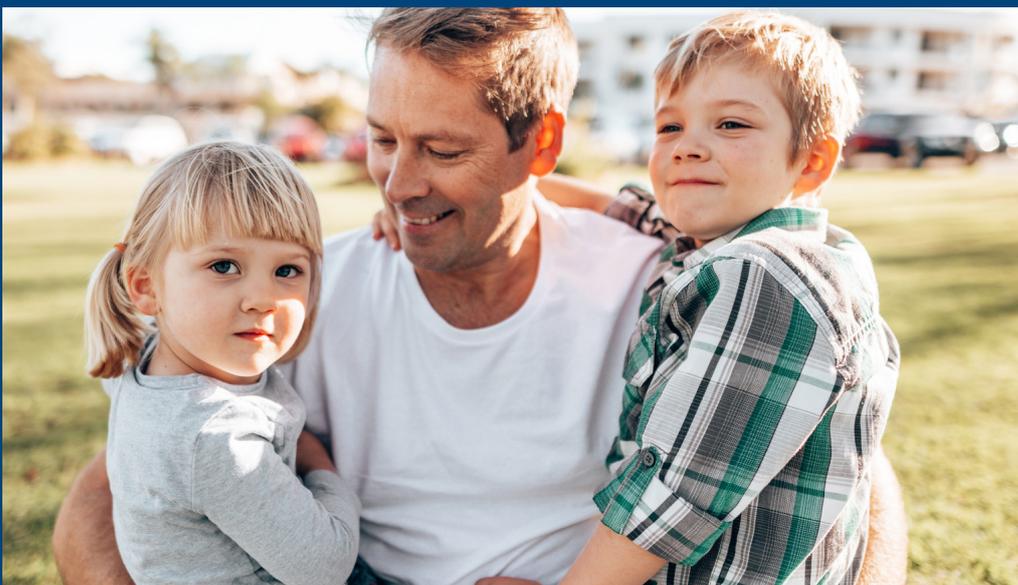


The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 20



2022



The Household, Income and Labour Dynamics in Australia (HILDA) Survey
is funded by the Australian Government Department of Social Services

The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 20

The 17th Annual Statistical Report of the HILDA Survey

Roger Wilkins, Esperanza Vera-Toscano, Ferdi Botha,
Mark Wooden and Trong-Anh Trinh

Melbourne Institute: Applied Economic & Social Research
The University of Melbourne



The Household, Income and Labour Dynamics in Australia (HILDA) Survey is funded by the Australian Government Department of Social Services



Melbourne Institute: Applied Economic & Social Research
Faculty of Business and Economics
Level 5, 111 Barry Street
FBE Building
The University of Melbourne
Victoria 3010 Australia
Tel: +61 3 8344 2100
Fax: +61 3 8344 2111
Web: www.melbourneinstitute.unimelb.edu.au/hilda

© Commonwealth of Australia 2022

ISSN 2205-0558 (Print)
ISSN 2205-0566 (Online)

Suggested citation: Roger Wilkins, Esperanza Vera-Toscano, Ferdi Botha, Mark Wooden and Trong-Anh Trinh (2022) *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 20*. Melbourne Institute: Applied Economic & Social Research, University of Melbourne.

This is the 17th Annual Statistical Report of the HILDA Survey. The first nine reports (2006 to 2014) were published as *Families, Incomes and Jobs: A Statistical Report of the HILDA Survey*.

All material presented in this publication is provided under a Creative Commons CC-BY Attribution 3.0 Australia <http://creativecommons.org/licenses/by/3.0/au/deed.en> licence. For the avoidance of doubt, this means this licence only applies to material as set out in this document.



The opinions, comments and analysis expressed in this document are those of the authors and do not necessarily represent the views of the Minister for Social Services or the Australian Government Department of Social Services and cannot be taken in any way as expressions of government policy.

Photo credits: ©iStock by Getty Images
Designed and manufactured by the Junction Print Group.



