obtain a mortgage in the first place and, if that is allowed for, mortgage holders may be worse off than renters in terms of financial wellbeing, especially because paying a mortgage is a substantial constraint on everyday finances.

Table 10.7: Factors associated with financial wellbeing, by sex, 2020 to 2024

	All	Females	Males
Male	0.529		
<i>Age group (Reference category: 15–24)</i>			
25–34	0.714	<i>ns</i>	1.404
35–44	<i>ns</i>	<i>ns</i>	<i>ns</i>
45–54	–0.930	–1.320	<i>ns</i>
55–64	<i>ns</i>	1.155	<i>ns</i>
65 and over	6.222	6.931	5.433
Bachelor's degree or higher	2.627	2.129	3.354
<i>Labour force status (Reference category: Unemployed)</i>			
Employed	5.416	5.326	5.677
Not in the labour force	6.042	5.297	7.161
<i>Household income quintile (Reference category: Bottom quintile)</i>			
Second quintile	0.591	0.981	<i>ns</i>
Middle quintile	1.936	1.894	1.981
Fourth quintile	3.440	3.073	3.819
Top quintile	6.752	6.562	6.919
<i>Savings habits (Reference category: Don't save: Spend more or as much as income)</i>			
Save whatever is left over: No regular plan	11.600	12.575	10.386
Spend regular income, save other income	15.276	16.714	13.582
Save regularly by putting money aside each month	18.428	19.135	17.539
Financial literacy (1–5 scale)	0.773	0.775	0.775
<i>Most important time for savings and spending (Reference category: Next week)</i>			
Next few months	4.783	4.420	5.174
Next year	7.929	7.825	8.018
Next 2–4 years	9.047	8.779	9.293
Next 5 or more years	11.557	11.149	11.951
SF-36 mental health measure (0–100 scale)	0.299	0.292	0.308
Partnered	1.465	1.975	1.027
Has children < 15 in household	–1.155	–0.975	–1.153
Single-parent household	–2.007	–1.812	–1.844
<i>Housing tenure type (Reference category: Private rental)</i>			
Social housing	<i>ns</i>	<i>ns</i>	<i>ns</i>
Owner with mortgage	1.134	1.390	0.841
Owner outright	5.769	5.871	5.556
First Nations	<i>ns</i>	<i>ns</i>	<i>ns</i>
<i>Immigrant status (Reference category: Australian-born)</i>			
Immigrant, main English-speaking countries	<i>ns</i>	<i>ns</i>	<i>ns</i>
Immigrant, other countries	–1.915	–2.162	–1.610
<i>Region of residence (Reference category: Non-urban)</i>			
Major urban	<i>ns</i>	<i>ns</i>	<i>ns</i>
Other urban	0.637	0.959	<i>ns</i>
Wave year is 2024	–1.376	–1.821	–0.835
Number of observations	27,110	14,703	12,407

Notes: The table presents ordinary least squares estimates from a regression model of the predictors of financial wellbeing on the 0 to 100 scale, also including a constant (not reported). See the Technical Appendix for an explanation of these models. Savings habits were not asked in 2024 but were asked in 2022. Information from 2022 was therefore used for information on savings habits in 2024. *ns* indicates the estimate is not significantly different from 0 at the 10% level.

The financial wellbeing of First Nations Australians does not significantly differ from that of non-Indigenous people.

There are no significant differences in financial wellbeing between Australian-born people and immigrants from the main English-speaking countries. However, immigrants from other countries report, on average, between 1.6 and 2.2 points lower financial wellbeing than Australian-born people.

There are no differences in financial wellbeing between residents of non-urban and major urban areas, but females living in non-major urban areas have higher financial wellbeing than females in non-urban areas.

Financial wellbeing was significantly lower in 2024 than in 2020. The financial wellbeing score declined by 1.8 points for females and by 0.8 points for males. This deterioration in financial wellbeing is also consistent with the evidence in Chapter 8 documenting the rise in financial stress over the same period. During the pandemic in 2020, many people were able to build up significant precautionary savings because of factors such as reductions in travel and eating out. Since 2020, however, these expenses have risen again which, in conjunction with more recent cost-of-living increases, would have depleted long-term savings and increased everyday financial pressures.

Who experienced big changes in financial wellbeing?

The previous analysis showed that, on average, financial wellbeing declined between 2020 and 2024. However, financial wellbeing did not deteriorate for all individuals, as it would also have improved for some and remained relatively stable for others. The analysis in Table 10.8 makes use of the longitudinal nature of the HILDA Survey to explore within-person changes in financial wellbeing scores. This makes it possible to look at which groups had the biggest changes in financial wellbeing from 2020 to 2024.

For selected sub-groups, Table 10.8 shows the proportion of individuals who reported that their financial wellbeing worsened, remained roughly the same and improved. For the purposes of this analysis, a person's financial wellbeing is assumed to have 'worsened' if their overall score decreased by more than 10 points (on the 0 to 100 scale), stayed roughly 'constant' if their overall score decreased or increased by 10 points or less, and 'improved' if their overall score increased by more than 10 points. Among all persons, financial wellbeing remained relatively constant for 59%, whereas it improved for 18.7% and worsened for 22.3%.

Financial wellbeing worsened for 24.1% of females and 20.8% of males. Younger age groups experienced a proportionally greater decline in financial wellbeing, especially those aged 25 to 34. Of note, however, is that financial wellbeing improved for about a quarter of 15- to 24-year-olds.

Only 13.2% of unemployed people experienced a financial wellbeing improvement, whereas 29.1% saw their financial wellbeing fall. Lower household income groups had higher proportions of people with a worsening in financial wellbeing.

Among those in single-parent households, half had no material change to their financial wellbeing. However, although 21.7% improved their financial wellbeing, 28.4% experienced a deterioration. People in private rentals (28.1%) had the highest proportion for which financial wellbeing worsened. Financial wellbeing also declined for 27.6% of people in social housing and 23.5% of owners with a mortgage.

A third of First Nations individuals experienced a drop in their financial wellbeing between 2020 and 2024.



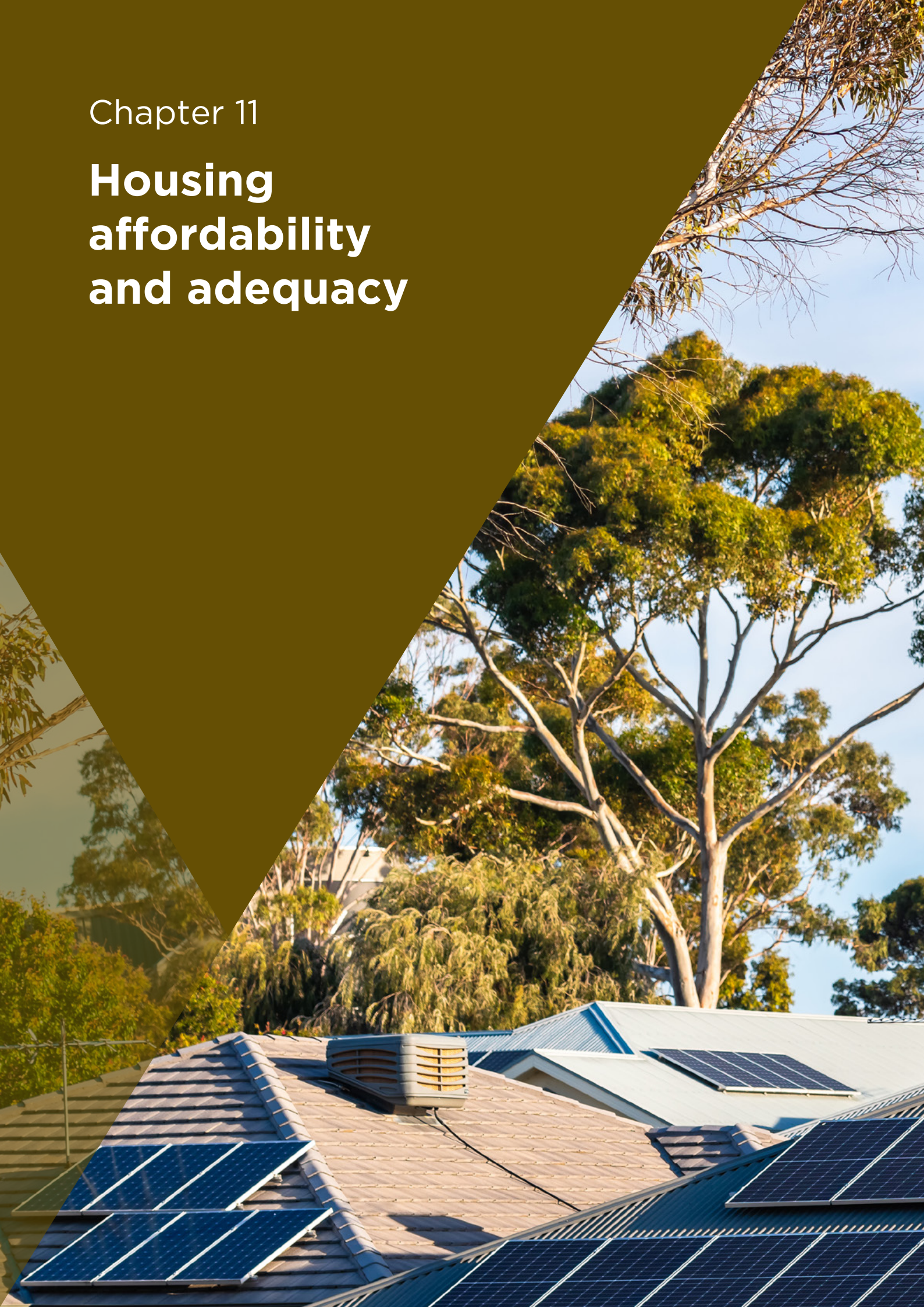
Table 10.8: Person-level change in financial wellbeing between 2020 and 2024 (%)

	Worsened (22.3)	Constant (59.0)	Improved (18.7)	Total
<i>Sex</i>				
Females	24.1	57.0	18.9	100.0
Males	20.8	61.3	18.0	100.0
<i>Age group</i>				
15–24	27.5	47.4	25.1	100.0
25–34	31.9	48.4	19.7	100.0
35–44	26.3	57.3	16.4	100.0
45–54	21.0	62.7	16.4	100.0
55–64	17.4	64.0	18.6	100.0
65 and over	16.3	65.4	18.3	100.0
<i>Labour force status</i>				
Unemployed	29.1	57.8	13.2	100.0
Employed	23.3	57.9	18.8	100.0
Not in the labour force	20.3	61.4	18.3	100.0
<i>Household income quintile</i>				
Bottom quintile	23.6	58.3	18.1	100.0
Second quintile	26.4	54.3	19.3	100.0
Middle quintile	23.6	59.3	17.1	100.0
Fourth quintile	21.1	59.6	19.3	100.0
Top quintile	17.9	63.5	18.6	100.0
<i>Household type</i>				
Couple without children	17.9	63.7	18.5	100.0
Couple with children	23.3	59.3	17.5	100.0
Single-parent household	28.4	50.0	21.7	100.0
Other household type	25.0	56.0	19.0	100.0
<i>Housing tenure type</i>				
Private rental	28.1	52.0	20.0	100.0
Social housing	27.6	46.1	26.3	100.0
Owner with mortgage	23.5	59.2	17.3	100.0
Owner outright	17.9	64.0	18.2	100.0
First Nations	32.7	45.8	21.6	100.0
<i>Immigrant status</i>				
Australian-born	23.9	57.2	19.0	100.0
Immigrant, main English-speaking countries	19.8	63.3	16.8	100.0
Immigrant, other countries	18.6	64.0	17.4	100.0

Notes: Cells may not add up to row totals due to rounding. For this analysis, financial wellbeing 'worsened' if a person's score declined by more than 10 points, 'stayed the same' if a person's score changed (increased or decreased) by less than 10 points, and 'improved' if a person's score increased by more than 10 points.

Chapter 11

Housing affordability and adequacy



Housing affordability and adequacy

Kyle Peyton

Key findings

- Housing costs surged to record highs in mainland capital cities, with 36% of private renters and 30% of mortgage holders spending over 30% of disposable income on housing in 2024.
- Homeowners experienced significant improvements in housing adequacy over the last two decades, but nearly 20% of social housing tenants reported inadequate housing in 2024.
- Half of young adults aged 18 to 29 were living with parents in 2024, up from 39% in 2001, with the largest increases among women and those aged 18 to 21.
- Two-thirds of young adults who leave the parental home rent privately, and housing stress among those living in mainland capital cities rose from 18% in 2001 to 25% in 2024.
- Young renters report higher rates of housing inadequacy and lower satisfaction than those who remain with parents or enter homeownership.

Housing costs represent one of the largest expenditures for Australian households. This chapter examines trends in housing affordability and housing adequacy using data from the HILDA Survey covering the period 2001 to 2024. This chapter is organised around three themes. The first examines trends in housing costs and affordability among mortgage holders and private renters, with attention to regional variation and differences across mainland capital cities. The second examines whether Australians' housing meets their needs, and how self-reported adequacy varies by tenure, region and household characteristics. The third focuses on young adults, documenting the rising share living with parents, the housing circumstances of those who leave the parental home, and the affordability and adequacy challenges they face.

Trends in housing costs and affordability

Box 11.1: Classification of regions

The analyses in this chapter use a three-region classification, based on the Australian Bureau of Statistics' (ABS) Australian Statistical Geography Standard (ASGS) Edition 3 (2021) described in Box 2.10, page 24. The categories used here are defined as follows.

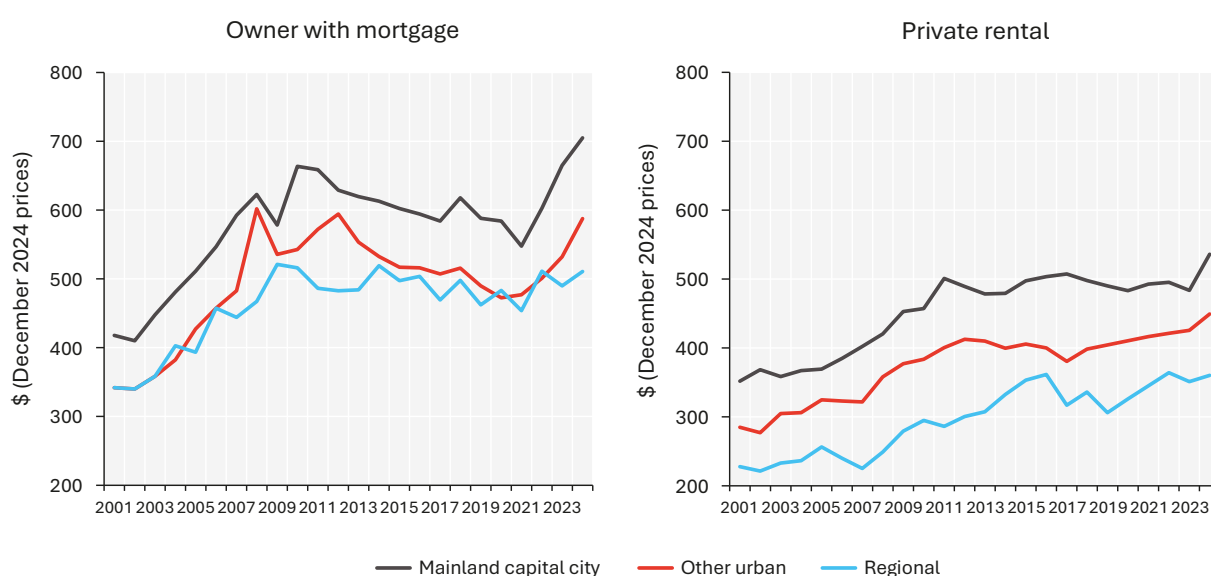
- Mainland capital cities. Sydney, Melbourne, Brisbane, Perth and Adelaide. These are defined using the ABS Greater Capital City Statistical Area (GCCSA) classification, which delineates a coherent capital-city geography for each.
- Other urban areas. All other Australian urban centres with populations of 1,000 or more. This includes Hobart, Darwin and Canberra, as well as larger urban centres such as Newcastle, the Gold Coast and Geelong.
- Regional areas. Non-urban areas, comprising small population clusters of fewer than 1,000 people and all rural and remote areas (the ASGS 'Bounded Locality' and 'Rural Balance' categories).

Figure 11.1 presents median weekly housing costs for homeowners with a mortgage and private renters, separately by region, from 2001 to 2024 (see Box 11.1 for region classifications). Housing costs are measured as weekly mortgage payments (principal plus interest) for homeowners with a mortgage and weekly rental payments for renters, with all figures expressed in December 2024 prices. The HILDA Survey began collecting other recurring housing costs (e.g., council rates, building insurance, utilities, maintenance) only in recent waves, and these are not included in the cost measures reported here. Social housing tenants face particularly severe affordability challenges (see Chapter 8), but small sample sizes preclude detailed disaggregation by region for this group.

For mortgage holders in mainland capital cities, median weekly costs rose from \$418 in 2001 to \$623 in 2008, declined gradually through the 2010s, fell sharply to \$548 in 2021 as interest rates reached historic lows, then surged to \$705 in 2024—an increase of \$157 (29%) in just three years. Mortgage costs in other urban and regional areas followed similar patterns, though at lower levels.

Private rental costs show a different trajectory. In mainland capital cities, median weekly rent rose rapidly from \$352 in 2001 to \$501 in 2011, was broadly stable through the 2010s, and has risen sharply since 2021 to reach \$536 in 2024—an overall increase of 52% in real terms. Rental costs in regional areas have also risen substantially over the period (from \$228 in 2001 to \$360 in 2024, an increase of 58%), though with more year-to-year fluctuation.

Figure 11.1: Median weekly housing costs, by region



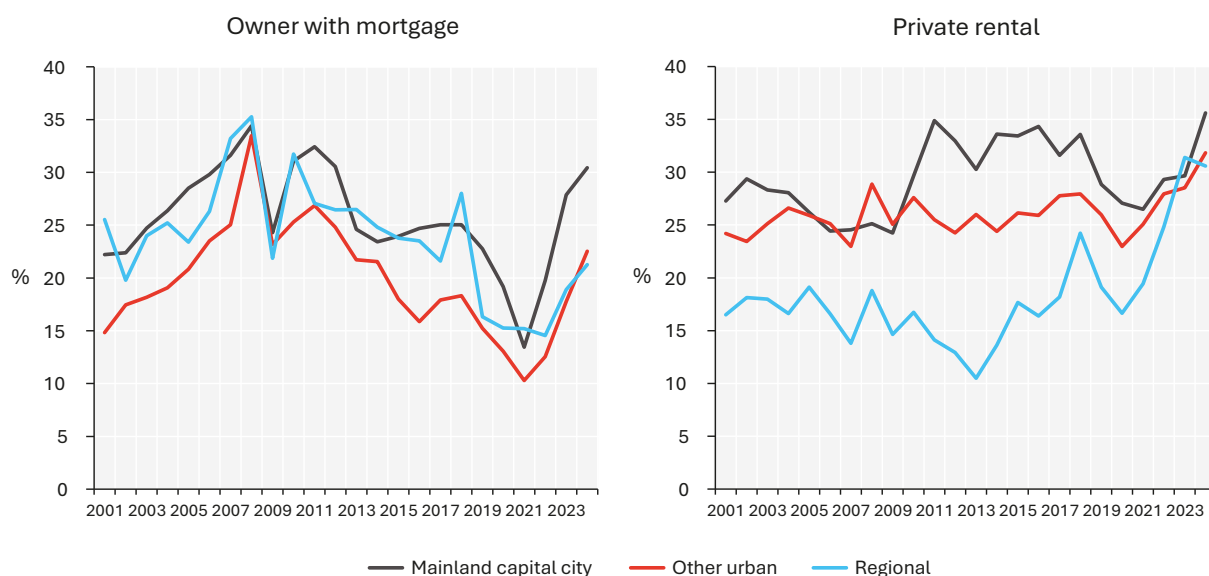
Note: Median weekly cost is the weekly mortgage payment for owners with a mortgage and the weekly rental payment for private renters, expressed in December 2024 prices.