Contents

1. Introduction	4
2. Households and family life	6
3. Household economic wellbeing.....	32
4. The labour market	66
5. Life during the COVID-19 pandemic in 2020.....	91
6. Financial wellbeing.....	108
7. Working from home.....	115
8. Mental health.....	121
9. Education participation and experiences.....	128
10. Social connection and social support	134
References.....	141
Technical Appendix.....	143
HILDA Survey Personnel	151

Acknowledgements

We acknowledge comments received on draft versions of this report from the Australian Government Department of Social Services and other Australian Government departments and agencies. Thanks also to The Editorial Collective for subediting and to Claire Denby for overseeing the subediting, design and printing of the report.

1

Introduction

Roger Wilkins

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. As of December 2021, 20 waves (years) are available to researchers, while this year sees the collection of the 22nd 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

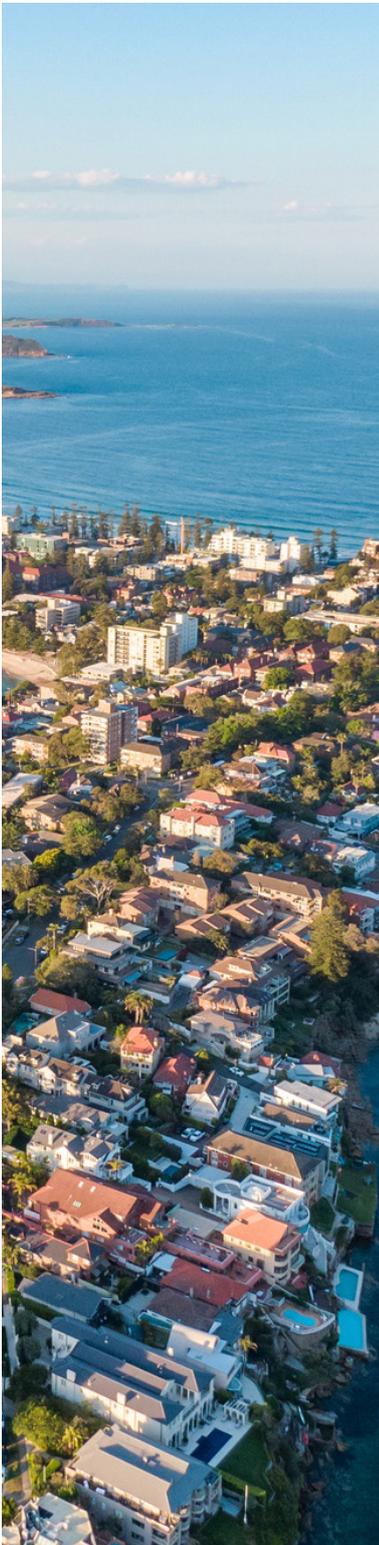
year, allowing us to see how their lives are changing over time.

By design, the study can be infinitely lived, 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 welfare reliance.

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 20 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

This report presents brief statistical analyses of the first 20 waves of the study, which were conducted between 2001 and 2020. An important theme of this year's report is how the COVID-19 pandemic impacted life in Australia in 2020. The 2020 data provide an insight into how the first year of the pandemic impacted our economic wellbeing, family and social life, health, labour market activity and many other aspects of life in Australia. All of these life domains, and how they evolved in 2020, are explored in this report. Throughout, particular attention is paid to Victoria. This is because the HILDA Survey fieldwork was largely conducted when Victoria, and Victoria alone, was in 'lockdown', a situation where movement of people, and social and economic activity were all severely constrained (see Box 5.1, page 91, and Box 5.2, page 92). While this analysis primarily speaks to the experience of Victorians in this period, in many respects, the findings for Victoria should be interpreted as

indicative of the impacts likely to have been experienced by residents of other states when they were in lockdown, both in 2020 and in 2021.

The report should be viewed as containing only 'selected findings', providing only a cursory indication of the rich potential of the HILDA Survey data. Indeed, a large number of studies on a diverse range of topics have been undertaken by researchers in Australia and internationally over the years since data from the first wave of the HILDA Survey were released in January 2003. Further details on the publications resulting from these studies are available on the HILDA Survey website at <<https://melbourneinstitute.unimelb.edu.au/hilda/publications>> and at <<http://flosse.dss.gov.au/>>.