These increases in housing costs have not been matched by growth in household incomes. Real median household disposable income declined by 4.3% between 2021 and 2023 and remained 3.3% below its 2021 level in 2024 (see Chapter 2, page 19). The combination of rapidly rising housing costs and stagnant incomes has placed increasing pressure on household budgets.

Figure 11.2 shows the proportion of mortgage holders and private renters spending more than 30% of their disposable (after-tax) household income on housing. This is a population-wide measure of high housing-cost burden, capturing all households regardless of their position in the income distribution. A separate measure, housing stress, is used later in this section to identify lower-income households facing high housing costs relative to their limited capacity to absorb them.

Among mortgage holders in mainland capital cities, this proportion peaked at 34% in 2008 during the Global Financial Crisis, declined to 13% in 2021 as interest rates fell, then rose sharply to 30% in 2024. For private renters in mainland capital cities, the proportion has trended upward over the period from 27% in 2001 to 36% in 2024—the highest level in the series.

Figure 11.2: Proportion of people spending over 30% of disposable income on housing, by region

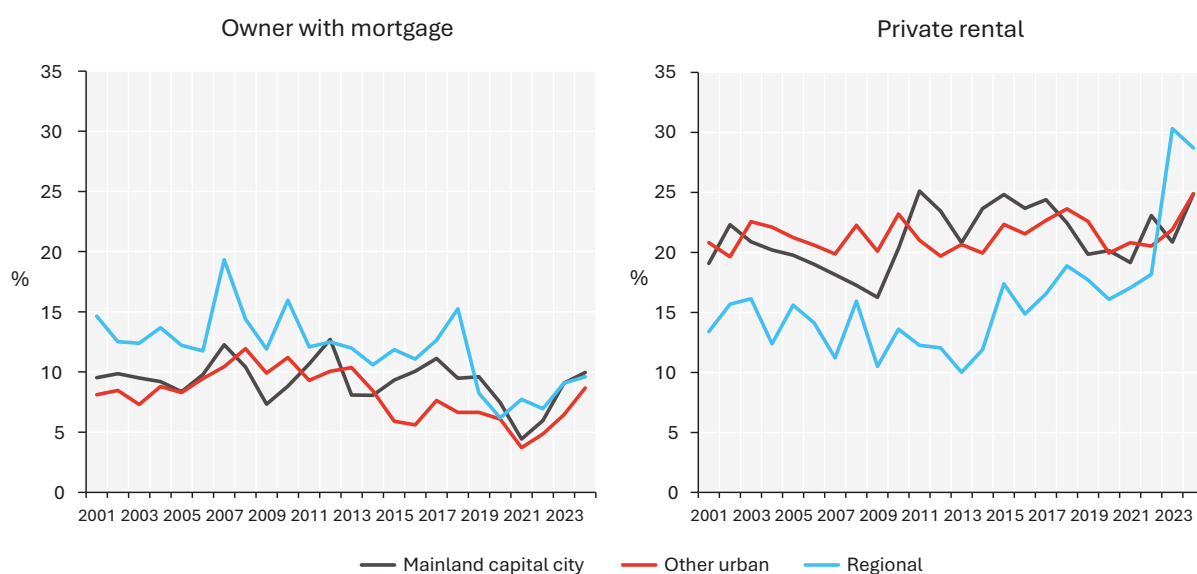


Note: Persons spending over 30% of disposable household income on housing are all those spending over 30% of disposable household income on housing, regardless of their position in the income distribution.

Figure 11.3 narrows attention to lower-income households. Higher-income households may spend more of their income on housing by choice—paying for size, quality or location—and for them this expenditure does not necessarily constitute financial strain. For lower-income households with limited capacity to absorb high housing costs, the same expenditure typically crowds out spending on other essentials and is taken as a marker of housing stress.

This chapter adopts the standard '30–40 rule' throughout: a household is in housing stress if housing costs exceed 30% of disposable household income and the household is in the bottom 40% of the equivalised disposable household income distribution. Equivalisation adjusts household income for household size and composition, placing households of different sizes on a comparable basis when ranking by income. The same measure is used in Chapter 8 of this report (see Box 8.4, page 111), which discusses alternative measures and the rationale for using disposable rather than gross income.

Figure 11.3: Proportion of people experiencing housing stress, by region



Note: Persons experiencing housing stress are those spending over 30% of disposable household income on housing, and whose household income is in the bottom 40% of the equivalised disposable household income distribution.

Figure 11.3 shows substantial regional variation in housing stress. Among low-income mortgage holders, housing stress fluctuated considerably over 2001 to 2019, ranging from 6% to 13% in mainland capital cities and other urban areas, and from 8% to 19% in regional areas. Housing stress rates fell to historic lows during the period of low interest rates—reaching 4.4% in mainland capital cities in 2021—before rebounding to around 9% to 10% across all regions by 2024. The picture is more concerning for low-income persons in the private rental market. In 2024, housing stress rates reached 25% for private renters in mainland capital cities, 25% in other urban areas and 29% in regional areas.

Table 11.1 examines housing costs and affordability across the five mainland capital cities in 2024. Sydney stands out on every measure. Median weekly mortgage payments are \$822 in Sydney compared with \$511 in Adelaide, and median weekly rents are \$613 compared with \$459. Sydney also has the highest share of mortgage holders spending more than 30% of disposable household income on housing (41.8%) and the highest rate of housing stress among private renters (31%). The cost ranking does not translate directly into an affordability ranking, however. Mortgage holders in Brisbane and Adelaide report relatively low rates of housing stress, while renters in Brisbane experienced the second-highest rate of housing stress (26.2%) among the mainland capitals.



Table 11.1: Housing costs and affordability by mainland capital city, 2024

	Median weekly cost (\$, December 2024 prices)	Percentage spending over 30% of disposable income	Percentage experiencing housing stress
Owner with mortgage			
Sydney	822	41.8	11.2
Melbourne	752	32.2	11.7
Brisbane	658	18.4	4.4*
Perth	611	24.4	10.3
Adelaide	511	16.7	9.7*
All mainland capital cities	705	30.4	10.0
Private rental			
Sydney	613	44.9	31.0
Melbourne	511	28.9	20.5
Brisbane	531	38.2	26.2
Perth	526	25.3	20.2
Adelaide	459	25.4	15.9
All mainland capital cities	536	35.6	24.9

Notes: Median weekly cost is the weekly mortgage payment for owners with a mortgage and the weekly rental payment for private renters, expressed in December 2024 prices. Persons spending over 30% of disposable household income on housing are all those spending over 30% of disposable household income on housing, regardless of their position in the income distribution. Persons experiencing housing stress are those spending over 30% of disposable household income on housing, and whose household income is in the bottom 40% of the equivalised disposable household income distribution. * Estimate not reliable.

Housing adequacy and suitability

The preceding analysis focused on housing affordability. A related dimension is housing adequacy—whether housing meets the needs of its occupants. The HILDA Survey includes several measures of housing adequacy (see Box 11.2). In this chapter, overall housing adequacy is measured using responses to item (g) in Box 11.2, which asks respondents how adequate their housing is for their needs in general. Item (g) functions as an omnibus measure of perceived housing adequacy, drawing on the respondent's overall assessment across the specific dimensions covered in items (a) to (f). The disaggregated picture across these specific dimensions is reported in Table 11.2 and shows broadly consistent patterns: in particular, the same tenure gradient—homeowners reporting the highest adequacy and social housing tenants the lowest—is evident across the dwelling-characteristic items.

Nationally, most Australians report that their housing adequately meets their needs in general. In 2024, 45% rated their overall housing as adequate, while 50% rated it as more than adequate. Only 5% reported less than adequate housing overall. However, this broadly positive national assessment masks substantial variation by tenure type, region, and other demographic characteristics.

Box 11.2: Measures of housing adequacy

To measure housing adequacy, the self-completion questionnaire asked respondents: *How adequate is your housing for your current needs, with respect to ...* followed by seven items:

- a. Living space
- b. Number of bedrooms
- c. Comfort (e.g., light, temperature, dampness)
- d. Distance from public transport
- e. Access to services normally used
- f. Access to outdoor recreation space (e.g., backyard, parks, beaches)
- g. Your housing needs in general

For each item, the response options are 'Much less than adequate', 'Less than adequate', 'Adequate', 'More than adequate', and 'Much more than adequate', coded 1 to 5. All items except (f) were also asked in Waves 1 and 2 (2001 and 2002). Item (f) was added for the first time in Wave 24 (2024). In this chapter, the five response options are collapsed into three: 'Less than adequate' (combining the two lowest categories), 'Adequate', and 'More than adequate' (combining the two highest categories).



Figure 11.4 compares overall housing adequacy ratings among homeowners, private renters, and social housing tenants in 2002 and 2024. In both years, homeowners reported the highest adequacy, followed by private renters, then social housing residents. However, these groups have diverged over time. In 2024, 56.2% of homeowners reported more than adequate housing, up from 47.5% in 2002. Only 3.3% reported less than adequate housing, down from 4.3%. Private renters also showed a modest upward shift, with 34.1% reporting more than adequate housing in 2024 compared to 28.5% in 2002. Around 10% of people in private rentals reported less than adequate housing in both years. Most concerning, social housing tenants reported substantially worse housing adequacy in 2024. Among social housing tenants, 18.7% reported less than adequate housing, up from 13.6% in 2002. Only 54.8% reported adequate housing, down from 69.1%.

Figure 11.4: Distribution of overall housing adequacy ratings

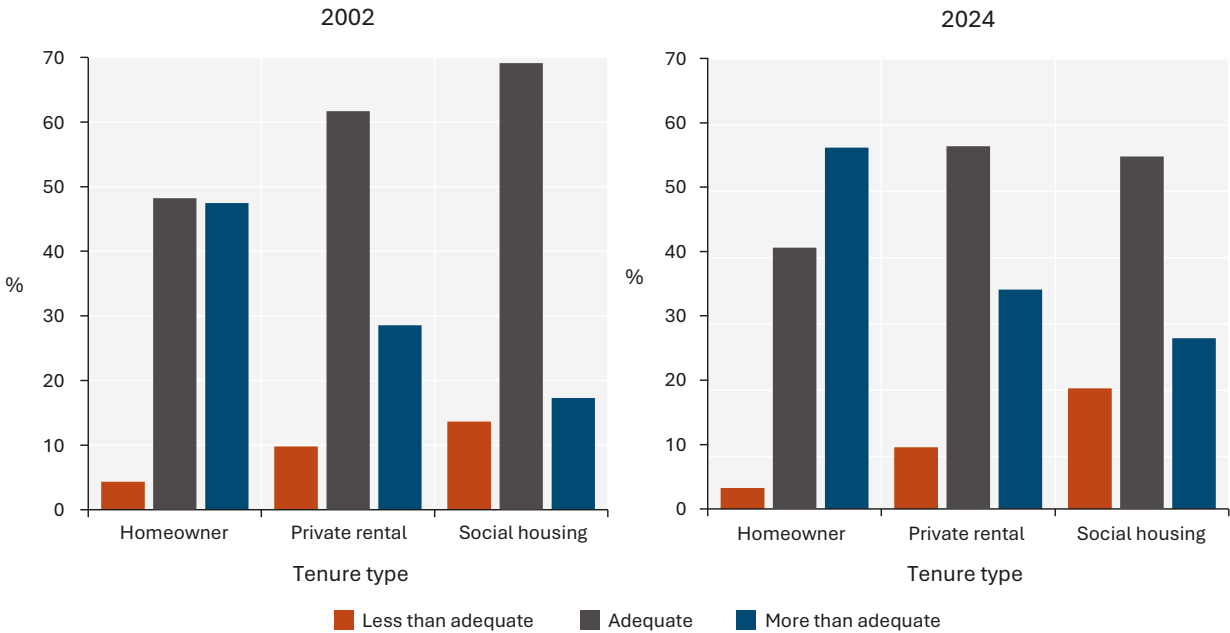


Table 11.2 reports rates of inadequacy on items (a) to (f) in Box 11.2, grouped into dwelling characteristics (living space, bedrooms, comfort) and access to amenities (transport, services, outdoor recreation). The most striking pattern is the dramatic regional inequality in access to amenities (see Box 11.1 for region classifications). Among regional residents, 56.3% report inadequate access to public transport, compared with 17.3% in other urban areas and 10% in mainland capital cities. Similarly, 28.7% of regional residents report inadequate access to services, nearly five times the rate in mainland capital cities (5.7%). Disparities in dwelling quality are comparatively small, with regional residents reporting slightly lower rates of inadequacy in living space, number of bedrooms and comfort than their urban counterparts.

Social housing tenants are most likely to report inadequacy across nearly all dimensions. For dwelling characteristics, around one in five social housing tenants report inadequate living space, bedrooms and comfort—rates three to four times higher than among homeowners. Private renters fall between these extremes, with rates roughly double those of homeowners. For access to amenities, social housing tenants again report the highest inadequacy across all three dimensions. Homeowners and private renters report similar rates for services access. However, homeowners are more likely than renters to report inadequate access to public transport, reflecting the concentration of homeowners in areas with more limited public transport.

Across family types, those with children report the highest rates of inadequate dwelling characteristics. Among single parents, 13.1% report inadequate living space, 14.8% report inadequate bedrooms and 15.6% report inadequate comfort. Among couples with dependent children, 10.5% report inadequate living space and 12.9% report inadequate bedrooms, but only 7.2% report inadequate comfort. In contrast, older couples are least likely to report inadequate dwelling quality across the three dimensions, and they also report the lowest rates of inadequate outdoor recreation access. The clearest exceptions are public transport, where all three older family-type categories report the highest rates of inadequacy, and services, where single older men and women in particular report the highest rates.

Table 11.2: Persons reporting inadequate dwelling characteristics and access to amenities, 2024 (%)

	Dwelling characteristics			Access to amenities		
	Living space	Number of bedrooms	Comfort	Public transport	Services	Outdoor recreation
Region						
Mainland capital city	9.5	9.6	8.4	10.0	5.7	6.7
Other urban	7.6	8.5	7.7	17.3	6.9	5.5
Regional	6.7	7.6	6.0	56.3	28.7	9.5
Housing tenure type						
Homeowner	6.1	7.0	4.8	17.2	8.1	5.4
Private rental	14.4	13.6	15.3	12.8	7.6	9.1
Social housing	22.7	21.4	22.6	16.9	12.8	16.0
Family type						
Non-elderly couple	8.3	6.7	7.5	15.7	7.7	6.2
Couple with dependent children	10.5	12.9	7.2	15.6	7.2	6.4
Single parent	13.1	14.8	15.6	15.4	10.9	8.0
Single non-elderly male	10.0	8.9	10.6	12.5	7.1	7.5
Single non-elderly female	9.3	7.0	12.3	16.9	8.1	8.1
Older couple	2.4	3.6	2.7	19.3	9.1	4.1
Single older male	4.4*	6.8	5.9	19.4	11.8	6.4
Single older female	6.6*	8.3	5.1	21.0	12.0	9.7

Notes: Inadequate refers to persons rating their housing as 'less than adequate' or 'much less than adequate' on each dimension. Estimates for homeowners includes both outright owners and mortgage holders. * Estimate not reliable.

The preceding analysis relies on respondents' subjective assessments of their housing. An alternative approach uses objective measures of housing suitability based on dwelling characteristics and household composition. The Canadian National Occupancy Standard (CNOS) provides an objective measure of whether a dwelling has sufficient bedrooms for its occupants based on household composition (see Box 11.3). In 2024, only 4.9% of persons lived in dwellings classified as overcrowded (requiring one or more additional bedrooms), while 19.5% lived in dwellings with exactly enough bedrooms and 75.6% had at least one spare bedroom. Australian housing, by this measure, is predominantly underutilised rather than overcrowded.

Box 11.3: Housing suitability

The Canadian National Occupancy Standard (CNOS) is the standard measure of housing suitability used by the Australian Bureau of Statistics (ABS) in Census reporting and by the Australian Institute of Health and Welfare for housing assistance statistics. The standard assesses whether a dwelling has sufficient bedrooms for its occupants based on household composition. Under the CNOS, bedroom requirements are determined as follows.

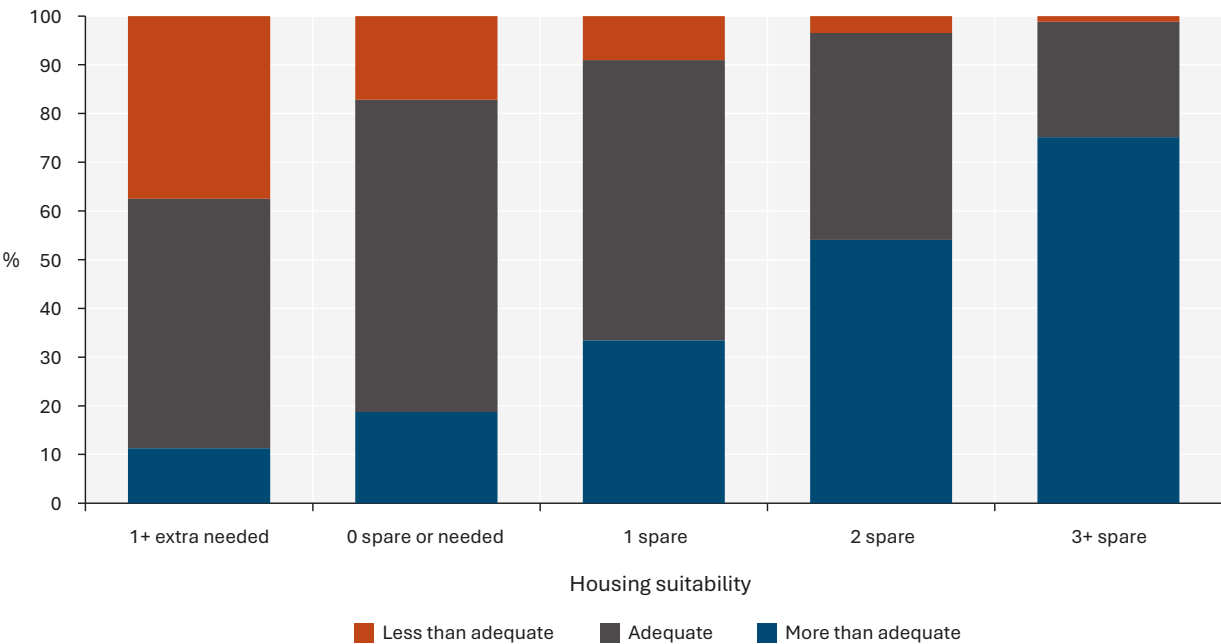
- Couples living in the same household share one bedroom.
- Other household members aged 18 and over each require a separate bedroom.
- Children of the same sex aged under 18 may share a bedroom, with a maximum of two children per bedroom.
- Children of opposite sexes may share a bedroom only if both are under 5 years of age.
- A person living alone may occupy a bedsitter (a dwelling with no separate bedroom).