Most of the analysis presented in this report consists of graphs and tables of descriptive statistics that are reasonably easy to interpret. However, several tables contain estimates from regression models. These are less easily interpreted than tables of descriptive statistics but are included because they are valuable for better understanding the various topics examined in the report. In particular, a regression model provides a clear description of the statistical relationship between two factors, *holding other factors constant*. For example, a regression model of the determinants of earnings can show the average difference in earnings between male and female employees, holding constant other factors such as age, education, hours of work and so on (that is, the average difference in earnings when males and females do not differ in other characteristics). Moreover, under certain conditions, this statistical association can be interpreted as a causal relationship, showing the effects of the 'explanatory variable' on the 'dependent variable'. Various types of regression models have been estimated for this report and, while these models are not

explained in depth, brief outlines of the intuition for these models and how to interpret the estimates are provided in the Technical Appendix.

The Technical Appendix also provides details on the HILDA Survey sample and the population weights supplied in the data to correct for non-response and attrition. These weights are used in all analysis presented in this report, so that all statistics represent estimates for the Australian population. Note, however, that the HILDA Survey under-represents immigrants arriving in Australia after 2011. Section B of the Technical Appendix further discusses this limitation. While precise data are not available, visa grants and migration flow data suggest that in 2020 between 4.5% and 6% of residents in Australia (approximately 1.1 to 1.5 million people) were immigrants who arrived after 2011. These individuals are largely not represented in the HILDA Survey sample and therefore in the analysis presented in this report.

Estimates based on the HILDA Survey, like all sample survey estimates, are subject to sampling error. As explained in more detail in the Technical Appendix, for tabulated results of descriptive statistics, we have adopted an Australian Bureau of Statistics convention and marked with an asterisk (*) estimates that have a relative standard error—the standard error relative to the size of the estimate itself—of more than 25%. A relative standard error that is less than 25% implies that there is a greater than 95% probability the true quantity lies within 50% of the estimated value. For regression model parameter estimates presented in this report, estimates that are not statistically significantly different from 0 at the 10% level are not reported and instead 'ns' (not significant) appears in place of the estimate. Estimates that are statistically significant at the 10% level have a probability of *not* being 0 that is greater than 90%.

2

Households and family life¹

Esperanza Vera-Toscano



The HILDA Survey collects information on various aspects of family life every year. These aspects comprise family and household structures; how parents cope with parenting responsibilities, including the care arrangements they use and the care-related problems they face; issues of work-family balance; perceptions of family relationships; and perceptions of and attitudes to roles of household members. Collecting this information from the same individuals every year allows us to investigate how and why family circumstances change over time—partnering and marriage, separation and divorce, childbirth, adult children leaving the family home, and any other change to the composition or nature of family circumstances.

In this chapter, we present analyses for the 2001 to 2020 period of four aspects of family life: the changing living arrangements of Australians, as described by the household types in which they live and with a special reference to young adults still living at home; partnering and separation; fertility intentions; and the characteristics and wellbeing of carers. As in other chapters of this year's report, particular attention is paid to the COVID-19 pandemic's initial impacts on households and family life.

Household dynamics, 2001 to 2020

Table 2.1 considers the evolution of household types (as described in Box 2.3, page 8) over the 2001 to 2020 period. It shows the proportion of individuals in each of 11 household types 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 (page 7), 2.2 (page 7) and 2.3 (page 8)).

Broadly speaking, the distribution of household types has been relatively stable across the 20 years. A household containing a couple with dependent children (and no one else) remains the most common household type, with approximately 41% of individuals living in this household

type across the entire period. Households containing a couple (and no children) remain the second most common household type, accounting for approximately 20% to 21% of individuals. Single-parent households are the third most common household type, accounting for about 11% to 12% of individuals. The fourth position in the ranking is for people living alone (the single household type), applying to around 10% of individuals.

Some important trends are nonetheless evident. The proportion of people living in multiple-family households has risen by 1.5 percentage points between 2001 and 2020 (from 2.7% to 4.2%). The peak was in fact in 2019, when the proportion of people in multiple-family households was 4.6%. Couple households with dependent children, with or without other

¹ Special thanks to Markus Hahn for his support with some of the statistical analysis for this chapter.