Housing suitability is determined by comparing the number of bedrooms required under these rules to the actual number of bedrooms in the dwelling.

Figure 11.5 compares the CNOS suitability measure with respondents' own ratings of their bedroom adequacy. The relationship between objective suitability and subjective adequacy is clear but weaker than might be expected. Among persons in overcrowded dwellings, 38% report their number of bedrooms as less than adequate. However, the majority (51%) rate their bedrooms as simply adequate and 11% consider them more than adequate. This disconnect has policy implications: objective crowding measures identify households that may warrant attention, but they do not reliably predict who actually experiences their housing as inadequate. Assessments of housing need based solely on housing suitability metrics may therefore miss households that experience inadequacy despite meeting the standard, while flagging others that do not perceive a problem.

As housing becomes more spacious relative to household needs, subjective assessments improve markedly. Among those with one spare bedroom, only 9% report inadequate bedrooms; this falls to 3.5% for those with two spare bedrooms and just 1% for those with three or more. The proportion rating their bedrooms as more than adequate rises correspondingly, from 11% among those living in overcrowded dwellings to 75% among those living in dwellings with three or more spare bedrooms.

Figure 11.5: Distribution of bedroom adequacy ratings, 2024 (%)



Notes: Housing suitability categories reflect bedrooms relative to household requirements under the CNOS. Population distribution: 1+ extra needed (4.9%), 0 spare (19.5%), 1 spare (33%), 2 spare (28%), 3+ spare (14.6%).

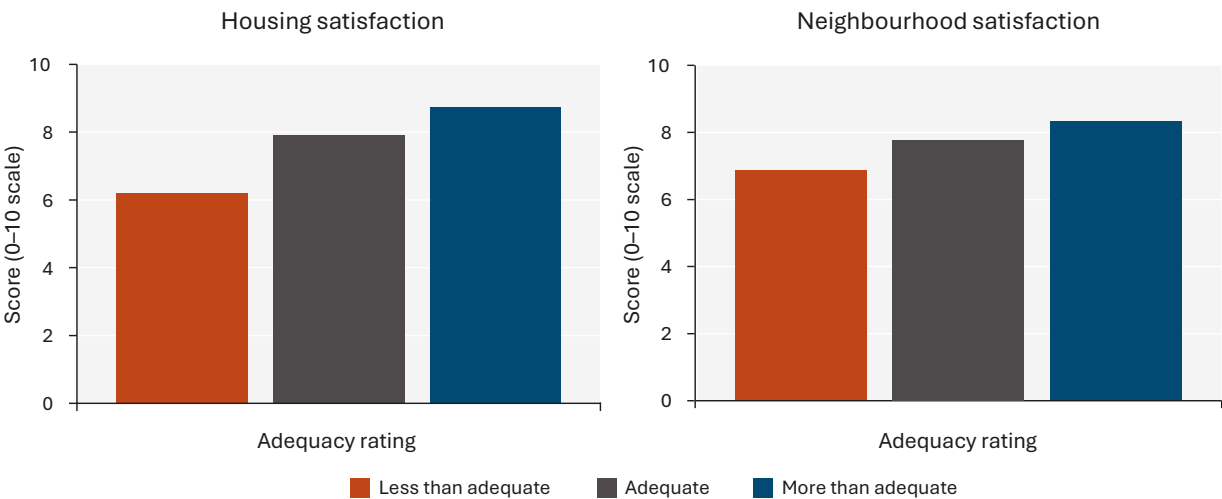


Housing adequacy and satisfaction

Since 2001, the HILDA Survey has measured satisfaction with one’s home and neighbourhood. Respondents rate their satisfaction on a scale from 0 (completely dissatisfied) to 10 (completely satisfied). Previous analyses have identified housing tenure, region of residence and perceptions of neighbourhood quality as among the strongest predictors of both measures. Homeowners consistently report higher satisfaction than renters, and those in regional areas report higher satisfaction than those in mainland capital cities (see Wilkins et al., 2024, Chapter 8).

Figure 11.6 shows how housing and neighbourhood satisfaction vary with perceived housing adequacy. The relationship is clear: those who rate their housing as less than adequate report substantially lower levels of both housing satisfaction (mean of 6.2) and neighbourhood satisfaction (mean of 6.9). By contrast, those who rate their housing as more than adequate report mean housing satisfaction of 8.7 and mean neighbourhood satisfaction of 8.3. The gradient is steeper for housing satisfaction, with a difference of approximately 2.5 scale points between those reporting less than adequate and more than adequate housing, compared to a difference of 1.4 scale points for neighbourhood satisfaction.

Figure 11.6: Mean housing and neighbourhood satisfaction, 2024



Note: Population distribution: Less than adequate (5.3%), Adequate (45%), More than adequate (49.7%).

However, these measures are also correlated with other factors—for example, those living in relatively disadvantaged areas are less satisfied with their housing situation and more likely to live in homes that are inadequate for their needs. To better understand the factors associated with housing and neighbourhood satisfaction, Table 11.3 presents results from regression models that account for multiple characteristics simultaneously.

Compared to those who rate their housing as less than adequate, individuals who rate their housing as adequate report housing satisfaction 1.47 scale points higher and neighbourhood satisfaction 0.73 scale points higher. Those who rate their housing as more than adequate report even higher satisfaction levels—2.17 scale points higher for housing satisfaction and 1.19 scale points higher for neighbourhood satisfaction. Overall housing adequacy shows a stronger association with housing satisfaction than with neighbourhood satisfaction.

Older persons report significantly higher levels of both housing and neighbourhood satisfaction than younger couples without children. Single parents report significantly lower satisfaction on both measures—0.12 scale points lower for housing satisfaction and 0.23 scale points lower for neighbourhood satisfaction. Single non-elderly males and females also report lower neighbourhood satisfaction than couples without children, though their housing satisfaction does not differ significantly.

Table 11.3: Factors associated with housing and neighbourhood satisfaction, 2024

	Housing satisfaction	Neighbourhood satisfaction
<i>Overall housing adequacy (Reference category: Less than adequate)</i>		
Adequate	1.47	0.73
More than adequate	2.17	1.19
<i>Family type (Reference category: Couple, no children)</i>		
Couple with dependent children	-0.08	<i>ns</i>
Single parent	-0.12	-0.23
Single non-elderly male	<i>ns</i>	-0.16
Single non-elderly female	-0.08	-0.16
Older couple	0.29	0.34
Single older male	0.24	0.18
Single older female	0.37	0.23
First Nations	0.17	-0.15
<i>Immigrant status (Reference category: Australian-born)</i>		
Immigrant, main English-speaking countries	<i>ns</i>	0.11
Immigrant, other countries	0.33	<i>ns</i>
<i>Housing suitability (Reference category: 0 spare bedrooms)</i>		
1+ extra bedrooms needed	<i>ns</i>	<i>ns</i>
1 spare bedroom	0.11	-0.09
2 spare bedrooms	0.07	-0.18
3+ spare bedrooms	<i>ns</i>	-0.19
<i>Housing tenure type (Reference category: Homeowner)</i>		
Private rental	-0.35	-0.10
Social housing	-0.29	-0.37
<i>Dwelling type (Reference category: Separate house)</i>		
Semi-detached house	-0.08	-0.14
Flat, unit, apartment	-0.24	-0.10
<i>Region (Reference category: Regional)</i>		
Sydney	-0.16	-0.51
Melbourne	<i>ns</i>	-0.51
Brisbane	<i>ns</i>	-0.39
Perth	-0.13	-0.47
Adelaide	-0.15	-0.53
Other urban	<i>ns</i>	-0.26
<i>Socioeconomic index for area (Reference category: Bottom quintile)</i>		
Second quintile	0.13	0.32
Third quintile	0.21	0.48
Fourth quintile	0.23	0.67
Fifth quintile	0.28	0.83
Spending over 30% of disposable income on housing	<i>ns</i>	0.08
Experiencing housing stress	-0.15	<i>ns</i>
Number of observations	14,662	14,636

Notes: Estimates are from linear regression models. First Nations status and immigrant status are reported separately but estimated from a single four-category classification, with non-Indigenous Australian-born as the reference category for both. Persons spending over 30% of disposable household income on housing are all those spending over 30% of disposable household income on housing, regardless of their position in the income distribution. Persons experiencing housing stress are those spending over 30% of disposable household income on housing, and whose household income is in the bottom 40% of the equivalised disposable household income distribution. *ns* indicates the estimate is not significantly different from 0 at the 10% level.

Compared to non-Indigenous Australian-born individuals, First Nations Australians report higher housing satisfaction (0.17 scale points) but lower neighbourhood satisfaction (−0.15 scale points).

Immigrants from non-English-speaking countries report higher housing satisfaction (0.33 scale points) than non-Indigenous Australian-born individuals but show no significant difference in neighbourhood satisfaction. Immigrants from main English-speaking countries do not differ significantly from the reference category on housing satisfaction and report modestly higher neighbourhood satisfaction (0.11 scale points).

Housing suitability, as measured by spare bedrooms, shows divergent associations with the two outcomes. Having one or two spare bedrooms is associated with modestly higher housing satisfaction. However, having spare bedrooms is associated with lower neighbourhood satisfaction. This pattern persists even after controlling for region and may reflect other unmeasured differences in the types of neighbourhoods where larger dwellings are located. Housing tenure remains a significant predictor of satisfaction even after accounting for perceived adequacy. Housing and neighbourhood satisfaction are significantly lower among persons living in private rentals and social housing. Those living in flats also report lower housing satisfaction and neighbourhood satisfaction than those in separate houses.

Region of residence is a much stronger predictor of neighbourhood satisfaction than housing satisfaction. Residents of all capital cities report significantly lower neighbourhood satisfaction than those in regional areas, with differences ranging from 0.26 scale points (other urban) to 0.53 scale points (Adelaide). By contrast, only Sydney, Perth and Adelaide are associated with significantly lower housing satisfaction, and the magnitudes are smaller. The Socioeconomic Index for Areas (SEIFA) also shows a clear positive gradient for both outcomes, but the association is substantially stronger for neighbourhood satisfaction. Individuals in the most advantaged areas (top SEIFA quintile) report housing satisfaction 0.28 scale points higher and neighbourhood satisfaction 0.83 scale points higher than those in the most disadvantaged areas.

Finally, housing affordability measures reveal distinct patterns. Among those in the top 60% of the equivalised disposable household income distribution, spending more than 30% on housing costs is associated with neighbourhood satisfaction, which may reflect choices to pay more for location. However, the association differs for lower-income households. Among those in the bottom 40% of the equivalised disposable household income distribution, spending more than 30% of disposable household income on housing is commonly referred to as housing stress. For this group, housing satisfaction is 0.15 scale points lower than for higher-income households that also spend more than 30% on housing. No significant difference is observed for neighbourhood satisfaction.

Overall, perceived housing adequacy is by far the strongest predictor of both housing and neighbourhood satisfaction. The difference between rating one's housing as 'less than adequate' versus 'more than adequate' is associated with a 2.17-point difference in housing satisfaction—larger than any other factor in the model. By comparison, the difference between living in a top-quintile versus bottom-quintile SEIFA area is associated with a 0.28-point difference in housing satisfaction.



Young adults living with parents

Previous analysis using HILDA data has documented a substantial increase in the proportion of young adults living with their parents over the past two decades (Wilkins et al., 2023, Chapter 2). This growth appears to have occurred primarily between 2001 and the mid-2010s, with the trend remaining relatively stable since then. Factors associated with living in the parental home include age, location, employment status, income and partnership status. Young adults in major urban areas are less likely to live with parents, as are those with higher personal incomes or who are employed full-time. Being partnered or having a dependent child substantially reduces the likelihood of living with parents.

Table 11.4 compares the living arrangements of three different cohorts of young adults. The time points—2001, 2012 and 2024—are spaced approximately 11 to 12 years apart, meaning each snapshot captures a different birth cohort: those born 1972 to 1983, 1983 to 1994 and 1995 to 2006 respectively. This allows us to examine how successive cohorts of young adults have fared at the same life stage. The results show that each successive cohort is more likely to be living with parents than the one before.

Among young adults aged 18 to 29, 39.4% of the 1972 to 1983 cohort were living with parents in 2001. This rose to 49.9% for the 1995 to 2006 cohort in 2024, an increase of 10.5 percentage points. This shift is evident across all age groups but is largest among younger age groups. Among 18- to 21-year-olds, 69.3% of the earliest cohort lived with parents, compared to 85.4% of the most recent cohort—a difference of 16.1 percentage points. Among 22- to 25-year-olds, the increase was 13.5 percentage points (from 34.7% to 48.2%). Among 26- to 29-year-olds, the increase was smaller at 5.5 percentage points (from 16.5% to 21.9%).

Table 11.4: Proportion of young adults living with parents, by sex and age group, 2001 to 2024 (%)

	2001	2012	2024	Change 2001–2024 (percentage points)
Men				
18–21	75.7	83.2	86.7	11.0
22–25	42.5	53.3	53.8	11.3
26–29	18.3	23.1	26.3	8.0
All 18–29	45.5	51.0	54.7	9.3
Women				
18–21	62.7	77.0	83.9	21.2
22–25	27.1	41.4	42.1	14.9
26–29	15.0	16.3	18.2	<i>ns</i>
All 18–29	33.6	42.6	45.1	11.5
People				
18–21	69.3	80.0	85.4	16.1
22–25	34.7	47.4	48.2	13.5
26–29	16.5	19.6	21.9	5.5
All 18–29	39.4	46.7	49.9	10.5

Notes: Living with parents refers to persons residing in a household where at least one parent is present. Changes are calculated as percentage-point differences between 2001 and 2024. *ns* indicates the estimate is not statistically different from 0 at the 10% level.

Men are more likely to live with their parents than women across all three groups. In 2024, 54.7% of young men lived with their parents compared to 45.1% of women. However, the gender gap has narrowed. In 2001, young men were 11.9 percentage points more likely than women to live with parents. By 2024, this gap had fallen to 9.6 percentage points. This narrowing reflects larger shifts among women. Among 18- to 21-year-olds, the proportion of women living with parents increased by 21.2 percentage points across cohorts (from 62.7% to 83.9%), compared to 11 percentage points for men (from 75.7% to 86.7%). A similar pattern is evident among 22- to 25-year-olds. For 26- to 29-year-olds, the change for women was not statistically significant, while men increased by 8 percentage points.

Characteristics of young adults by living arrangements

Table 11.5 compares the characteristics of young adults aged 18 to 29 who are living with their parents to those who are not living with their parents, across the same three cohorts (see Box 11.1 for region classifications used in this and subsequent tables). The two groups differ markedly in their educational status, and the differences have widened over time. In 2024, 36% of those living with parents were full-time students, compared to 17% of those who had left home, while 39% of those who had left home held a university degree, compared to 14% of those still living with parents. University attainment has risen in both groups across cohorts, reflecting the broader rise in tertiary attainment over this period (see Chapter 5, page 65). However, the rise has been substantially larger among those who have left home (from 24% in 2001 to 39% in 2024) than among those still living with parents (12% to 14%), so the educational gap between the two groups has approximately doubled.

Employment patterns also differ between the two groups in 2024 (see Box 2.11, page 26, for labour force status classifications). Those who have left home are much more likely to be employed full-time (58% versus 40%) and less likely to be unemployed (3.6% versus 6.6%) or out of the labour force (12.8% versus 15.5%).

Across cohorts, both groups show broadly similar trends: part-time employment rose by around 6 to 7 percentage points in each (from 31.9% to 38.4% among those living with parents; from 18.6% to 25.5% among those who have left home), while unemployment declined by about 3 to 4 percentage points in each (from 11% to 6.6% among those living with parents; from 6.6% to 3.6% among those who have left home). The share not in the labour force fell more substantially among those who have left home (from 19.1% in 2001 to 12.8% in 2024) than among those living with parents (17.3% to 15.5%).

Table 11.5: Characteristics of young adults, by living arrangement, 2001 to 2024 (%)

	Living with parents			Not living with parents		
	2001	2012	2024	2001	2012	2024
<i>Region</i>						
Mainland capital city	68.4	71.9	70.7	63.9	64.5	65.9
Other urban	22.8	21.3	20.7	28.6	29.7	29.2
Regional	8.8	6.8	8.6	7.5	5.8	4.9
<i>Labour force status</i>						
Employed full-time	39.8	36.6	39.6	55.7	55.2	58.1
Employed part-time	31.9	33.5	38.4	18.6	21.6	25.5
Unemployed	11.0	8.3	6.6	6.6	5.0	3.6
Not in labour force	17.3	21.5	15.5	19.1	18.2	12.8
<i>Education</i>						
University degree	11.7	12.2	14.4	23.9	33.5	39.0
Full-time student	31.2	38.7	35.9	14.9	15.7	17.2
First Nations	2.0	4.1	3.7	2.5	3.3	4.7
<i>Immigrant status</i>						
Australian-born	82.3	82.4	83.4	76.0	66.4	70.3
Immigrant, main English-speaking countries	4.3	3.5*	7.8*	7.9	7.7	4.9
Immigrant, other countries	13.4	14.0	8.8	16.1	25.9	24.7

Note: *Estimate not reliable.

The immigrant composition of young adults has also shifted, with immigrants from non-English speaking countries now comprising a larger share of those not living with their parents (24.7% in 2024, up from 16.1% in 2001).

The share of young adults who identify as First Nations Australians has risen modestly across both groups, from 2% to 3.7% among those living with parents, and from 2.5% to 4.7% among those not living with parents.

Family and housing situations among young adults not living with parents

We now turn to aspects of life that are specific to young adults not living with parents: the families they are forming, the housing tenure they have entered, and the affordability of that housing. These outcomes are not informative for young adults still living at home, whose family type and housing tenure reflect their parents' circumstances rather than their own. As Table 11.6 shows, the family composition of these young adults has shifted notably across cohorts.

The proportion who are part of a couple without children rose from 30.2% in 2001 to 40.6% in 2024, while the proportion who are part of a couple with children fell from 21.6% to 14.8%. Single parents also declined, from 6.5% to 2.6%. The proportion who are single has remained stable at around 42%. These patterns suggest that leaving the parental home increasingly requires pooling resources with a partner, and that young adults who do leave are delaying or forgoing parenthood.

Housing tenure has also shifted. Among young adults not living with their parents, the proportion who owned a home outright or with a mortgage fell from 31.3% in 2001 to 26.8% in 2024. Over the same period, the proportion renting privately rose from 59.1% to 65.6% and the proportion living in flats, units or apartments rose from 25.2% to 32.6%.

Table 11.6: Family and housing situations among young adults not living with parents, 2001 to 2024 (%)

	2001	2012	2024	Change 2001-2024
Family type				
Couple without children	30.2	34.7	40.6	10.4
Couple with children	21.6	21.9	14.8	-6.7
Single parent	6.5	3.3	2.6	-3.9
Single male	22.7	22.1	23.0	<i>ns</i>
Single female	19.0	18.0	19.0	<i>ns</i>
Housing tenure type				
Outright owner	5.0	4.3	2.6	-2.5
Owner with mortgage	26.3	23.6	24.2	<i>ns</i>
Private rental	59.1	64.9	65.6	6.5
Social housing	4.3	2.4	2.7	-1.6
Other	5.3	4.9	4.9	<i>ns</i>
Dwelling type				
Separate house	59.5	57.0	56.2	<i>ns</i>
Semi-detached house	15.4	9.2	11.2	-4.1
Flat, unit, apartment	25.2	33.8	32.6	7.4

Notes: 'Other' housing tenure type includes those living rent-free. *ns* indicates the estimate is not statistically different from 0 at the 10% level.

Table 11.7 examines housing costs and affordability for the two main tenure types: mortgage holders and private renters. Due to small sample sizes in regional areas (as shown in Table 11.5, only 4.9% of young adults not living with parents lived in regional areas in 2024), estimates are presented for mainland capital cities and the rest of Australia only (the latter combining the 'Other urban' and 'Regional' categories defined in Box 11.1).

Housing costs have risen substantially in real terms across successive cohorts of young adults. Among mortgage holders in mainland capital cities, median weekly mortgage payments rose from \$437 for the 2001 cohort to \$705 for the 2024 cohort—an increase of \$268 (61%). Among private renters in mainland capital cities, median weekly rents rose from \$350 to \$511 (46%). Cost increases were even larger in percentage terms outside mainland capitals, with rents rising from \$257 to \$439 (71%).

For young mortgage holders, the proportion spending more than 30% of disposable household income on housing peaked in 2012—reaching 46.5% in mainland capital cities—before declining to 36.1% in 2024. The proportion in housing stress remained relatively stable over the period, ranging from 8.6% to 10.7% in mainland capital cities. Both patterns are consistent with selection: the share of young mortgage holders in housing stress has not risen despite substantial real cost increases, suggesting mortgage entry has become increasingly restricted to those with higher earnings, substantial savings or access to family wealth.

For the majority of young adults who rent privately, the picture is more concerning. The proportion of young adults spending more than 30% of disposable income on housing rose significantly between 2001 and 2024—from 25.8% to 39.5% in mainland capital cities, and from 26% to 32.8% elsewhere. Housing stress has also increased significantly. In mainland capital cities, 25.3% of young private renters are now in housing stress, up from 17.6% for the equivalent cohort in 2001.

Table 11.7: Housing costs and affordability among young adults not living with parents, by tenure type and region, 2001 to 2024

	2001	2012	2024	Change 2001–2024
Mortgage holders				
<i>Median weekly cost (\$, December 2024 prices)</i>				
Mainland capital city	437	699	705	268
Rest of Australia	376	634	622	246
<i>Percentage spending over 30% of disposable income</i>				
Mainland capital city	33.9	46.5	36.1	ns
Rest of Australia	21.0	26.5	31.2	10.1
<i>Percentage experiencing housing stress</i>				
Mainland capital city	8.6	10.7	9.9	ns
Rest of Australia	5.4*	9.9	7.8*	ns
Private renters				
<i>Median weekly cost (\$, December 2024 prices)</i>				
Mainland capital city	350	475	511	161
Rest of Australia	257	349	439	182
<i>Percentage spending over 30% of disposable income</i>				
Mainland capital city	25.8	36.9	39.5	13.6
Rest of Australia	26.0	26.1	32.8	6.8
<i>Percentage experiencing housing stress</i>				
Mainland capital city	17.6	29.1	25.3	7.7
Rest of Australia	21.8	21.9	27.1	ns

Notes: Median weekly cost is the weekly mortgage payment for owners with a mortgage and the weekly rental payment for private renters. Percentage spending over 30% of disposable income is the share of young adults paying more than 30% of disposable household income on housing, calculated across all young adults of the relevant tenure regardless of household income. Percentage experiencing housing stress restricts this further to young adults whose household income is in the bottom 40% of the equivalised disposable household income distribution. *Estimate not reliable. *ns* indicates the estimate is not statistically different from 0 at the 10% level.

These findings for young adults are consistent with broader patterns of declining homeownership and rising intergenerational wealth inequality in Australia. Each successive cohort of young adults who leave the parental home faces greater affordability pressures than the one before, and more young adults remain in the parental home for longer. Yet remaining in the parental home may come with its own costs, raising the question of whether young adults who leave end up in housing that better meets their needs despite the affordability challenges they face.

Housing adequacy among young adults by living arrangement

Figure 11.7 compares overall housing adequacy ratings (see Box 11.2) among young adults by living arrangement in 2001 and 2024. Young adults who live with their parents report higher levels of housing adequacy than those who do not, but this difference is largely driven by those living in private rentals. In 2024, 60% of young adults living with parents reported more than adequate housing, compared to 53% of homeowners. However, only 38% of young adults living in private rentals reported more than adequate housing, and 8% reported less than adequate housing. While adequacy ratings improved modestly across all three groups between 2001 and 2024, the gap between those living with parents and those not living with parents persists. Private renters—two-thirds of young adults not living with parents—report consistently lower housing adequacy than both homeowners and those living with parents.

Figure 11.7: Distribution of overall adequacy ratings among young adults

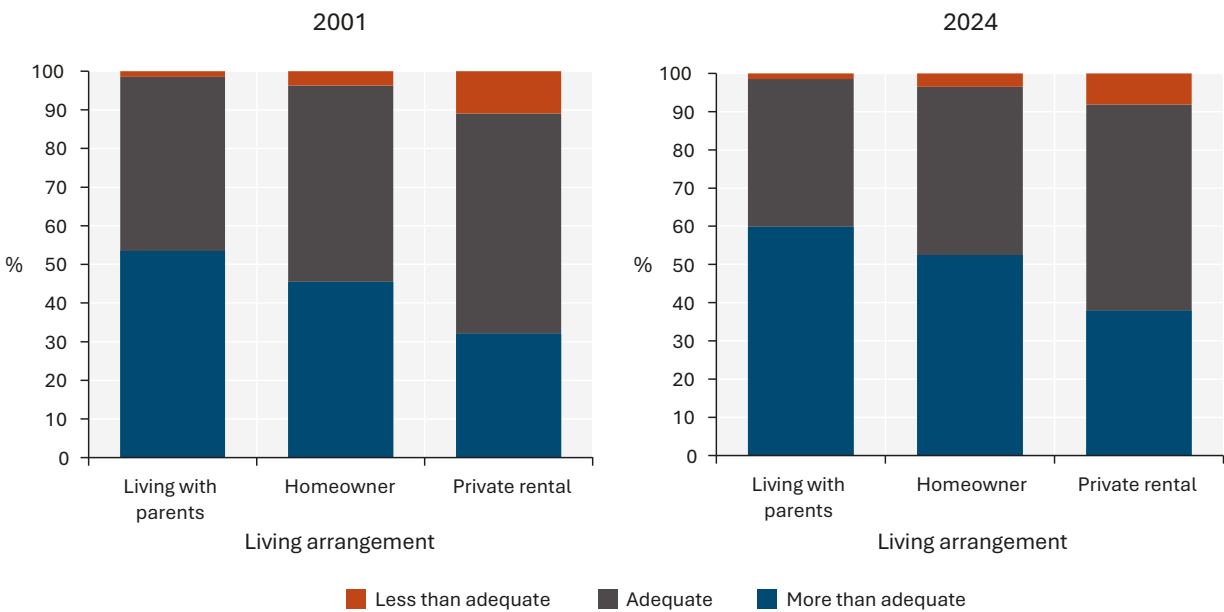


Table 11.8 examines specific dimensions of housing inadequacy and satisfaction among young adults by living arrangement in 2024. For dwelling characteristics, renters report substantially higher rates of inadequacy than homeowners and those still living with parents. Nearly one in five young renters (17.7%) report inadequate comfort, compared to 7.2% of homeowners and 3.8% of those living with their parents. Renters also report higher rates of inadequate living space and number of bedrooms.

Table 11.8: Housing inadequacy and satisfaction among young adults, by living arrangement, 2024

	Living with parents	Homeowner	Private rental
Inadequate dwelling characteristics (%)			
Living space	4.1	7.6*	12.9
Number of bedrooms	4.5*	9.2	10.3
Comfort	3.8	7.2	17.7
Inadequate access to amenities (%)			
Public transport	15.3	16.0	13.0
Services	5.6	7.4	6.8
Outdoor recreation	4.2	7.2	12.2
Average satisfaction levels (0–10)			
Housing	8.69	8.59	7.75
Neighbourhood	8.05	8.14	7.76

Note: *Estimate not reliable.

For access to amenities, the patterns are more mixed. Renters report significantly higher rates of inadequate access to outdoor recreation, but somewhat lower rates of inadequate transport access, likely reflecting their concentration in urban areas. Overall satisfaction ratings tell a consistent story. Young homeowners and those living with their parents report similar levels of housing and neighbourhood satisfaction, while renters score significantly lower on both measures. The gap is largest for housing satisfaction, consistent with the differences observed for dwelling quality.

Taken together, the findings for young adults paint a clear picture. Each successive cohort is more likely to remain in the parental home, and those who leave increasingly enter private rentals rather than homeownership. The two-thirds of young adults who have left home and rent privately face not only greater affordability pressures—with housing stress rising from 18% to 25% between 2001 and 2024—but also report poorer dwelling quality and lower housing satisfaction than those who remain with parents or enter homeownership. At the same time, the relative stability of affordability metrics among young mortgage holders likely reflects increasing selectivity into homeownership rather than improving conditions. As homeownership becomes less accessible, the quality and affordability of rentals will increasingly determine the housing outcomes of young Australians.



Chapter 12

Social media use and cybercrime victimisation



Social media use and cybercrime victimisation

Ferdi Botha and Kyle Peyton

Key findings

- Problematic social media use is more prevalent among young Australians, especially teenage girls, with around one in three aged 15 to 17 identified as at risk of problematic social media use.
- Higher levels of problematic social media use are associated with lower self-reported mental health scores, greater loneliness and lower life satisfaction for both females and males.
- The overall population prevalence of cybercrime victimisation is relatively low (11.6%), with identity crime and scams the most common cybercrime victimisation types.
- Females are more likely than males to report having experienced online sexual harassment.
- Problematic social media use is associated with a significantly greater likelihood of experiencing cybercrime victimisation.

For the first time in Wave 24, the HILDA Survey included questions designed to measure problematic social media use, as well as incidents of cybercrime victimisation. Problematic social media use refers to patterns of use characterised by preoccupation with social media, negative feelings when social media is unavailable, and negative real-life consequences from excessive use. Cybercrime refers to illegal activities and harm done to others online, via digital devices and computer networks (Voce and Morgan, 2025). This provides a unique opportunity to understand the patterns of, and characteristics associated with, both problematic social media use and cybercrime victimisation. Such knowledge is important given the widespread adoption of social media platforms across the Australian population.

This chapter first describes problematic social media use, including the individual characteristics associated with a greater probability of problematic social media use. The relationship between problematic social media use and individual wellbeing is also described. The chapter then describes the prevalence of cybercrime victimisation, examines the factors that jointly predict the likelihood of experiencing cybercrime victimisation—including problematic social media use—and shows how cybercrime victimisation is related to wellbeing.

Problematic social media use

Research examining the relationship between social media use and mental health has produced mixed results, though measures of problematic use—which focus on preoccupation with social media, negative feelings when social media is unavailable, and negative real-life consequences from excessive use—have shown more consistent associations with lower mental health outcomes (Cunningham et al., 2021). The most widely used measure of problematic social media use is the Bergen Social Media Addiction Scale (BSMAS), with total scores ranging from 6 to 30 (see Box 12.1). The BSMAS was included in the Wave 24 self-completion questionnaire (SCQ), marking its first inclusion in the HILDA Survey.



Box 12.1: The Bergen Social Media Addiction Scale (BSMAS)

The BSMAS is a six-item self-report measure of problematic social media use (Andreassen et al., 2016, 2017). Adapted from the earlier Bergen Facebook Addiction Scale (Andreassen et al., 2012), the BSMAS assesses six core components of behavioural addiction as applied to social media use. The BSMAS was included in the Wave 24 SCQ, marking its first inclusion in the HILDA Survey.

Respondents were asked: *Next are some questions about your use of social media (Facebook, X, Instagram, TikTok and the like). How often during the last year have you ...* followed by six items:

- a. *spent a lot of time thinking about social media or planned use of social media (salience)*
- b. *felt an urge to use social media more and more (tolerance)*
- c. *used social media in order to forget about personal problems (mood modification)*
- d. *tried to cut down on the use of social media without success (relapse)*
- e. *become restless or troubled if you have been prohibited from using social media (withdrawal)*
- f. *used social media so much that it has had a negative impact on your job/studies (conflict)*

For each item, the response options are 'Never', 'Rarely', 'Sometimes', 'Often', and 'Very often', coded 1 to 5. Respondents could also indicate 'Does not apply' for each item.

The BSMAS score is calculated as the sum of responses across all six items, yielding a total score ranging from 6 to 30, with higher scores indicating more problematic patterns of use. The scale demonstrated good internal consistency in the HILDA sample (Cronbach's alpha = 0.85), comparable to that found in international validation studies. For respondents who indicated 'Does not apply' on some items but provided valid responses on others, 'Does not apply' was recoded to 'Never' (i.e., a score of 1). This approach is supported by evidence that 'Does not apply' responses varied systematically across items in a manner consistent with symptom severity—items capturing more severe addiction symptoms (such as withdrawal, relapse and conflict) had higher 'Does not apply' rates than items capturing more common experiences (such as salience and tolerance)—suggesting respondents used this option to indicate 'this symptom does not occur' rather than as a form of non-response.

The BSMAS is the most widely used measure of problematic social media use (Casale et al., 2023). It should be noted that 'social media addiction' is not a clinically recognised disorder, and the validity of applying addiction frameworks to social media use remains debated in the literature. Prior research has proposed cut-offs of 19 to identify individuals who are 'at risk of problematic social media use' (Bányai et al., 2017) and 24 to identify those meeting criteria for a diagnosis of social media disorder (Luo et al., 2021), though this is not a clinically recognised diagnosis. The BSMAS is best understood as a screening tool for problematic patterns of use rather than a diagnostic instrument.

Figure 12.1 presents median BSMAS scores by sex and age group. Younger people report substantially higher levels of problematic social media use than older individuals, with median scores declining monotonically from 17 among females aged 15 to 17 to 8 among males aged 65 and over. Females report higher levels of problematic use than males across all age groups, though this gap narrows with age. Among 15- to 17-year-olds, the median score for females is 2 points higher than that for males (17 versus 15), whereas among those aged 65 and over, the gap is just 1 point (9 versus 8).

Figure 12.1: Median BSMAS scores

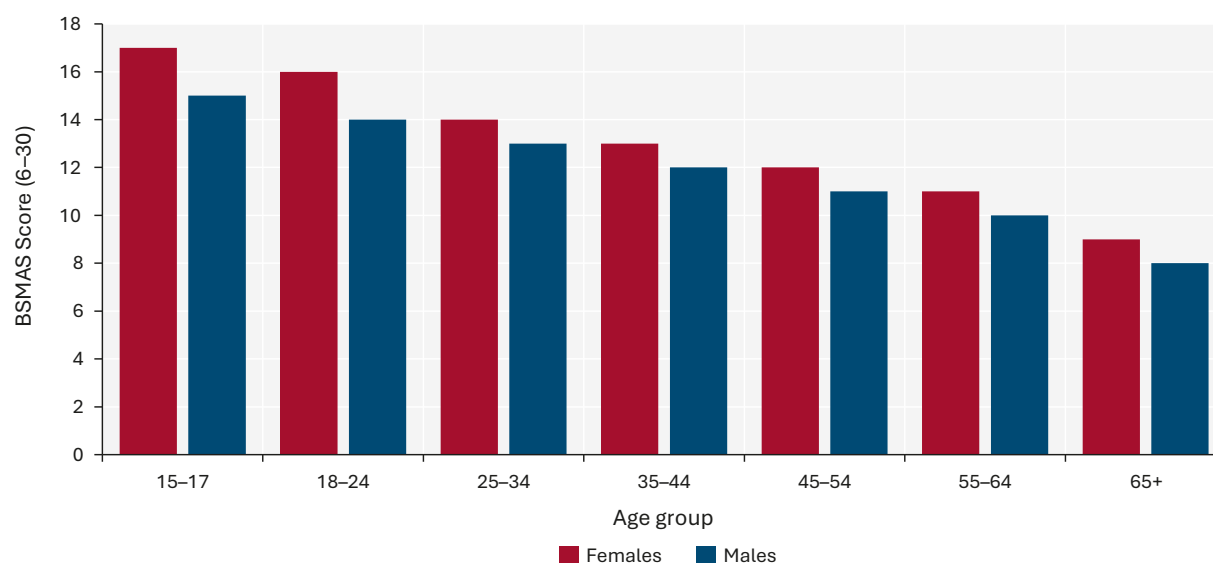
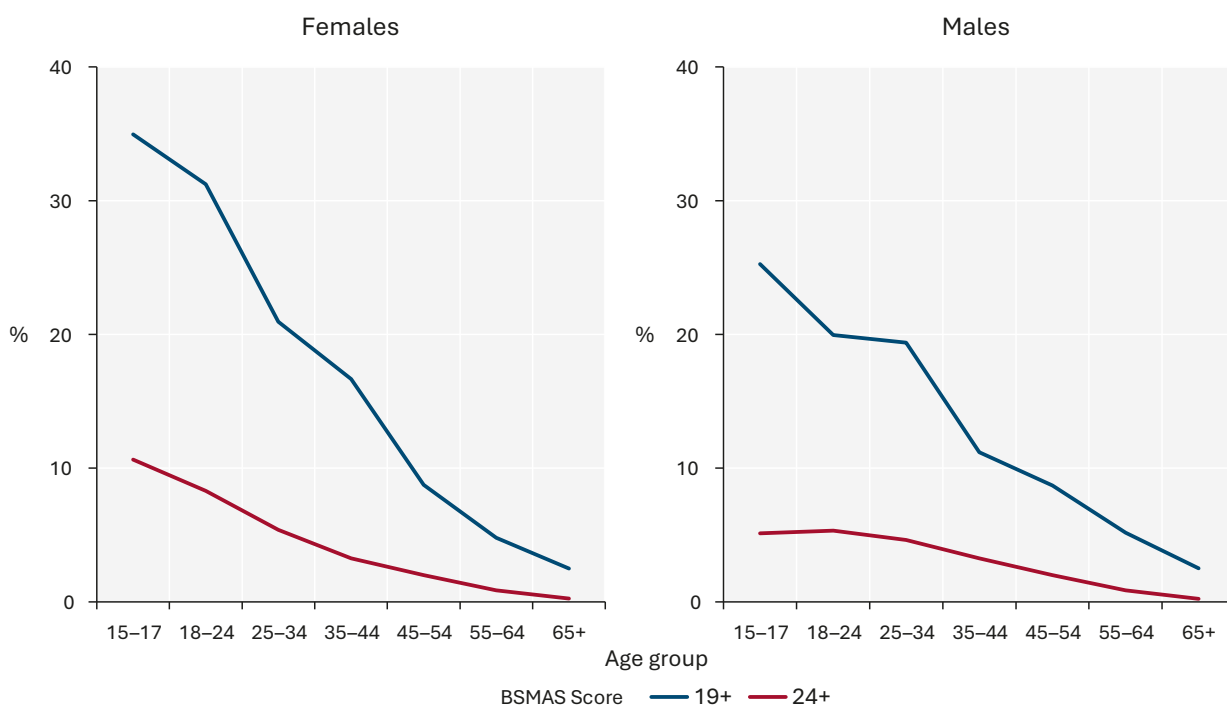


Figure 12.2 presents the proportion of people scoring at or above the at-risk (19+) and high (24+) thresholds, by sex and age group. The age gradient observed in median scores is even more pronounced when examining the prevalence of at-risk use. Among females aged 15 to 17, 35% score 19 or above on the BSMAS, compared with 25% of males in the same age group. These proportions decline steeply with age: by ages 45 to 54, fewer than 10% of both females and males score in the at-risk range, and by age 65 and over, the figure falls to around 3%.