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, 1995). 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.

Box 2.2: Single parents

We adopt the Australian Bureau of Statistics' (ABS) definition of a single parent in this report (see ABS, 1995). 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. However, a person who reports being legally or de facto married will not be classified as a single parent even if their partner is not usually resident in the household.

household members, have collectively fallen by 0.9 percentage points between 2001 and 2020, although their share increased by 0.7 percentage points between 2019 and 2020.

Also evident is that the proportion of people in single-parent households with dependent

children (without others) exhibited a declining trend between 2001 and 2020, falling by 0.7 percentage points, with 0.3 of this 0.7 decline occurring between 2019 and 2020. The proportion of people living in single-parent households with non-dependent children (and no dependent children) increased by



Table 2.1: Proportion of individuals in each household type, 2001 to 2020 (%)

	2001	2004	2007	2010	2013	2016	2019	2020	Change 2001 to 2020	Change 2019 to 2020
<i>Couple with children</i>	52.4	52.7	53.6	52.8	50.6	50.3	50.3	51.4	-1.0	1.1
Couple with dependent children	41.4	41.5	41.4	40.9	40.3	40.6	40.7	40.9	-0.6	0.2
Couple with dependent children and others ^a	2.4	1.8	2.0	3.0	2.3	1.7	1.6	2.1	-0.3	0.5
Couple with non-dependent children, with or without others ^a	8.5	9.4	10.2	8.9	8.0	8.0	8.1	8.4	-0.1	0.4
<i>Couple without children (with or without others^a)</i>	20.4	20.6	20.2	21.0	21.5	21.1	20.4	20.6	0.1	0.2
<i>Single-parent household</i>	11.4	12.1	11.7	11.9	11.5	12.5	12.6	11.8	0.5	-0.8
Single parent with dependent children	6.9	7.2	6.6	6.3	6.7	6.8	6.6	6.2	-0.7	-0.3
Single parent with dependent children and others ^a	1.5	1.4	1.0	1.5	1.4	1.3	1.1	1.1	-0.4	-0.1
Single parent with non-dependent children, with or without others ^a	2.9	3.6	4.1	4.1	3.4	4.4	4.9	4.5	1.6	-0.4
<i>Single person</i>	9.5	9.3	9.3	9.4	9.5	9.7	9.9	9.9	0.4	0.1
<i>Other household type</i>	6.4	5.3	5.2	5.0	7.0	6.5	6.8	6.3	0.0	-0.5
Other family household	1.1	1.3	0.9	1.0	1.4	1.1	1.3	1.3	0.2	0.1
Multiple-family household	2.7	2.6	3.1	2.7	4.3	4.5	4.6	4.2	1.5	-0.4
Group household	2.5	1.4	1.2	1.3	1.3	0.9	1.0	0.8	-1.8	-0.2
Total	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.

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, giving 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 (page 7), while 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, 90% 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).
- For an individual to be classified as a member of the household, in most cases the individual must reside in the household at least 50% of the time. Consequently, dependent children in a ‘shared care’ arrangement who reside in the household less than 50% of the time are not treated as members of the household. In the event that a child resides exactly 50% of the time in each parent’s household, the child is assigned to the mother’s household.

In some of the analysis presented in this report, individuals are classified according to family type (see Box 3.4, page 36) 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 or when non-dependent children live with their parents.

2.0 percentage points between 2001 and 2019, but shrank by 0.4 percentage points between 2019 and 2020.

Changes in household type

The stability of household type is examined in Table 2.2, which presents the proportion of individuals changing their household type from one year to the next, disaggregated by initial household type. Estimates are shown separately for five periods—2001 to 2004, 2005 to 2008, 2009 to 2012, 2013 to 2016 and 2017 to 2020—to examine whether mobility between household types has changed over the 2001 to 2020 period. Note that the composition of a household can change without causing a change in household type. For example, a non-dependent child may move out, but if another non-dependent child remains in the household (and no other change occurs), the household type will not change for the household members remaining in the household. It is also possible for the household type to change without any change in membership. For example, a dependent child may become a non-dependent child.