A similar pattern is evident for the more severe threshold of 24 and above. Approximately 11% of females and 5% of males aged 15 to 17 meet this threshold, compared with fewer than 1% of those aged 65 and over. The sex difference in high-scoring individuals is particularly notable among young people: females aged 15 to 17 are roughly twice as likely as males to score 24 or above.

Figure 12.2: Rates of problematic social media use



Self-control and problematic social media use

Box 12.2: The Tangney et al. (2004) measure of self-control

To measure self-control, the SCQ contained the Tangney et al. (2004) Brief Self-Control Scale item battery. Respondents were asked how well each of the following 13 statements describe them, with responses ranging from 1 ('not at all') to 5 ('very well').

- I am good at resisting temptation*
- I have a hard time breaking bad habits*
- I am lazy*
- I say inappropriate things*
- I do certain things that are bad for me, if they are fun*
- I refuse things that are bad for me*
- I wish I had more self-discipline*
- People would say I have iron self-discipline*
- Pleasure and fun sometimes keep me from getting work done*
- I have trouble concentrating*
- I can work effectively towards long-term goals*
- Sometimes I cannot stop myself from doing something even if I know it is wrong*
- I often act without thinking through all the alternatives*

The self-control score is calculated as an average across the 13 items as follows: $[a + (6 - b) + (6 - c) + (6 - d) + (6 - e) + f + (6 - g) + h + (6 - i) + (6 - j) + k + (6 - l) + (6 - m)] / 13$. The score ranges from 1 (no self-control) to 5 (full self-control).

Research suggests that lower scores on measures of self-control—which capture difficulty with impulse regulation, resisting temptation and maintaining long-term goals—are associated with higher levels of problematic social media use (e.g., Błachnio and Przepiórka, 2016; Simsir-Gokalp and Akyurek, 2024). To examine this relationship in the Australian population, Table 12.1 presents estimates from regression models of problematic social media use as a function of self-control measured in Wave 23 (see Box 12.2) and a range of socio-demographic characteristics. Columns (1) and (2) present ordinary least squares regression estimates where the dependent variable is the BSMAS score (ranging from 6 to 30). Columns (3) and (4) present average marginal effects from logistic regression models where the dependent variable is an indicator for at-risk use (scoring 19 or above on the BSMAS).

Table 12.1: Factors associated with problematic social media use, by sex—Persons aged 16 and over, 2024

	BSMAS Score (6–30)		At-risk (BSMAS ≥ 19)	
	Females	Males	Females	Males
Self-control (1–5)	–1.844	–1.776	–0.068	–0.075
<i>Age group (Reference category: 16–17)</i>				
18–24	–1.035	–0.943	<i>ns</i>	–0.085
25–34	–2.105	–1.825	–0.090	–0.100
35–44	–3.339	–2.458	–0.134	–0.147
45–54	–4.536	–3.198	–0.208	–0.157
55–64	–5.365	–3.962	–0.238	–0.180
65 and over	–6.290	–4.404	–0.252	–0.191
Bachelor’s degree or higher	0.407	<i>ns</i>	<i>ns</i>	<i>ns</i>
<i>Labour force status (Reference category: Employed full-time)</i>				
Employed part-time	0.667	0.618	0.029	<i>ns</i>
Unemployed	0.972	<i>ns</i>	<i>ns</i>	<i>ns</i>
Not in the labour force	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
<i>Household equivalised annual disposable income (Reference category: Bottom quintile)</i>				
Second quintile	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Third quintile	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Fourth quintile	0.507	<i>ns</i>	<i>ns</i>	<i>ns</i>
Top quintile	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Partnered	<i>ns</i>	–0.540	<i>ns</i>	<i>ns</i>
Has dependent children	<i>ns</i>	0.418	<i>ns</i>	<i>ns</i>
First Nations	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
<i>Immigrant status (Reference category: Australian-born)</i>				
Immigrant, main English-speaking countries	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Immigrant, other countries	<i>ns</i>	0.969	<i>ns</i>	<i>ns</i>
<i>Region (Reference category: Mainland capital city)</i>				
Other urban	<i>ns</i>	–0.293	<i>ns</i>	<i>ns</i>
Regional	–0.434	–0.427	<i>ns</i>	<i>ns</i>
Constant	22.490	20.865	–	–
Number of observations	6,437	5,285	6,437	5,285

Notes: Estimates in columns (1) and (2) are from linear regression models of the BSMAS score. Estimates in columns (3) and (4) are average marginal effects from logit models of the probability of scoring 19 or above on the BSMAS ('at-risk'). The requirement for a valid self-control measure from Wave 23 means the effective minimum age in this analysis is 16. See the Technical Appendix for an explanation of these models. *ns* indicates the estimate is not statistically significant at the 10% level.

Lower self-control is strongly associated with problematic social media use for both females and males. People with higher self-control report substantially lower levels of problematic social media use. A 1-point increase on the self-control scale (which ranges from 1 to 5) is associated with a reduction of approximately 1.8 points on the BSMAS and a 7-percentage-point lower probability of at-risk use.

The age gradient in problematic social media use observed in Figures 12.1 and 12.2 remains evident after accounting for self-control and other characteristics. Relative to those aged 16 to 17, persons aged 65 and over score approximately 6 points lower on the BSMAS among females and 4.5 points lower among males. The probability of at-risk use is approximately 20 to 25 percentage points lower among those aged 65 and over compared with those aged 16 to 17.

Other socio-demographic characteristics show weaker and less consistent associations with problematic social media use. Education, household income and immigrant status are largely unrelated to BSMAS scores, with most associations not statistically significant. Being partnered is associated with lower BSMAS scores among males but not females. Having dependent children and labour force status show some association for males, though these are modest and do not consistently predict at-risk status. First Nations status is not significantly associated with problematic social media use. People in regional areas score approximately 0.4 points lower on the BSMAS than those in mainland capital cities, for both females and males.

Problematic social media use and wellbeing

Figure 12.3 shows the association between BSMAS scores and three measures of wellbeing: overall life satisfaction, loneliness and mental health. Life satisfaction is measured on a scale from 0 (totally dissatisfied) to 10 (totally satisfied). Loneliness is measured by the item 'I often feel very lonely' with responses ranging from 1 (strongly disagree) to 7 (strongly agree). Mental health is measured using the mental health subscale of the SF-36 health survey (see Box 2.13, page 32), which captures the frequency of feelings such as nervousness, depression and calm over the past four weeks, with scores ranging from 0 to 100 and higher scores indicating better mental health.

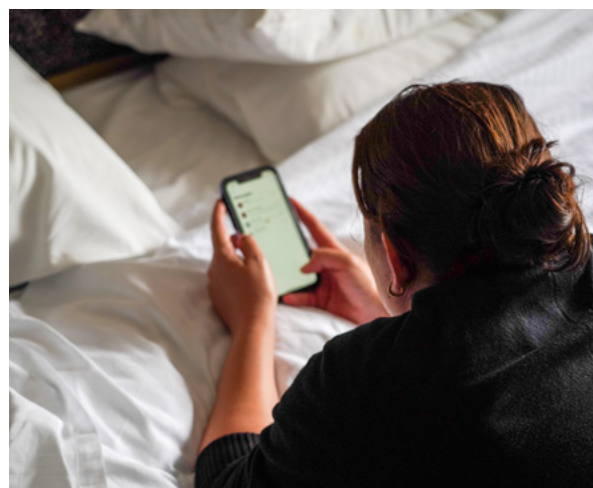
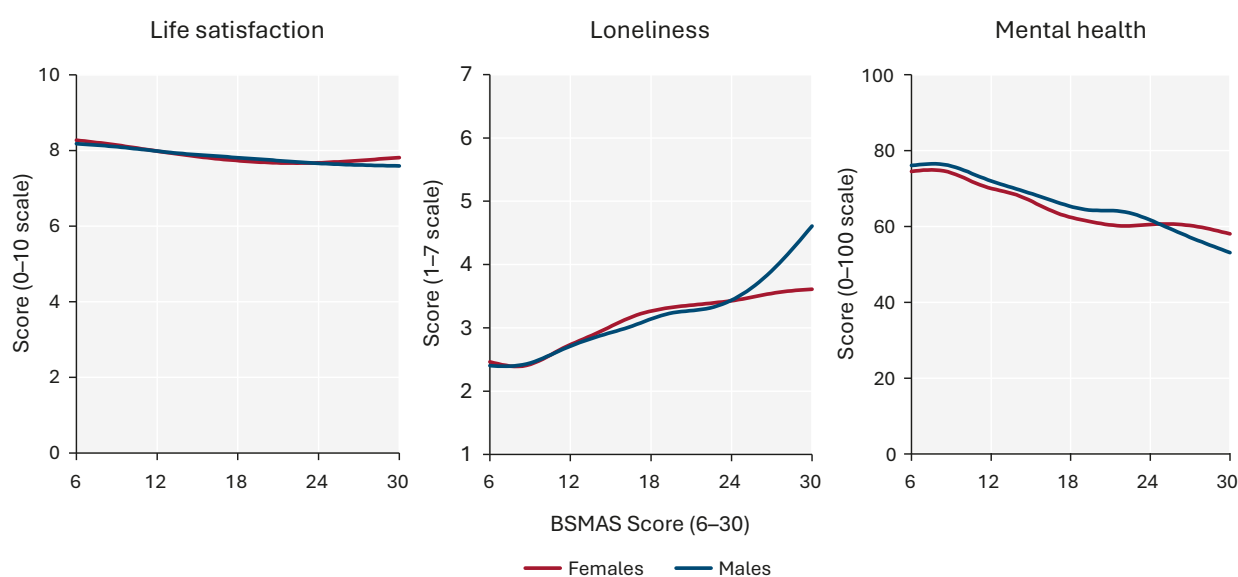


Figure 12.3: Associations between problematic social media use and wellbeing outcomes—Persons aged 15 and over, 2024



Note: Lines represent smoothed conditional means, estimated separately for females and males.

Higher BSMAS scores are associated with lower life satisfaction, greater loneliness and lower self-reported mental health for both females and males. The associations are relatively modest for life satisfaction, with average scores declining from around 8 to around 7.5 across the BSMAS range. For loneliness, average scores increase from around 2.5 to 3.6 for females and 4.6 for males. The associations are particularly pronounced for mental health and loneliness. Mental health scores decline from around 75 to around 55 as BSMAS scores increase from 6 to 30, a difference of approximately 20 points, while the increase in loneliness represents a comparable shift relative to the scale range. These patterns are broadly similar for females and males, although males show a somewhat steeper decline in mental health and a steeper increase in loneliness, particularly at higher BSMAS scores.

Table 12.2 presents regression estimates that quantify these associations while controlling for age and other background characteristics. These estimates quantify the associations shown in Figure 12.3 while accounting for socio-demographic differences between people with higher and lower BSMAS scores. Higher BSMAS scores are significantly associated with lower life satisfaction, greater loneliness and lower mental health scores for both females and males. In magnitude, each additional point on the BSMAS is associated with approximately 0.03 points lower life satisfaction, 0.06 points higher loneliness and 0.8 points lower mental health. As these data are cross-sectional, the associations reported here should not be interpreted as causal. It is equally plausible that lower wellbeing contributes to greater social media use as that social media use reduces wellbeing.

Table 12.2: Associations between problematic social media use and wellbeing outcomes, by sex—Persons aged 15 and over, 2024

	Life satisfaction (0–10)		Loneliness (1–7)		Mental health (0–100)	
	Females	Males	Females	Males	Females	Males
BSMAS score (scale from 6 to 30)	–0.036	–0.03	0.069	0.060	–0.826	–0.818
<i>Age group (Reference category: 15–17)</i>						
18–24	–0.467	–0.717	<i>ns</i>	0.409	<i>ns</i>	–4.744
25–34	–0.748	–1.291	0.574	0.814	–4.043	–8.999
35–44	–0.973	–1.413	0.583	1.020	–4.346	–9.577
45–54	–1.088	–1.520	0.564	1.113	–3.599	–8.219
55–64	–0.875	–1.405	0.436	0.996	<i>ns</i>	–5.891
65 and over	–0.356	–0.825	0.285	0.567	4.815	<i>ns</i>
Bachelor’s degree or higher	<i>ns</i>	<i>ns</i>	–0.249	–0.190	2.207	1.664
<i>Labour force status (Reference category: Employed full-time)</i>						
Employed part-time	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	–1.691
Unemployed	–0.286	–0.454	0.661	0.356	–4.522	–5.121
Not in the labour force	–0.171	–0.187	0.274	0.299	–5.064	–6.379
<i>Household equivalised income (Reference category: Bottom quintile)</i>						
Second quintile	<i>ns</i>	0.267	<i>ns</i>	<i>ns</i>	1.965	1.915
Third quintile	0.191	0.289	–0.160	<i>ns</i>	3.370	2.477
Fourth quintile	0.213	0.428	–0.241	–0.294	3.631	3.274
Top quintile	0.349	0.459	–0.162	–0.223	3.596	4.343
Partnered	0.488	0.526	–0.666	–0.999	4.363	3.415
Has dependents	<i>ns</i>	0.094	0.159	<i>ns</i>	<i>ns</i>	1.463
First Nations	<i>ns</i>	0.28	0.386	<i>ns</i>	<i>ns</i>	<i>ns</i>
<i>Immigrant status (Reference category: Australian-born)</i>						
Immigrant, main English-speaking countries	0.131	0.195	<i>ns</i>	<i>ns</i>	2.805	1.53
Immigrant, other countries	<i>ns</i>	0.151	–0.179	<i>ns</i>	1.942	1.534
<i>Region (Reference: Mainland capital city)</i>						
Other urban	0.166	<i>ns</i>	0.110	<i>ns</i>	0.982	1.146
Regional	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Constant	8.676	8.826	1.983	1.883	75.722	83.063
Number of observations	7,676	6,468	7,672	6,459	7,671	6,462

Notes: Estimates are from linear regression models. Life satisfaction is measured on a scale from 0 to 10. Loneliness is measured on a scale from 1 to 7, with higher scores indicating greater loneliness. Mental health is measured using the SF-36 Mental Health subscale (0 to 100), with higher scores indicating better mental health. *ns* indicates the estimate is not significantly different from 0 at the 10% level. See the Technical Appendix for an explanation of these models.

Higher household income is associated with higher life satisfaction and better mental health. Having dependent children is associated with higher loneliness among females and better mental health among males. People in other urban areas report slightly higher life satisfaction (females) and better mental health (males) compared with those in mainland capital cities, though regional residence shows no significant associations. Life satisfaction is lower among adults aged 18 to 64 compared with those aged 15 to 17, while females aged 65 and over report significantly better mental health than those in younger age groups.

To put these estimates in context, moving from the median BSMAS score of 12 to 19 (the at-risk threshold) is associated with approximately 0.2 to 0.3 points lower life satisfaction, 0.4 to 0.5 points higher loneliness and 6 points lower mental health. In each case, the associations are slightly larger for females than males. For mental health, this difference is similar in magnitude to the difference between being not in the labour force and employed full-time.

Cybercrime victimisation

Instances of cybercrime victimisation—such as online harassment, malware attacks, identity fraud, and other online fraud and scams—affect large proportions of Australians every year, often with negative financial, social and psychological consequences (Voce and Morgan, 2025). Despite the constant risks of cybercrime victimisation in an increasingly digital world, most studies have tended to focus exclusively on younger people (see Chun et al., 2020) or are not wholly representative of the population (Voce and Morgan, 2025), thus limiting what is currently known about cybercrime victimisation in the general Australian population.

In Wave 24, the HILDA Survey fielded six items (see Box 12.3) initially developed by Marttila et al. (2021) that cover several aspects of cybercrime. Inclusion of these items in the HILDA Survey therefore enables us to provide a nationally representative description of selected cybercrime victimisation types in Australia.

Box 12.3: Measures of cybercrime victimisation

The HILDA Survey included six items on cybercrime victimisation (see Marttila et al., 2021) in the Wave 24 Person Questionnaire (PQ) for the first time. Respondents who indicated that they had access to the internet (whether through a computer, mobile phone, or other device) were asked: *Have any of the following happened to you during the last 12 months?*

- a. *You were the target of a threat or attack on social media?*
- b. *You were falsely accused online?*
- c. *You were targeted with hateful or degrading material on the internet?*
- d. *You experienced sexual harassment on social media?*
- e. *An online account of yours was stolen, or a new account made with your name without your permission?*
- f. *You lost money because of an online scam?*

For each item, response options were 'yes' or 'no'. Respondents could also answer 'none of the above', refuse to answer or respond that they 'don't know'. If respondents asked for clarification on the meaning of 'social media' in relation to items (a) and (d), respondents would be informed that social media includes platforms such as Facebook, X, Instagram and TikTok.

For some analyses in this chapter, items (a), (b) and (c) are classified as *threats*, item (d) is classified as *sexual harassment*, item (e) is classified as *identity crime* and item (f) is classified as *scams*.

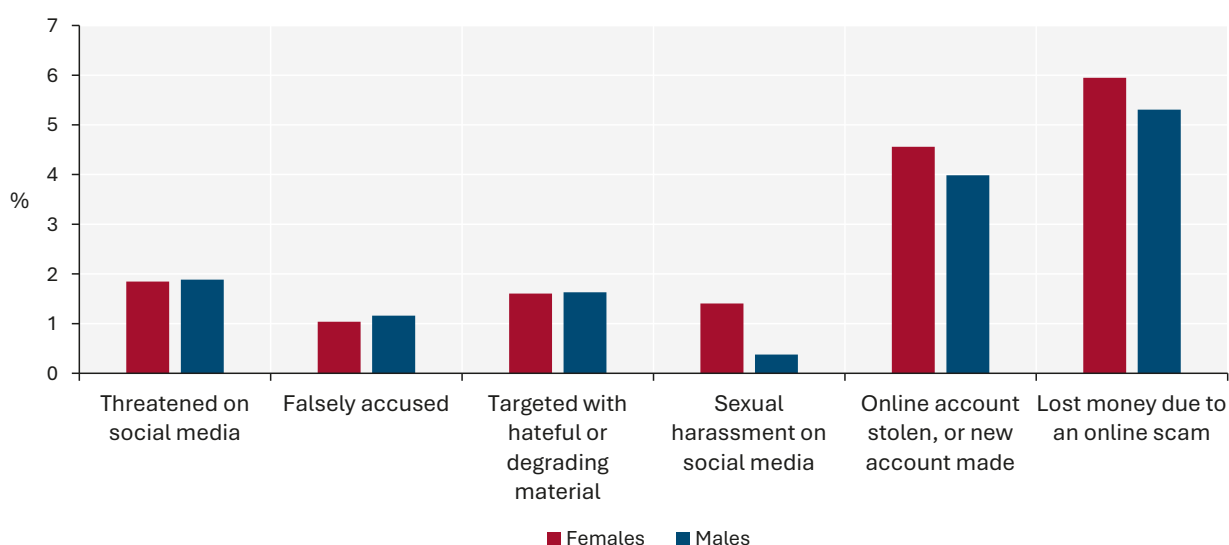
Distribution and prevalence of cybercrime victimisation

In terms of the prevalence of cybercrime victimisation, 11.6% of the population reported having experienced any type of victimisation; 12.1% of females and 11% of males reported at least one cybercrime victimisation type. Note that the six items included in the HILDA Survey (see Box 12.3) cover a limited number of possible cybercrime victimisation categories, with measures such as malware, ransomware, data breaches, stalking and other forms of identity theft not captured. As such, these estimates under-report the prevalence of all reported cybercrime victimisation types in Australia (see e.g. Voce and Morgan, 2025).

Figure 12.4 shows the proportion of females and males who reported having experienced each cybercrime victimisation type. The incidence of threats ranges between roughly 1% and 1.8%, with little evidence of gender differences. Reports of sexual harassment are also low, but their prevalence is much higher among females (1.8%) than among males (0.4%).

Online scams and identity crime are the most prevalent types of cybercrime victimisation captured in the HILDA Survey, with females reporting a slightly higher prevalence than males. Roughly 4.6% of females and 4% of males had their online accounts stolen or a new account made in their names. Similarly, 5.9% of females had lost money because of an online scam, compared to 5.3% of males.

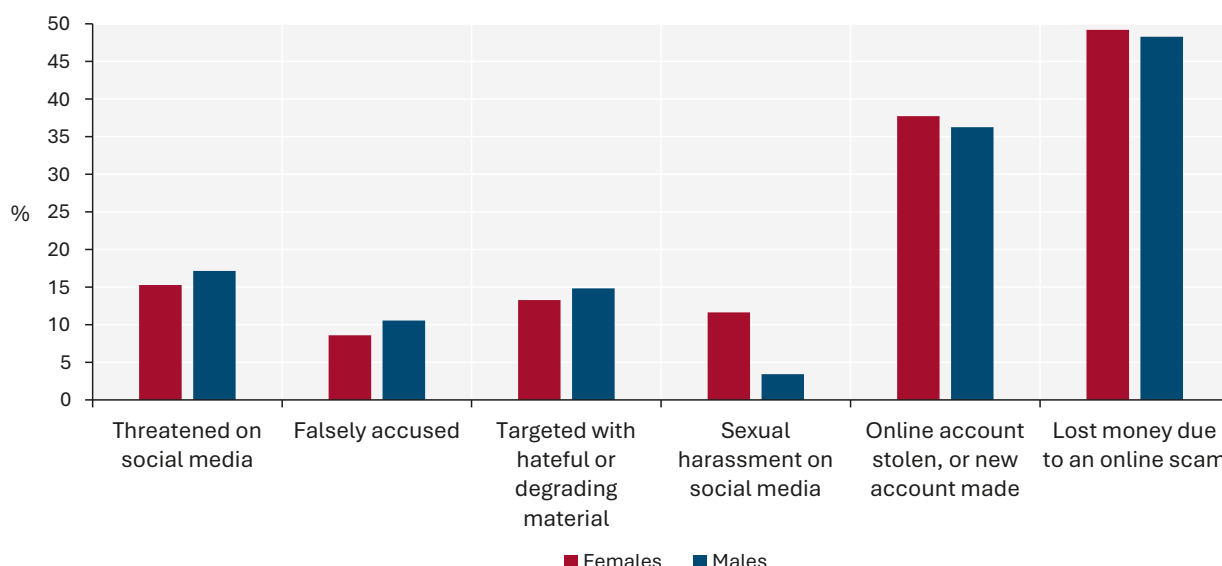
Figure 12.4: Prevalence of cybercrime victimisation, 2024



For the group of people with at least one cybercrime victimisation type, Figure 12.5 provides an indication of which victimisation was most prevalent.

Threats were more common among males than females: 17.2% were threatened on social media, 10.5% were falsely accused, and 14.8% were targeted with hateful or degrading material. There were significant gender differences in experiences of online sexual harassment, with this victimisation reported by 11.6% of females and 3.4% of males.

Figure 12.5: Victimisation prevalence among people with at least one type, 2024



Acts of identity crime and scams were clearly the most prevalent cybercrime victimisations reported by people with at least one victimisation, and the prevalence was again marginally higher among females. Having online accounts stolen or a new account made in their name was experienced by 37.7% of females and 36.3% of males. Moreover, 49.2% of females had lost money because of an online scam, compared to 48.3% of males.

Table 12.3 shows the percentage of people who were victims of different types of cybercrime, ranging from zero to six possible types. Almost 90% of all individuals did not report any cybercrime victimisation, whereas 9.3% of females and 8.8% of males reported one cybercrime victimisation type. Another roughly 2% to 3% of all persons experienced two or more victimisations (second and third columns).

The fourth and fifth columns in Table 12.3 apply to the approximately 11% to 12% of people who reported at least one cybercrime victimisation type. Among this group, most people experienced one type of victimisation: 76.9% among females and 79.9% among males. Another 14% to 15% reported two victimisation types. The intensity of cybercrime victimisation experiences was highest among females. About 23.1% of females reported two or more types of victimisation, compared to 20.1% of males.

Table 12.3: Number of cybercrime victimisation types, by sex, 2024 (%)

	All persons		Persons with at least one type of victimisation	
	Females	Males	Females	Males
0	87.9	89.0	–	–
1	9.3	8.8	76.9	79.9
2	1.8	1.5	14.9	14.0
3	0.6	0.3	5.1	3.1
4 or more	0.4	0.3	3.1	3.0
Total	100.0	100.0	100.0	100.0

Note: Cells may not add up to column totals due to rounding.

Individual predictors of cybercrime victimisation

Table 12.4 reports regression results showing the individual factors that jointly predict a person's likelihood of having experienced some form of cybercrime victimisation in the past 12 months. Models were estimated separately for threats, sexual harassment, identity crime and scams, as well as for having experienced any one of these.

Problematic social media use (see Box 12.1) is significantly associated with the probability of reporting cybercrime victimisation. Being at-risk of problematic social media use is related to a 4.4 percentage-point higher probability of experiencing any cybercrime victimisation. Compared to persons who are not at-risk problematic social media users, those who are at-risk are 1.5 percentage points more likely to have received threats, 0.5 percentage points more likely to have experienced sexual harassment, 1.9 percentage points more likely to have had their identity stolen, and 1.1 percentage points more likely to have been the victim of an online scam. Because some cybercrime victimisation questions relate specifically to social media, these associations may in part be a function of more problematic social media users spending more time on social media.

Cybercrime victimisation is more probable among females. Compared to females, males are 1.4 percentage points less likely to report any kind of cybercrime victimisation, 0.7 percentage points less likely to report sexual harassment on social media and 0.9 percentage points less likely to have been scammed online.

Overall, age is positively associated with the probability of any cybercrime victimisation. Compared to those aged 15 to 24, people aged 45 to 54 and 55 to 64 are 2.7 and 3.9 percentage points, respectively, more likely to report having experienced at least one type of victimisation.

This relationship with age changes when considering the types of cybercrime victimisation. People aged 25 to 34 as well as those aged 65 or older are significantly less likely than 15- to 24-year-olds to receive online threats. The probability of online sexual harassment is lower for persons aged 55 and older as compared to persons aged 15 to 24.

The likelihood of identity crime and scams, however, rises with age. For example, compared to people aged 15 to 24, the probability of being a victim of a scam is 2.0 percentage points greater for those aged 35 to 44 and 2.7 percentage points greater for those aged 55 to 64.

There is no significant relationship between highest level of completed education and the probability of cybercrime victimisation.

In almost all cases, employed people are less likely to report cybercrime victimisation than people who are unemployed or not in the labour force. For instance, unemployed persons and people not in the labour force are 9.3 and 2.5 percentage points, respectively, more likely than employed persons to report any cybercrime victimisation. Unemployed people are 4.5 percentage points more likely than employed people to have experienced identity fraud. Scams are 1.4 percentage points more likely among those not in the labour force relative to employed individuals.

There is generally a negative association between household income and the probability of cybercrime victimisation, except for sexual harassment. People in the fourth household income quintile are, on average, 1.6 percentage points less likely to be victims of online threats relative to individuals in the bottom household income quintile. Compared to those in the bottom household income quintile, moreover, people in the top household income quintile are 2.4 percentage points less likely to have been victims of a scam.

Interestingly, except for the cases of identity fraud and scams, partnered individuals are less likely than non-partnered people to report cybercrime victimisation. Online threats and online sexual harassment are therefore more likely among non-partnered people.

Table 12.4: Factors associated with the probability of experiencing cybercrime victimisation, 2024

	Any cybercrime victimisation	Threats	Sexual harassment	Identity crime	Scams
At-risk problematic social media use (BSMAS >= 19)	0.044	0.015	0.005	0.019	0.011
Male	-0.014	<i>ns</i>	-0.007	<i>ns</i>	-0.009
<i>Age group (Reference category: 15-24)</i>					
25-34	<i>ns</i>	-0.014	<i>ns</i>	0.011	<i>ns</i>
35-44	0.018	<i>ns</i>	<i>ns</i>	0.015	0.020
45-54	0.027	<i>ns</i>	<i>ns</i>	0.018	0.026
55-64	0.039	<i>ns</i>	-0.004	0.033	0.027
65 and over	0.018	-0.024	-0.006	0.017	0.026
Bachelor's degree or higher	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
<i>Labour force status (Reference category: Employed)</i>					
Unemployed	0.093	0.055	0.013	0.045	<i>ns</i>
Not in the labour force	0.025	0.016	0.008	<i>ns</i>	0.014
<i>Household equivalised annual disposable income quintile (Reference category: Bottom quintile)</i>					
Second quintile	<i>ns</i>	<i>ns</i>	<i>ns</i>	-0.010	<i>ns</i>
Middle quintile	-0.035	-0.014	<i>ns</i>	<i>ns</i>	-0.023
Fourth quintile	-0.025	-0.016	<i>ns</i>	<i>ns</i>	<i>ns</i>
Top quintile	-0.040	-0.013	<i>ns</i>	<i>ns</i>	-0.024
Partnered	-0.013	-0.007	-0.006	<i>ns</i>	<i>ns</i>
First Nations	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
<i>Immigrant status (Reference category: Australian-born)</i>					
Immigrant, main English-speaking countries	0.020	0.011	<i>ns</i>	<i>ns</i>	0.013
Immigrant, other countries	<i>ns</i>	-0.013	-0.003	<i>ns</i>	0.011
<i>Region of residence (Reference category: Major urban)</i>					
Other urban	0.029	0.007	<i>ns</i>	0.011	0.016
Non-urban	<i>ns</i>	<i>ns</i>	<i>ns</i>	0.016	<i>ns</i>
Number of observations	14,193	14,193	14,193	14,193	14,193

Notes: The table presents mean marginal effects from probit regression models of the predictors of having experienced cybercrime victimisation. See the Technical Appendix for an explanation of these models. *ns* indicates the estimate is not significantly different from 0 at the 10% level.

Non-Indigenous individuals and First Nations people do not differ significantly in their chances of reporting cybercrime victimisation.

Immigrants from main English-speaking countries are more likely to experience online threats and scams than Australian-born people. Immigrants from other countries are significantly less likely than Australian-born people to experience threats and sexual harassment, but are more likely to be victims of scams.

Except for sexual harassment, residents of other urban areas are significantly more likely than major urban residents to experience cybercrime victimisation. The likelihood of being a victim of identity fraud is also 1.6 percentage points lower among residents of major urban regions relative to those living in non-urban areas.

Cybercrime victimisation and wellbeing outcomes

What are the associations between the experience of cybercrime victimisation and individual wellbeing outcomes? Table 12.5 reports the summarised estimates from regressions showing how cybercrime victimisation is related to life satisfaction, loneliness and mental health. Each row denotes a separate regression model, showing how the specific cybercrime victimisation type is associated with each outcome.

The relationships are strongly negative. Life satisfaction is significantly lower among people who have experienced any cybercrime victimisation, and significantly lower for all four victimisation types. For example, those who report having experienced online sexual harassment have a 0.68-point lower life satisfaction score (on the 0 to 10 scale) than those who do not. Life satisfaction is also, on average, 0.56 points lower among people who have been threatened online.

Having been a victim of cybercrime is associated with increased feelings of loneliness. On the 0 to 7 scale, loneliness scores are, on average, 0.27 points higher among people who have experienced cybercrime victimisation. Among individuals who have experienced sexual harassment online, loneliness is roughly 0.73 points higher.

The mental health score of people who have received online threats is, on average, 7.79 points lower (on the 0 to 100 scale) relative to people who have not experienced this type of cybercrime victimisation. The association of mental health with sexual harassment is very strong—compared to those who have not experienced online sexual harassment, people report, on average, 10.80 points worse mental health scores if they have experienced sexual harassment. It is noteworthy that, despite its relatively low incidence (see Figures 12.4 and 12.5), online sexual harassment has the strongest association with wellbeing relative to the other cybercrime victimisation types.

Table 12.5: Associations between cybercrime victimisation and wellbeing outcomes, 2024

	Life satisfaction (0–10)		Loneliness (1–7)		Mental health (0–100)	
	Estimate	Observations	Estimate	Observations	Estimate	Observations
Any cybercrime victimisation	–0.265	16,578	0.274	15,034	–4.134	15,144
Threats	–0.561	16,578	0.539	15,034	–7.791	15,144
Sexual harassment	–0.684	16,578	0.727	15,034	–10.804	15,144
Identity crime	–0.149	16,578	0.231	15,034	–2.477	15,144
Scams	–0.195	16,578	0.185	15,034	–3.088	15,144

Notes: The table presents estimates from ordinary least squares regression models of the association of cybercrime victimisation with life satisfaction, loneliness, and mental health. See the Technical Appendix for an explanation of these models. For each outcome, every row represents a separate regression model reporting the association between the outcome and cybercrime victimisation. All models additionally control for sex, age, education, labour force status, household income, partnership status, immigrant status and First Nations identity, and region of residence.



References

- Andreassen, C.S., Billieux, J., Griffiths, M.D., Kuss, D.J., Demetrovics, Z., Mazzoni, E. and Pallesen, S. (2016) 'The Relationship Between Addictive Use of Social Media and Video Games and Symptoms of Psychiatric Disorders', *Psychology of Addictive Behaviors*, vol. 30, no. 2, pp. 252–262.
- Andreassen, C.S., Pallesen, S. and Griffiths, M.D. (2017) 'The Relationship Between Addictive Use of Social Media, Narcissism, and Self-esteem: Findings from a Large National Survey', *Addictive Behaviours*, vol. 64, pp. 287–293.
- Andreassen, C.S., Torsheim, T., Brunborg, G.S. and Pallesen, S. (2012) 'Development of a Facebook Addiction Scale', *Psychological Reports*, vol. 110, no. 2, pp. 501–517.
- Australian Bureau of Statistics (ABS) (2001) *Australian Standard Geographical Classification (ASGC), 2001*, Catalogue No. 1216.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) (2011) *Australian Standard Geographical Classification (ASGC), July 2011*, Catalogue No. 1216.0, ABS, Canberra.
- Australian Bureau of Statistics (2014) *Family, Household and Income Unit Variables*. <https://www.abs.gov.au/statistics/standards/family-household-and-income-unit-variables/2014>.
- Australian Bureau of Statistics (ABS) (2018) *Labour Statistics: Concepts, Sources and Methods, February 2018*, Catalogue No. 6102.0.55.001, ABS, Canberra.
- Australian Bureau of Statistics (ABS) (2019–20) *Household Income and Wealth, Australia*. <https://www.abs.gov.au/statistics/economy/finance/household-income-and-wealth-australia/2019-20>.
- Australian Bureau of Statistics (ABS) (2021a) *Australian Statistical Geography Standard (ASGS), Edition 3*.
- Australian Bureau of Statistics (2021b) *Level of Highest Educational Attainment (HEAP)*. <https://www.abs.gov.au/census/guide-census-data/census-dictionary/2021/variables-topic/education-and-training/level-highest-educational-attainment-heap>.
- Australian Bureau of Statistics (2025) *Consumer Price Index, Australia*. <https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/consumer-price-index-australia/mar-quarter-2025>.
- Ballard, T., Kepple, A. and Cafiero, C. (2013) 'The Food Insecurity Experience Scale: Development of a Global Standard for Monitoring Hunger Worldwide'. <http://www.fao.org/fileadmin/templates/ess/voh/FIES_Technical_Paper_v1.1.pdf>.
- Bányai, F., Zsila, Á., Király, O., Maraz, A., Elekes, Z., Griffiths, M.D., Andreassen, C.S. and Demetrovics, Z. (2017) 'Problematic Social Media Use: Results from a Large-scale Nationally Representative Adolescent Sample', *PLoS ONE*, vol. 12, no. 1, e0169839.
- Błachnio, A. and Przepiórka, A. (2016) 'Dysfunction of Self-regulation and Self-control in Facebook Addiction', *Psychiatric Quarterly*, vol. 87, no. 3, pp. 493–500.
- Botha, F. and Ribar, D.C. (2025) 'Financial Well-being and Mental Health: A Reciprocal Relationship?', *Applied Economics Letters*. doi: 10.1080/13504851.2025.2610417.
- Botha, F., de New, J.P. and Nicastro, A. (2020) 'Developing a Short Form Version of the Commonwealth Bank-Melbourne Institute Reported Financial Well-Being Scale', Commonwealth Bank of Australia and Melbourne Institute Financial Wellbeing Scales Technical Report No. 5, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Botha, F., Morris, R.W., Butterworth, P. and Glozier, N. (2023) 'Generational Differences in Mental Health Trends in the Twenty-first Century', *PNAS*, vol. 120, no. 49, pp. 1–8.
- Casale, S., Akbari, M., Seydavi, M., Benucci, S.B. and Fioravanti, G. (2023) 'Has the Prevalence of Problematic Social Media Use Increased Over the Past Six Years and Since the Start of the COVID-19 Pandemic? A Meta-analysis of the Studies Published Since the Development of the Bergen Social Media Addiction Scale', *Addictive Behaviors*, vol. 147, 107838.
- Chatterjee, A., Singh, A. and Stone, T. (2016) 'Understanding Wage Inequality in Australia', *Economic Record*, vol. 92, pp. 348–360. doi: 10.1111/1475-4932.12263.
- Chun, J., Lee, J., Kim, J. and Lee, S. (2020) 'An International Systematic Review of Cyberbullying Measurements', *Computers in Human Behavior*, vol. 113, 106485.