Overall, household type changes from one year to the next for approximately 13% of individuals. This result has remained stable over the HILDA Survey period. However, the likelihood of one’s household type changing does vary considerably across



Table 2.2: Proportion of individuals for whom household type changes from one year to the next, by initial household type, 2001 to 2020 (%)

	2001-2004	2005-2008	2009-2012	2013-2016	2017-2020
<i>Couple with children</i>					
Couple with dependent children	7.9	8.0	9.0	8.3	8.2
Couple with dependent children and others ^a	37.0	39.0	38.4	36.6	40.4
Couple with non-dependent children, with or without others ^a	27.3	28.6	29.5	25.5	26.8
<i>Couple without children (with or without others^a)</i>					
	8.7	9.0	9.4	9.1	8.6
<i>Single-parent household</i>					
Single parent with dependent children	17.4	19.5	18.9	19.7	18.6
Single parent with dependent children and others ^a	44.3	39.3	43.5	43.9	42.7
Single parent with non-dependent children, with or without others ^a	23.4	23.3	24.0	19.5	19.5
<i>Single person</i>					
	10.3	11.3	11.7	11.2	10.3
<i>Other household type</i>					
Other family household	27.8	30.3	31.0	26.1	21.8
Multiple-family household	42.1	38.4	41.5	36.7	34.3
Group household	48.1	33.8	45.4	38.0	32.5
Total	12.3	12.6	13.8	12.8	12.3

Notes: Years in column headings refer to the initial year. For example, the column headed '2001-2004' examines all household-type changes between 2001 and 2002, 2002 and 2003 and 2003 and 2004.^a 'Others' comprises related persons as well as unrelated persons. If dependent children are present, the household could (and often will) include non-dependent children.

household types. The most stable household types are couples with dependent children without others, and couples without children. Single-person households are also relatively stable.

The least stable household types contain members who are not a partner, parent or child of one of the other members. Most notably, single-parent households with dependent children that include 'others', and individuals in group households, are the most likely to change their household type from one year to the next.

In terms of changes over the HILDA Survey period, we see an increase in household type changes in 2017 to 2020 for those in the household type comprising couples with dependent children along with others, with 40.4% changing household type in that period, compared to 36.6% for the 2013 to 2016 period. Also evident is a decline in household type changes in the 2017 to 2020 period for those in 'other

family' households and those in group households.

Table 2.3 considers changes to household composition, showing the proportion of the population (including children under 15 years of age) experiencing various changes over multiple time-frames. The first row presents the proportion of people experiencing any change to household composition, whether this arises from the individual moving or another person entering or leaving that person's household. The second row presents the proportion experiencing an increase in household size, and the third row presents the proportion experiencing a decrease in household size. The remaining rows show the proportion of people experiencing particular changes to household composition: partnering, separation of partners, birth of a child, a child moving in, a child moving out, and death of a household member.



Changes are examined over one-, five-, 10-, 15- and 20-year time-frames, all commencing in 2001. Note that multiple-year estimates are based on changes occurring between every year within the time-frame being analysed. For example, changes in household composition between 2001 and 2004 (a three-year time-frame) are evaluated by examining the changes in the individual's household membership between 2001 and 2002, 2002 and 2003, and 2003 and 2004. It is, therefore, possible for an individual to have both an increase and a decrease in household size over multiple-year time-frames. In fact, an individual can experience all of the changes examined in the table in any given time-frame of three or more years—including both partnering and separation.²

Over one year, approximately 20% of people experienced at least one change in household composition, be it through someone leaving the household or by someone joining the household. Over the five-year

period, almost half of the population experienced at least one change in household composition; while over the 10-year period, nearly two-thirds experience at least one change in household membership. Then, over the 15-year period three-quarters experienced at least one change in household membership; while over the 20-year period, around 80% of the population experienced at least one change.

The lower panel of the table examines six types of changes in household composition—partnering, separation, the birth of a child, a child moving into or out of the parental home, and the death of a household member.

The most important driver of changes in household composition, be it over one, five, 10, 15 or 20 years, is change related to children in the household. The single most common source of change in the composition of an individual's household is a child leaving the parental home, with 11.6% of

individuals experiencing this source of change to the composition of their household from one year to the next, and 65.1% experiencing it over 20 years.

Children moving (back) into the parental home and the birth of children are also important sources of change in household composition.³ Interestingly, children moving (back) into the parental home becomes relatively more important than children's birth over longer time-frames. Similarly, partnering and separation are relatively unimportant sources of change in household composition over one year. However, over longer time-frames (five or more years), partnering and separation become relatively more important sources of change in household composition.

In Table 2.4, we consider changes in household composition between 2019 and 2020 by state of residence in light of the different experiences across the states of COVID-19 infection and

Table 2.3: Changes in household composition from 2001 (%)

	1 Year	5 Years	10 Years	15 Years	20 Years
Household composition changed (someone left and/or someone entered)	21.2	49.9	64.5	74.3	78.1
Household size increased	7.8	29.5	44.4	54.0	59.2
Household size decreased	13.0	38.6	54.9	65.7	71.3
<i>Nature of change in composition</i>					
Partnering	3.3	13.1	23.4	31.5	36.4
Separation	2.2	10.2	17.1	23.0	26.1
Birth of a child	4.9	13.2	19.9	25.6	29.1
Child moving into parent home	3.9	14.6	23.6	30.0	34.3
Child moving out of parent home	11.6	34.8	50.2	60.6	65.1
Death of a household member	0.5	2.5	4.8	6.8	8.4

² Note that changes in household composition that occur between waves will not be captured by Table 2.3 if they are reversed between those waves. For example, no change in household composition occurs if an individual separates from their partner subsequent to being interviewed in one wave and then re-partners with that same person prior to the next wave's interview. The extent to which the prevalence of changes is underestimated will, moreover, differ across the different types of changes to household composition. For example, movements of children into and out of the parental home are more likely to be missed than births. Also note that the estimates in Table 2.3 relate to the population alive in all years over the time-frame under examination. For example, the estimates for changes in household membership over the 10 years following 2001 relate to the population aged 0 and over in 2001 who were still alive in 2011.

³ Note that a change in relation to children in the household will not just apply to the parents in the household, it applies to everyone who was living in the household left by the child, including the child who moves, any siblings, and any other related or unrelated people living in the household.



Table 2.4: Changes in household composition by state of residence, 2019 to 2020 (%)

	<i>All States</i>	<i>NSW and ACT</i>	<i>Victoria</i>	<i>Rest of Australia</i>
Household composition changed (someone left and/or someone entered)	18.0	18.6	16.0	18.8
Household size increased	7.6	8.7	7.2	7.1
Household size decreased	10.3	10.3	9.2	10.9
<i>Nature of change in composition</i>				
Partnering	2.3	2.0	2.8	2.1
Separation	2.1	2.8	1.7	1.9
Birth of a child	4.1	4.2	3.4	4.5
Child moving into parent home	3.2	3.4	2.9	3.2
Child moving out of parent home	9.9	9.6	8.6	10.9
Death of a household member	0.5	0.3	0.4	0.8

lockdowns in the early months of the pandemic. Results show that, between 2019 and 2020, 16% of people living in Victoria experienced at least one change in household composition. However, this percentage is slightly larger for the rest of the country, with over 18.5% of people living elsewhere experiencing changes in household composition.

While the most important driver of change in household composition is related to children

moving out of the parental home, only 8.6% of Victorians experienced this change between 2019 and 2020, compared with 9.6% of people in New South Wales and the Australian Capital Territory, and 10.9% in the rest of Australia. Partnering was somewhat more common in Victoria than the rest of the country between 2019 and 2020, but other changes in household composition were less likely to happen in Victoria than in the rest of the country.

Young adults still living with their parents

Figure 2.1 shows that the proportion of young adults living in the parental home has grown since 2001. In 2001, 47.3% of men and 36.7% of women aged 18 to 29 were living with their parents, while the proportions for 2020 were 55.1% of men and 48.4% of women.