- Comerton-Forde, C., Ip, E., Ribar, D.C., Ross, J., Salamanca, N. and Tsiaplias, S. (2018) 'Using Survey and Banking Data to Measure Financial Well-being', Commonwealth Bank of Australia and Melbourne Institute Financial Well-Being Scales Technical Report No. 1, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Cunningham, S., Hudson, C.C. and Harkness, K. (2021) 'Social Media and Depression Symptoms: A Meta-analysis', *Research on Child and Adolescent Psychopathology*, vol. 49, pp. 241–253.
- Davidson, P., Bradbury, B., Hill, T. and Wong, M. (2020) 'Poverty in Australia 2020: Part 1, Overview', ACOSS/UNSW Poverty and Inequality Partnership Report No. 3, ACOSS, Sydney.
- Dey, T. and Cebulla, A. (2023) 'Mental Health of Single Mothers in Australia', *Journal of Public Mental Health*, vol. 22, no. 2, pp. 73–82.
- Fair Work Ombudsman (2014) *Casual Employment Changes*. <https://www.fairwork.gov.au/about-us/workplace-laws/legislation-changes/closing-loopholes/casual-employment-changes>.
- Freestone, O. (2018) 'The Drivers of Life-cycle Wage Inequality in Australia', *Economic Record*, vol. 94, no. 307, pp. 424–444.
- Hagenaars, A., De Vos, K. and Zaidi, A. (1994) *Poverty Statistics in the Late 1980s*, Eurostat, Luxembourg.
- Hayes, C. (2009) 'HILDA Standard Errors: Users' Guide', HILDA Project Technical Paper Series No. 2/08, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Hayes, C. and Watson, N. (2009) 'HILDA Imputation Methods', HILDA Project Technical Paper Series No. 2/09, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Hendrick, S.S. (1988) 'A Generic Measure of Relationship Satisfaction', *Journal of Marriage and Family*, vol. 50, no. 1, pp. 93–98.
- Jobs and Skills Australia (2025) *New Perspectives on Old Problems. Gendered Jobs Work and Pay*. <https://www.jobsandskills.gov.au/download/19799/new-perspectives-old-problems-gendered-jobs-work-and-pay/3326/gender-economic-equality-study-paper-1/pdf>.
- Kessler, R.C., Andrews, G., Colpe, L.J., Hiripi, E., Mroczek, D.K., Normand, S.L.T., Walters, E.E. and Zaslavsky, A.M. (2002) 'Short Screening Scales to Monitor Population Prevalences and Trends in Non-specific Psychological Distress', *Psychological Medicine*, vol. 32, pp. 959–976.
- Laß, I., Botha, F., Peyton, K. and Wilkins, R. (2025) *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 23*, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Luo, T., Qin, L., Cheng, L., Wang, S., Zhu, Z., Xu, J., Chen, H., Liu, Q., Hu, M., Tong, J., Hao, W., Wei, B. and Liao, Y. (2021) 'Determination of the Cut-off Point for the Bergen Social Media Addiction Scale (BSMAS): Diagnostic Contribution of the Six Criteria of the Components Model of Addiction for Social Media Disorder', *Journal of Behavioral Addictions*, vol. 10, no. 2, pp. 281–290.
- Marttila, E., Koivula, A. and Räsänen, P. (2021) 'Cybercrime Victimization and Problematic Social Media Use: Findings from a Nationally Representative Panel Study', *American Journal of Criminal Justice*, vol. 46, no. 6, pp. 862–881.
- Mavromaras, K., McGuinness, S., O'Leary, N., Sloane, P. and Wei, Z. (2013) 'Job Mismatches and Labour Market Outcomes: Panel Evidence on University Graduates', *Economic Record*, vol. 89, no. 286, pp. 382–395.
- Organisation for Economic Co-operation and Development (OECD) (2019) 'Income Poverty of Households in Australia: Evidence from the HILDA Survey', Economics Department Working Papers No. 1539, OECD Publishing, Paris.
- Perales, F. and Baxter, J. (2018) 'Sexual Identity and Relationship Quality in Australia and the United Kingdom', *Family Relations*, vol. 67, pp. 55–69.
- Rasch, G. (1960) *Probabilistic Models for Some Intelligence and Attainment Tests*, Danish Institute for Educational Research, Copenhagen.
- Rowley, S. and Ong, R. (2012) *Housing Affordability, Housing Stress and Household Wellbeing in Australia*, Final Report No. 192, Australian Housing and Urban Research Institute, Melbourne.
- Roy, J. and Schurer, S. (2013) 'Getting Stuck in the Blues: Persistence of Mental Health Problems in Australia', *Health Economics*, vol. 22, no. 9, pp. 1139–1157.
- Simsir-Gokalp, Z. and Akyurek, M.I. (2024) 'Self-control and Problematic Social Media Use: A Meta-analysis', *Journal of Education in Science, Environment and Health*, vol. 10, no. 3, pp. 199–215.
- Summerfield, M., Garrard, B., Kamath, R., Macalalad, N., Nesa, M., Watson, N. and Wilkins, R. (2025) 'HILDA User Manual—Release 24', Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.

- Sun, C. (2010) 'HILDA Expenditure Imputation', HILDA Project Technical Paper Series No. 1/10, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Tangney, J.P., Baumeister, R.F. and Boone, A.L. (2004) 'High Self-control Predicts Good Adjustment, Less Pathology, Better Grades, and Interpersonal Success', *Journal of Personality*, vol. 72, no. 2, pp. 271-324.
- Twenge, J.M. (2020) 'Increases in Depression, Self-harm, and Suicide among U.S. Adolescents After 2012 and Links to Technology Use: Possible Mechanisms', *Psychiatric Research and Clinical Practice*, vol. 2, no. 1, pp. 19-25.
- Twenge, J.M., Haidt, J., Blake, A.B., McAllister, C., Lemon, H. and Le Roy, A. (2021) 'Worldwide Increases in Adolescent Loneliness', *Journal of Adolescence*, vol. 93, pp. 257-269.
- Ung, B. (2024) 'Cash Rate Pass-through to Outstanding Mortgage Rates', April, *Reserve Bank of Australia Bulletin*.
- United Nations (2011) *Canberra Group Handbook on Household Income Statistics*, United Nations, New York and Geneva.
- Voce, I. and Morgan, A. (2025) *Cybercrime in Australia 2024*, Australian Institute of Criminology.
- Ware, J.E., Snow, K.K., Kosinski, M. and Gandek, B. (2000) *SF-36 Health Survey: Manual and Interpretation Guide*, QualityMetric Inc., Lincoln, RI.
- Watson, N. (2004a) 'Income and Wealth Imputation for Waves 1 and 2', HILDA Project Technical Paper Series No. 3/04, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Watson, N. (2004b) 'Wave 2 Weighting', HILDA Project Technical Paper Series No. 4/04, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Watson, N. and Fry, T. (2002) 'The Household, Income and Labour Dynamics in Australia (HILDA) Survey: Wave 1 Weighting', HILDA Project Technical Paper Series No. 3/02, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Watson, N. and Wooden, M. (2002) 'The Household, Income and Labour Dynamics in Australia (HILDA) Survey: Wave 1 Survey Methodology', HILDA Project Technical Paper Series No. 1/02, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Wen, L. and Maani, S.A. (2022) 'Earnings Penalty of Educational Mismatch: A Comparison of Alternative Methods of Assessing Over-education', *New Zealand Economic Papers*, vol. 56, no. 2, pp. 169-194.
- Wilkins, R. (2014) 'Derived Income Variables in the HILDA Survey Data: The HILDA Survey "Income Model"', HILDA Project Technical Paper Series, No. 1/14, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Wilkins, R. (2016) *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 14*, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Wilkins, R. and Sun, C. (2010) 'Assessing the Quality of the Expenditure Data Collected in the Self-completion Questionnaire', HILDA Discussion Paper No. 1/10, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Wilkins, R., Botha, F., Laß, I. and Peyton, K. (2024) *The Household Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 22*, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Wilkins, R., Buchler, S. and Baxter, J. (2025) 'The Declining Wellbeing of Sole Parents in Australia in the 21st Century', Life Course Centre Working Paper Series 2025-20, Institute for Social Science Research, The University of Queensland.
- Wilkins, R., Vera-Toscano, E. and Botha, F. (2023) *The Household Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 21*, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Wooden, M. (2009). 'Use of the Kessler Psychological Distress Scale in the HILDA Survey', HILDA Project Discussion Paper Series No. 2/09, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Wooden, M. (2013) 'The Measurement of Cognitive Ability in Wave 12 of the HILDA Survey', *HILDA Project Discussion Paper Series* No. 1/13, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Workplace Gender Equality Agency (2022) *Australia's Gender Equality Scorecard. Key Results from the Workplace Gender Equality Agency's 2020-21 Employer Census*, Sydney. https://www.wgea.gov.au/sites/default/files/documents/2020-21_WGEA_SCORECARD.

Technical Appendix

A. Overview of statistical methods and terms used in the report

Adjustments for inflation

All dollar figures presented in this report are expressed at December 2024 prices to remove the effects of inflation (the general rise in prices of goods and services) and thereby make estimates for different years more comparable. This is achieved using the Australian Bureau of Statistics (ABS) Consumer Price Index (CPI), which is produced on a quarterly basis (ABS Catalogue Number 6401.0). To convert a dollar value to December 2024 prices, the value is multiplied by the ratio of the CPI for the December quarter of 2024 (139.4) to the value of the CPI in the quarter to which the value relates. For example, to convert a wage measured in the third quarter of 2001 (when the CPI was 74.7) to December 2024 prices, the wage is multiplied by 1.87 (139.4/74.7). The interpretation of this adjustment is that prices, on average, rose by 87% between the September quarter of 2001 and the December quarter of 2024, which means that the amount of money required to buy a given bundle of goods and services had, on average, increased by 87%. We therefore need to increase the wage measured in the September quarter of 2001 by 87% to make it comparable with the wage measured in the December quarter of 2024. Note that for dollar values measured over an annual timeframe, such as income, the average value of the CPI over the relevant year is used for the denominator.

Balanced panel

A longitudinal household survey is known as a household panel study. A balanced panel restricts the sample to individuals who have responded to the survey in all waves of the period under study. For example, a balanced panel for Waves 1 to 10 of the HILDA Survey consists of individuals who have responded in all 10 waves.

Correlation coefficient

Often referred to as the Pearson correlation coefficient, the correlation coefficient is a statistical measure of how two variables are associated with each other. It is equal to the covariance of the two variables relative to the product of their standard deviations, having a minimum possible value of -1 (perfectly negatively correlated) and a maximum possible value of 1 (perfectly positively correlated). Positive values indicate that when one variable increases, the other variable also tends to increase. Negative values indicate that when one variable increases, the other variable tends to decrease. If the correlation coefficient is 0, there is no (linear) association between the two variables. Note that the correlation coefficient does not tell us about the extent and nature of any *causal* relationship between the two variables.



Gini coefficient

The Gini coefficient is a measure of dispersion often used as a measure of inequality of income and wealth. It ranges between 0 and 1, a low value indicating a more equal distribution and a high value indicating a more unequal distribution. Zero corresponds to perfect equality (everyone having exactly the same) and 1 corresponds to perfect inequality (where one person has everything and everyone else has nothing).

Indicator variable

Used in regression analysis, an indicator (or dummy) variable is equal to 1 if a particular characteristic or event is present, and equal to 0 otherwise. In ordinary least squares regression, the coefficient on an indicator variable is interpreted as the mean effect on the dependent variable of the presence of the characteristic/event, holding all else constant.

Mean marginal effects

Qualitative dependent variable models, such as probit and logit, are 'non-linear', meaning that the effects of explanatory variables on the probability of an outcome depend both on the value of that variable and on the values of the other explanatory variables. For example, in the logit models of the probability of becoming a single parent presented in Chapter 3, the effects of homeownership will depend on the values of the other explanatory variables. This complicates interpretation of the coefficients. We therefore report 'mean marginal effects', which provide a straightforward summary analogous to those obtained in linear regression models, namely, the average change in the probability of the outcome when the explanatory variable changes. For a binary predictor such as homeownership, the mean marginal effect is the average over the sample of the change in predicted probability when that predictor moves from non-ownership (0) to ownership (1).

Mean, median and mode

The mean, median and mode are all measures of central tendency. The mean is the statistical term used for what is more commonly known as the average—the sum of the values of a data series divided by the number of data points. The median is the middle data point in data sorted from lowest to highest value; 50% of the data points will lie below the median and 50% will lie above it. The mode is simply the most frequently occurring value of a data series.

Percentiles, deciles, quintiles and terciles

Percentiles, deciles, quintiles and terciles all identify 'locations' in the distribution of a variable, such as income, when it is ordered from lowest to highest. There are 100 percentiles, 10 deciles, five quintiles and three terciles for any given distribution. For example, the first (or bottom) percentile of the income distribution identifies the income below which are the lowest 1% of incomes (and above which are the highest 99% of incomes), the first decile identifies the income below which are the lowest 10% of incomes, the first quintile identifies the income below which are the lowest 20% of incomes, and the first tercile identifies the income below which are the lowest third of incomes. It is also common to refer to the percentile, decile, quintile or tercile to which an observation 'belongs'. For example, people with an income greater than the income at the 19th percentile but less than the income at the 20th percentile are said to belong to (or be located in) the 20th percentile. (Such individuals would also belong to the second decile, the first quintile and the first tercile.)

Regression models

In statistical analysis, a regression model is used to identify associations between a 'dependent' variable (such as earnings) and one or more 'independent' or 'explanatory' variables (such as measures of educational attainment and work experience). In particular, it shows how the typical value of the dependent variable changes when any one of the independent variables is varied and all other independent variables are held fixed. Most commonly, regression models estimate how the mean value of the dependent variable depends on the explanatory variables—for example, mean (or 'expected') earnings given a particular level of education and work experience. Different types of regression models are used depending on factors such as the nature of the variables and data, and the 'purpose' of the regression model. The following types of models are often estimated using HILDA Survey data.

- **Ordinary least squares** models estimate linear associations between a dependent variable (such as earnings) and one or more independent (or explanatory) variables (such as age and educational attainment). The method finds the linear combination of the explanatory variables that minimises the sum of the squared distances between the observed values of the dependent variable and the values predicted by the regression model.
- **Probit** and **logit** models are used to estimate the effects of factors, such as age and educational attainment, on a 'qualitative' or categorical dependent variable, such as labour force status. (The variable 'labour force status' is qualitative because it is not naturally 'quantitative' or numerical, such as is the case with income.) The standard models examine 'binary' dependent variables, which are variables with only two distinct values, and estimates obtained from these models are interpreted as the effects on the *probability* the variable takes one of those values. For example, a model might be estimated on the probability an individual is employed (as opposed to not employed).
- **Fixed-effects** models are often applied to panel data such as the HILDA Survey data. They involve accounting for the effects of all characteristics of sample members that do not change over time. For example, if we are interested in how life events impact on life satisfaction, a fixed-effects model is useful because we can control for (remove the effects of) fixed individual traits such as optimism and pessimism. This is achieved by examining how the outcome of interest changes at the individual level in response to changes in explanatory variables (such as income). For example, a fixed-effects model will find a positive effect of income on life satisfaction if individuals who experience increases in income from one year to the next tend to exhibit increases in life satisfaction over the same period, and individuals who experience decreases in income from one year to the next tend to exhibit decreases in life satisfaction over that period.
- **Survival or hazard** models are used to investigate the determinants of duration in a particular state, such as unemployment. They estimate the probability of leaving that state as a function of duration of the 'spell' and other factors. Commonly used models are the discrete-time event history model or the Cox proportional hazards model.

Relative standard error

The standard error of an estimate is a measure of the precision with which the estimate is estimated. For example, assuming statistical independence of the values in the sample, the standard error of the mean of a variable (such as income) is the standard deviation of the variable divided by the square root of the sample size, and there is a 95% probability that the true mean lies within 1.96 standard deviations of the estimated mean. The relative standard error of an estimate is the ratio of the standard error to the value of the estimate. In this report, we have marked with an asterisk (*) estimates in descriptive tabulations based on fewer than 20 observations, which will typically have a relative standard error greater than 25%. Note that a relative standard error that is less than 25% implies there is a greater than 95% probability the true quantity lies within 50% of the estimated value.

Standard deviation

The standard deviation is a measure of variability or 'dispersion' of a variable. It is equal to the square root of the mean squared difference of a variable from its mean value.

Statistical significance

In the context of statistical analysis of survey data, a finding is statistically significant if it is unlikely to be simply due to sampling variability—that is, if it is unlikely to be due to random factors causing specific characteristics of the survey sample to differ from the characteristics of the population. A common standard is to regard a difference between two estimates as statistically significant if the probability that they are different is at least 95%. However, 90% and 99% standards are also commonly used. The 90% standard is adopted for regression results presented in this report. Note that a statistically significant difference does not mean the difference is necessarily large or significant in the common meaning of the word.

B. Population inferences from the HILDA Survey data

As discussed in Watson and Wooden (2002), the reference population for Wave 1 of the HILDA Survey was all members of private dwellings in Australia, with the main exception being the exclusion of people living in remote and sparsely populated areas (now referred to as very remote). These coverage rules were broadly in line with those adopted by the Australian Bureau of Statistics (ABS) in its supplements to the Monthly Population Survey. Households were selected using a multi-staged approach designed to ensure representativeness of the reference population. First, a stratified random sample of 488 of the 1996 Census Collection Districts (CDs), each of which contains approximately 200 to 250 households, was selected from across Australia. Within each of these areas, depending on the expected response and occupancy rates of the area, a random sample of 22 to 34 dwellings was selected. Within each dwelling, up to three households were randomly selected. The frame of CDs was stratified by state and territory and, within the five most populous states, by metropolitan and non-metropolitan regions. Nonetheless, despite the region-based stratification, Wave 1 of the HILDA Survey was an equal-probability sample; in particular, the smaller states and territories were not over-sampled. This reflects the focus of the HILDA Survey on producing nationwide population estimates.

All members of the selected households were defined as members of the sample, although individual interviews were (and continue to be) only conducted with those aged 15 years and over. Since Wave 1, interviews have been sought with all members of Wave-1-responding households, which has meant following all individuals of these households wherever they go in Australia (including remote and sparsely populated areas). Individuals who move overseas are, however, not interviewed while they are living overseas. Note that, to ensure completeness of household information, any individuals who become part of an existing (permanent) sample member's household are also interviewed, but—aside from important exceptions explained below—these individuals are only interviewed as long as they remain in the same household as the permanent sample member.

The HILDA Survey is designed to have an indefinite life, which is primarily achieved by adding to the sample any children born to or adopted by sample members. The HILDA Survey aims to remain representative of the Australian population, but its original design as a longitudinal study meant that it would not be representative of immigrants who arrived after the initial (Wave 1) selection of the sample. To date, three approaches have been taken to address this source of declining representativeness. First, immigrants who join the household of an existing sample member automatically become permanent sample members. Second, in Wave 11, a general sample top-up (of 4,096 individuals) was conducted, which allowed immigrants who had arrived between 2001 and 2011 to enter the HILDA Survey sample. Third, in Wave 24 a sample top-up was conducted focusing on adding immigrants to the HILDA Survey (a small pilot immigrant sample was also added in Wave 23). Another immigrant sample top-up was added in Wave 25 and it is planned that an immigrant sample top-up will be added on a four-yearly basis going forward. These immigrant sample top-ups primarily focus on permanent arrivals, so temporary visa holders will typically be under-represented.

Whilst this report contains data disaggregated for the First Nations population, please note that the HILDA Survey is only representative of the First Nations population that lives outside of very remote areas (i.e., 91% of the broader First Nations population). It is not representative of the entire First Nations population. According to the 2021 Census, 2.5% of the Australian population aged 15 and over identify as First Nations excluding very remote areas (2.8% if very remote areas are included). Similarly, 2.6% of the HILDA sample identify as First Nations peoples. However, as previously mentioned, the HILDA sample excludes people living in very remote areas—this disproportionately impacts the First Nations sample (the 2021 Census found that 9.1% of First Nations Australians aged 15 years and over lived in very remote areas, compared to 0.7% of non-Indigenous Australians). Furthermore, the small overall number of First Nations respondents (259 in Wave 1 and 587 in Wave 24) precludes detailed analysis of this cohort.

Non-response is an issue for all household surveys, and *attrition* (i.e., people dropping out due to refusal to participate or our inability to locate them) is a further particular issue in all panel surveys. Because of attrition, and despite sample additions owing to changes in household composition, panels may slowly become less representative of the populations from which they are drawn, although as a result of the 'split-off' method, this does not necessarily occur.