Given the stricter lockdown restrictions imposed in the state of Victoria, we further disaggregate

Figure 2.1: Share of young adults (aged 18 to 29) living with one or both parents



the share of young adults living with their parents distinguishing Victoria from the rest of Australia. Results in Figure 2.2 show that the proportion of men living with their parents in Victoria rose by 1.1 percentage points between 2019 and 2020 (from 61.1% to 62.2%). In contrast, the proportion of women living with their parents in Victoria decreased slightly, by 0.3 percentage points, between 2019 and 2020. Over the same period, in the rest of Australia the proportion of young adults living with their parents rose by 0.7 percentage points for men and 0.8 percentage points for women. Overall, therefore, there do not appear to be large effects of the Victorian lockdowns in 2020 on young adults living in the parental home.

Figure 2.3 examines the share of young adults who left the parental home and the share who returned to the parental home in the year to 2019 and in the year to 2020, disaggregated by

gender and distinguishing Victoria from the rest of Australia. While there was an increase of 0.4 percentage points between 2019 and 2020 in the share of young women who left their parental home in Victoria, there was also a significantly larger increase of 1.2 percentage points (three times larger) in the share of those who returned to their parental home. For Victorian young men, the number of returnees decreased by 0.5 percentage points, while there was virtually no change (a 0.1 percentage-point decline) in the share of young men leaving the parental home. Overall, we observe a larger increase in the share of returnees than a decrease in the share of those who leave the parental home, independent of gender or place of residence.

Figure 2.4 examines the proportion of young adults living in the parental home

Figure 2.2: Share of young adults (aged 18 to 29) living with one or both parents—Victoria compared with the rest of Australia, 2019 and 2020

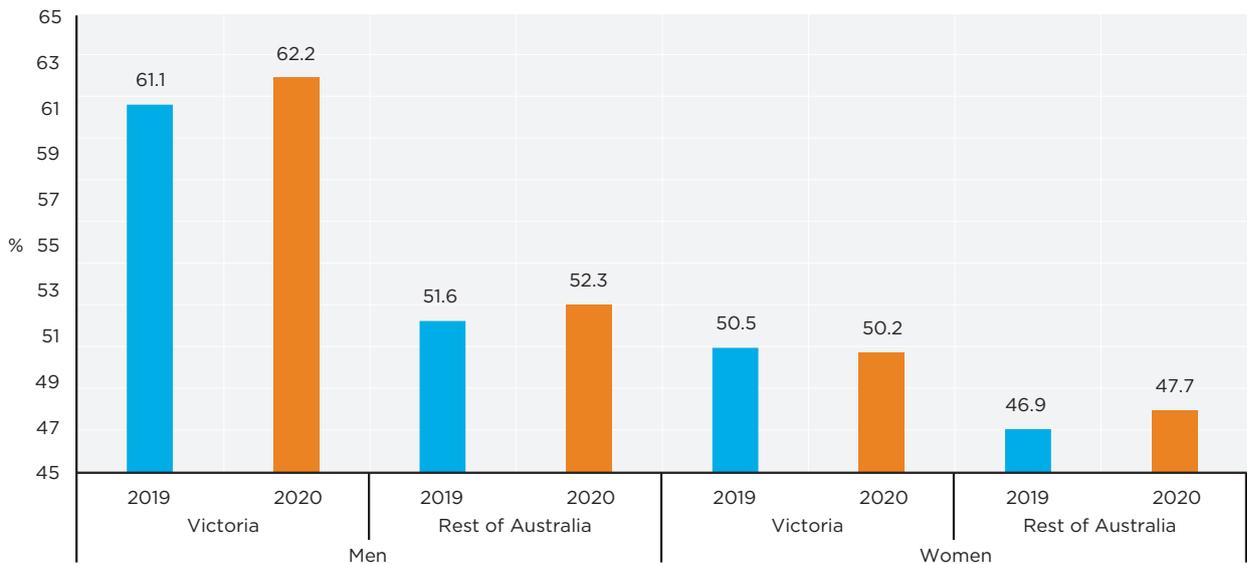


Figure 2.3: Share of young adults leaving and returning to the parental home, by gender and state, 2019 and 2020