To overcome the effects of survey non-response (including attrition), the HILDA Survey data managers analyse the sample each year and produce *weights* to adjust for differences between the characteristics of the panel sample and the characteristics of the Australian population.²² That is, adjustments are made for non-randomness in the sample selection process that causes some groups to be relatively under-represented and others to be relatively over-represented. For example, non-response to Wave 1 of the survey was slightly higher in Sydney than it was in the rest of Australia, so that slightly greater weight needs to be given to Sydneysiders in data analysis in order for estimates to be representative of the Australian population as a whole.

The population weights provided with the data allow us to make inferences about the Australian population from the HILDA Survey data. A population weight for a household can be interpreted as the number of households in the Australian population that the household represents. For example, one household (Household A) may have a population weight of 1,000, meaning it represents 1,000 households, while another household (Household B) may have a population weight of 1,200, thereby representing 200 more households than Household A. Consequently, in analysis that uses the population weights, Household B will be given 1.2 times ($1,200/1,000$) the weight of Household A. To estimate the mean (average) of, say, income of the households represented by Households A and B, we would multiply Household A's income by 1,000, multiply Household B's income by 1,200, add the two together and then divide by 2,200.

The sum of the population weights is equal to the estimated population of Australia that is 'in scope', by which is meant 'they had a chance of being selected into the HILDA sample' and which therefore excludes those that HILDA explicitly has not attempted to sample—namely, some people in very remote regions in Wave 1, people resident in non-private dwellings in 2001 and non-resident visitors. In principle, the in-scope population in Waves 2 to 10 excludes most immigrants arriving in Australia after 2001, and the in-scope population in Waves 12 to 23 excludes most immigrants arriving after 2011. However, Wave 24 includes immigrants arriving after 2011, through the addition of the immigrant top-up sample. For example, in 2021, based on visa grants and migration flows data, it is estimated that immigrants arriving after 2011 (when the last sample top-up was conducted) accounted for between 4.5% and 6% of the Australian population, translating to between approximately 1.1 million and 1.5 million people. These individuals are largely not represented in the HILDA Survey sample until 2024. However, owing to a lack of suitable external benchmarks for this population subgroup, these immigrants are in practice included in the in-scope population. Consequently, in all waves, the HILDA Survey weights sum to the total Australian population inclusive of new immigrants. In Wave 24, the household population weights sum to 10.7 million and the 'person' population weights sum to 26.6 million.

²² Further details on how the weights are derived are provided in Watson and Fry (2002), Watson (2004b) and Summerfield et al. (2025).



As the length of the panel grows, the variety of weights that might be needed also grows. Most obviously, separate cross-sectional weights are required for every wave, but more important is the range of longitudinal weights that might be required. Longitudinal (multi-year) weights are used to retain representativeness over multiple waves. In principle, a set of weights will exist for every combination of waves that could be examined—Waves 1 and 2, Waves 5 to 9, Waves 2, 5 and 7, and so on. The longitudinal weights supplied with the data allow population inferences for analysis using any two waves (i.e., any pair of waves) and analysis of any ‘balanced panel’ of a contiguous set of waves, such as Waves 1 to 6 or Waves 4 to 7. Longitudinal weights are also provided to allow analysis of ‘rotating’ content. For example, to facilitate longitudinal analysis of wealth, longitudinal weights are provided for Waves 2, 6, 10, 14, 18 and 22. In this report, cross-sectional weights are always used when cross-sectional results are reported and the appropriate longitudinal weights are used when longitudinal results are reported. Thus, all statistics presented in this report should be interpreted as estimates for the in-scope Australian population. That is, all results are ‘population-weighted’ to be representative of the Australian community.

A further issue that arises for population inferences is missing data for a household, which may arise because a member of a household did not respond or because a respondent did not report a piece of information. This is particularly important for components of financial data such as income, where failure to report a single component by a single respondent (e.g., dividend income) will mean that a measure of household income is not available. To overcome this problem, the HILDA data managers *impute* values for various data items. For individuals and households with missing data, imputations are undertaken by drawing on responses from individuals and households with similar characteristics, and also by drawing on their own responses in waves other than the wave in which the data are missing. Full details on the imputation methods are available in Watson (2004a), Hayes and Watson (2009) and Sun (2010). In this report, imputed values are used in all cases where relevant data are missing and an imputed value is available. This largely applies only to income, expenditure and wealth variables.

The population weights and imputations allow inferences to be made from the HILDA Survey about the characteristics and outcomes of the Australian population. However, estimates based on the HILDA Survey, like all sample survey estimates, are subject to sampling error. Because of the complex sample design of the HILDA Survey, the reliability of inferences cannot be determined by constructing standard errors on the basis of random sampling, even allowing for differences in probability of selection into the sample reflected by the population weights. The original sample was selected via a process that involved stratification by region and geographic ‘ordering’ and ‘clustering’ of selection into the sample within each stratum. Standard errors (measures of reliability of estimates) need to take into account these non-random features of sample selection, which can be achieved by using *replicate weights*. Replicate weights are supplied with the unit record files available to approved researchers for cross-sectional analysis and for longitudinal analysis of all balanced panels that commence with Wave 1 (e.g., Waves 1 to 4 or Waves 1 to 8). Full details on the sampling method for the HILDA Survey are available in Watson and Wooden (2002), while details on the construction, use and interpretation of the replicate weights are available in Hayes (2009).

In this report, standard errors of statistics are not reported. Instead, for tabulated results of descriptive statistics, estimates that have a relative standard error of more than 25% are marked with an asterisk (*). For regression model parameter estimates, estimates that are not statistically significantly different from 0 at the 10% level are not reported, with *ns* (not significant) appearing in place of the estimate.

C. Fieldwork process and outcomes

Sample

The HILDA Survey commenced in 2001, with a nationally representative sample of Australian households (residing in private dwellings). Of the 11,693 households selected for inclusion in the sample in 2001, 7,682 households agreed to participate, resulting in a household response rate of 66%. The 19,914 residents of those households form the basis of the 'main sample' that is interviewed in each subsequent year (or survey wave), but with interviews only conducted with people aged 15 years or older. As noted in Section B of this Technical Appendix, interviews are also conducted with any other person who joins a household in which an original sample member is living. These individuals are only interviewed as long as they remain living with an original sample member, unless they are an immigrant who migrated to Australia after 2001 or they have a child with an original sample member, in which case they become a 'permanent' sample member. People who are known to have died are removed from the sample (but their existing data are retained). We also do not pursue interviews with people who have moved overseas, people who have requested to no longer be contacted or people we have not been able to contact for three successive survey waves. In 2011 a 'top-up' sample was added. This resulted in the addition of 2,153 households and 5,451 people (including children aged under 15). The household response rate for the top-up sample was 69%. In 2023 and 2024, a 'top-up' sample of immigrants was added. A total of 70 households and 223 people (including children aged under 15) were added to the sample in 2023 and a total of 677 households and 2,069 people (including children aged under 15) were added to the sample in 2024.

Data collection

The annual interviews for the main sample commence towards the end of July each year and conclude by mid-February of the following year. The interviewer workforce comprised 154 interviewers in Wave 24, 134 of whom were face-to-face interviewers. The remaining 20 were dedicated telephone interviewers. In Wave 24, 2,932 interviews (or 17.1% of the total completed) were undertaken by telephone.

Response

Table A1 and Figure A1 summarise key aspects of the HILDA sample for the period examined in this report (Waves 1 to 24).²³ Table A1 presents the number of households, respondents and children under 15 years of age in each wave. In Wave 24, interviews were obtained with a total of 17,178 people, of which 12,408 were from the original sample, 3,354 were from the Wave 11 top-up sample, 122 were from the Wave 23 immigrant top-up and 1,294 were from the Wave 24 immigrant top-up. Of the original 13,969 respondents in 2001, 5,754 or 50.7% of those still in scope (i.e., alive and in Australia), were still participating at Wave 24.

Note that—the top-up sample aside—the total number of respondents in each wave is greater than the number of Wave 1 respondents interviewed in that wave, for three main reasons. First, some non-respondents in Wave 1 are successfully interviewed in later waves. Second, interviews are sought in later waves with all people in sample households who turn 15 years of age. Third, additional people are added to the panel as a result of changes in household composition. For example, if a household member 'splits off' from their original household (e.g., children leave home to set up their own place, or a couple separates), the entire new household joins the panel. Inclusion of 'split-offs' is the main way in which panel surveys, including the HILDA Survey, maintain sample representativeness over the years.

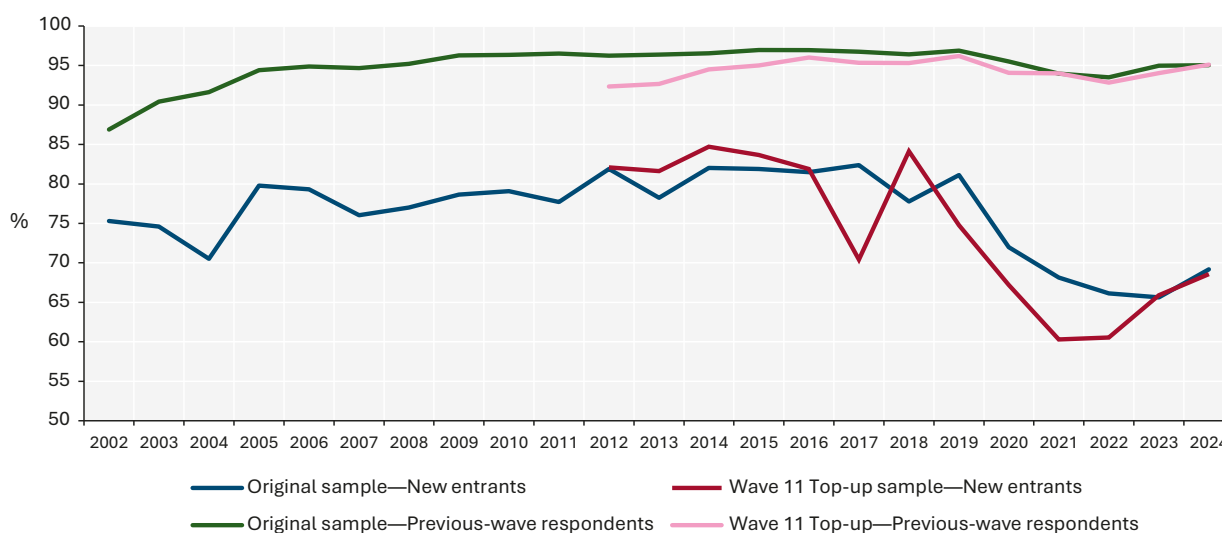
²³ More detailed data on the sample make-up, and in particular response rates, can be found in Summerfield et al. (2025).

Table A1: HILDA Survey sample sizes

	Households	People interviewed	Children under 15
Wave 1	7,682	13,969	4,787
Wave 2	7,245	13,041	4,276
Wave 3	7,096	12,728	4,089
Wave 4	6,987	12,408	3,888
Wave 5	7,125	12,759	3,896
Wave 6	7,139	12,905	3,756
Wave 7	7,063	12,789	3,691
Wave 8	7,066	12,785	3,574
Wave 9	7,234	13,301	3,625
Wave 10	7,317	13,526	3,600
Wave 11	9,543	17,612	4,781
Wave 12	9,537	17,475	4,698
Wave 13	9,555	17,500	4,735
Wave 14	9,538	17,511	4,670
Wave 15	9,631	17,605	4,690
Wave 16	9,750	17,693	4,819
Wave 17	9,741	17,570	4,847
Wave 18	9,638	17,434	4,845
Wave 19	9,664	17,462	4,863
Wave 20	9,555	17,070	4,819
Wave 21	9,358	16,549	4,661
Wave 22	9,003	15,954	4,566
Wave 23	8,928	15,987	4,516
Wave 24	9,513	17,178	4,442

Note: Figures include sample recruited in Wave 11 as well as Wave 23 and Wave 24 top-ups.

Figure A1 reports re-interview rates (percentage of previous-wave respondents still in scope who were interviewed in the current wave) and response rates among new entrants to the sample for both the original sample and the top-up sample. As can be seen, re-interview rates for the original sample are high, exceeding 95% for the first time in Wave 8. However, response rates dropped during the pandemic years. In Wave 24, the re-interview rate was 94.9% for the original sample and 95% across all samples. We expect much lower response rates among new individuals joining the sample. Nevertheless, response rates for this group have averaged approximately 75% to 80% for much of the period since Wave 4. However, from Wave 21, the rate dropped below 70% for both the original sample and the Wave 11 top-up sample.

Figure A1: HILDA Survey response rates, Waves 2 to 24 (2002 to 2024)

All people who are interviewed are also asked to complete a self-completion questionnaire (SCQ), either on paper or (since Wave 20) online. Of the 17,178 people who were interviewed in Wave 24, 15,743 (91.7%) completed this SCQ.

More detailed information on interview response rates across demographic groups is presented in Tables A2 and A3. Table A2 examines Wave 1 respondents, presenting the proportion of the sample responding in all 24 waves and the proportion responding in Wave 24, disaggregated by characteristics in Wave 1 (i.e., in 2001). Table A3 presents analogous information for the Wave 11 top-up sample.

Table A2: Percentage of Wave 1 respondents re-interviewed by selected Wave 1 characteristics (%)

Wave 1 characteristics	Interviewed in all waves	Interviewed in Wave 24	Wave 1 characteristics	Interviewed in all waves	Interviewed in Wave 24
<i>Area</i>			<i>First Nations status</i>		
Sydney	38.6	47.8	First Nations	30.5	53.4
Rest of New South Wales	41.6	50.7	Non-Indigenous	41.2	50.6
Melbourne	40.2	51.2	<i>Educational attainment</i>		
Rest of Victoria	38.6	48.6	Year 11 or below	34.8	44.2
Brisbane	46.2	54.8	Year 12	40.8	51.4
Rest of Queensland	41.2	49.4	Certificate III or IV	39.1	48.7
Adelaide	43.0	52.5	Diploma	47.2	56.4
Rest of South Australia	40.4	54.2	Degree or higher	53.9	63.3
Perth	40.5	49.2	<i>Dwelling type</i>		
Rest of Western Australia	34.1	46.4	House	41.6	51.2
Tasmania	43.1	53.4	Semi-detached	39.1	49.9
Northern Territory	55.9	70.5	Flat, unit, apartment	36.8	46.3
Australian Capital Territory	49.7	61.1	Other	35.0	51.2
<i>Sex</i>			<i>Labour force status</i>		
Male	39.0	48.8	Employed full-time	43.6	53.5
Female	42.6	52.3	Employed part-time	45.8	55.9
<i>Age group (years)</i>			Unemployed	32.1	45.5
15-19	30.6	45.8	Not in the labour force	34.4	42.8
20-24	30.3	45.1	<i>Employment status in main job^a</i>		
25-34	38.8	50.4	Employee	44.7	54.6
35-44	46.6	55.5	Employer	41.3	50.3
45-54	50.2	58.5	Own account worker	42.4	52.9
55-64	45.3	52.6	Contributing family worker	36.8	45.9
65-74	24.4	26.6	<i>Occupation^a</i>		
75 and over	2.6	2.6	Managers/Administrators	46.1	56.8
<i>Marital status</i>			Professionals	53.4	63.4
Married	43.7	51.7	Associate Professionals	44.7	54.8
De facto	38.8	49.9	Tradespersons	35.9	46.5
Separated	39.9	50.1	Advanced Clerical/Service	42.9	49.8
Divorced	47.7	57.5	Intermediate Clerical/Sales/Service	44.7	54.6
Widowed	33.6	36.5	Intermediate Production/Transport	38.3	44.9
Single	35.1	48.7	Elementary Clerical/Sales/Service	44.6	56.2
<i>Country of birth</i>			Labourers	35.9	45.9
Australia	42.5	52.5	All Wave 1 respondents	41.0	50.7
Overseas			Total number responding	4,459	5,754
Main English-speaking	41.8	49.1			
Other	31.8	42.3			

Notes: Estimates are for the sample and are therefore not population-weighted. ^a Employed people only.

Table A3: Percentage of Wave 11 top-up respondents re-interviewed by selected Wave 11 characteristics (%)

Wave 11 characteristics	Interviewed in all waves	Interviewed in Wave 24	Wave 11 characteristics	Interviewed in all waves	Interviewed in Wave 24
<i>Area</i>			<i>First Nations status</i>		
Sydney	54.0	60.6	First Nations	50.6	58.4
Rest of New South Wales	58.4	62.1	Non-Indigenous	54.4	61.3
Melbourne	57.5	64.0	<i>Educational attainment</i>		
Rest of Victoria	50.9	59.8	Year 11 or below	47.0	55.8
Brisbane	58.0	66.8	Year 12	54.4	60.1
Rest of Queensland	51.7	61.4	Certificate III or IV	55.5	64.3
Adelaide	57.6	61.6	Diploma	56.9	66.4
Rest of South Australia	53.1	55.1	Degree or higher	60.1	63.0
Perth	44.9	53.9	<i>Dwelling type</i>		
Rest of Western Australia	34.0	48.5	House	54.3	61.1
Tasmania	63.3	67.2	Semi-detached	51.2	60.1
Northern Territory	39.1	52.2	Flat, unit, apartment	56.8	62.3
Australian Capital Territory	41.7	45.1	Other	100.0	100.0
<i>Sex</i>			<i>Labour force status</i>		
Male	52.8	60.5	Employed full-time	56.7	64.5
Female	55.6	61.8	Employed part-time	55.1	60.8
<i>Age group (years)</i>			Unemployed	57.3	65.2
15-19	45.8	53.3	Not in the labour force	50.1	56.3
20-24	49.5	59.2	<i>Employment status in main job^a</i>		
25-34	57.6	65.3	Employee	56.3	63.5
35-44	55.4	62.6	Employer	50.0	59.2
45-54	56.7	63.3	Own account worker	55.2	61.1
55-64	60.8	67.0	Contributing family worker	60.0	70.0
65-74	59.2	63.1	<i>Occupation^a</i>		
75 and over	21.2	25.8	Managers	56.3	66.6
<i>Marital status</i>			Professionals	60.6	66.4
Married	57.6	63.9	Technicians and Trades Workers	49.7	56.6
De facto	53.8	61.0	Community and Personal Service Workers	55.8	61.5
Separated	57.6	62.4	Clerical and Administrative Workers	55.4	62.2
Divorced	55.6	61.0	Sales Workers	54.3	63.2
Widowed	38.4	43.2	Machinery Operators and Drivers	56.4	63.1
Single	49.3	58.0	Labourers	57.5	65.0
<i>Country of birth</i>			All Wave 11 top-up respondents	54.3	61.2
Australia	55.7	62.5	Total number responding	1,876	2,180
Overseas					
Main English-speaking	52.9	61.6			
Other	50.2	56.0			

Notes: Estimates are for the sample and are therefore not population-weighted. ^aEmployed people only.

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Commenced in 2001, the Household, Income and Labour Dynamics in Australia (HILDA) Survey is a nationally representative household-based panel study, providing longitudinal data on the economic wellbeing, employment, health and family life of Australians.

The study is funded by the Australian Government Department of Social Services and is managed by the Melbourne Institute of Applied Economic and Social Research at the University of Melbourne. Roy Morgan Research has conducted the fieldwork since 2009, prior to which The Nielsen Company was the fieldwork provider.