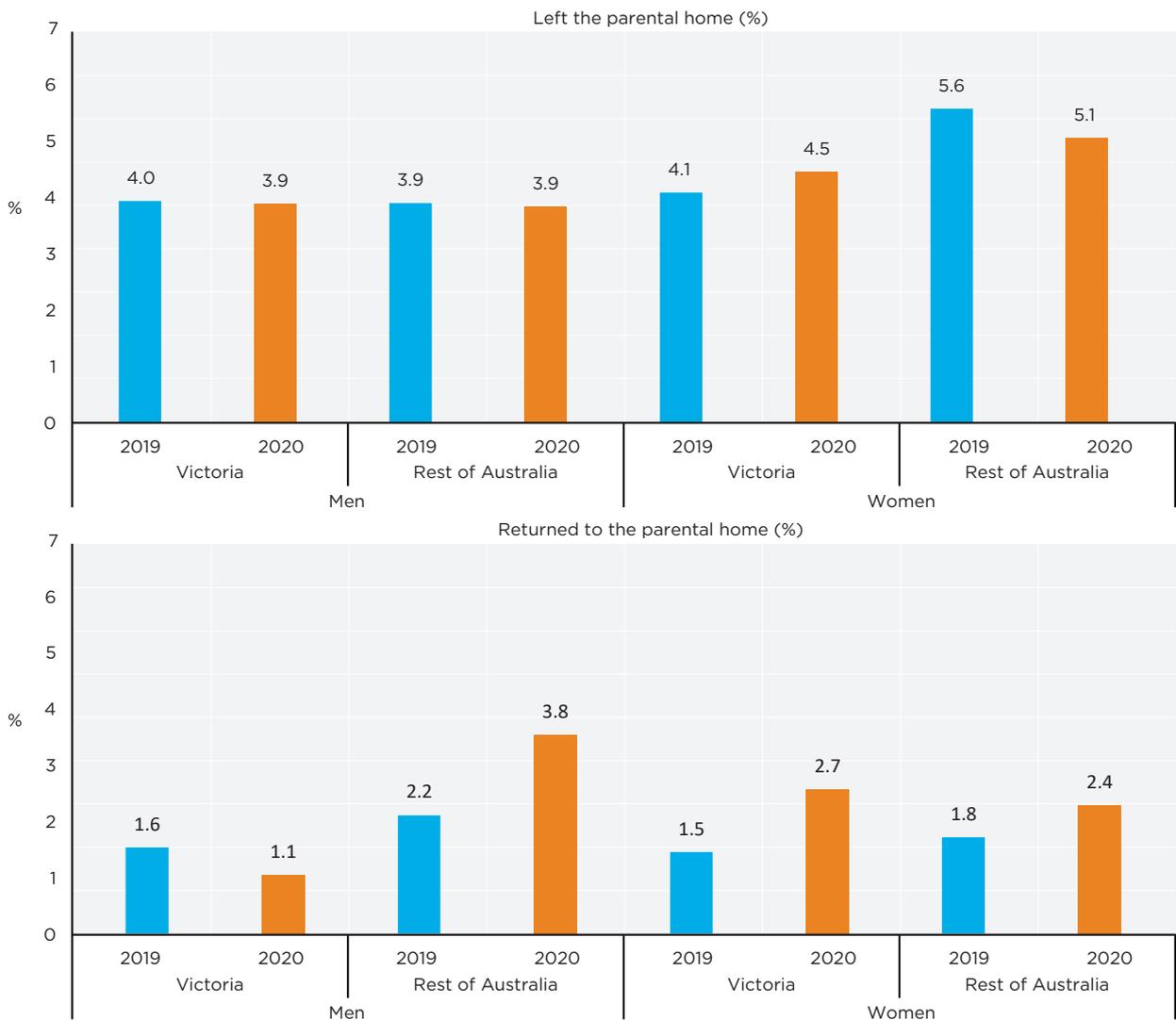


Figure 2.4: Share of young adults living with their parents, by age group and gender

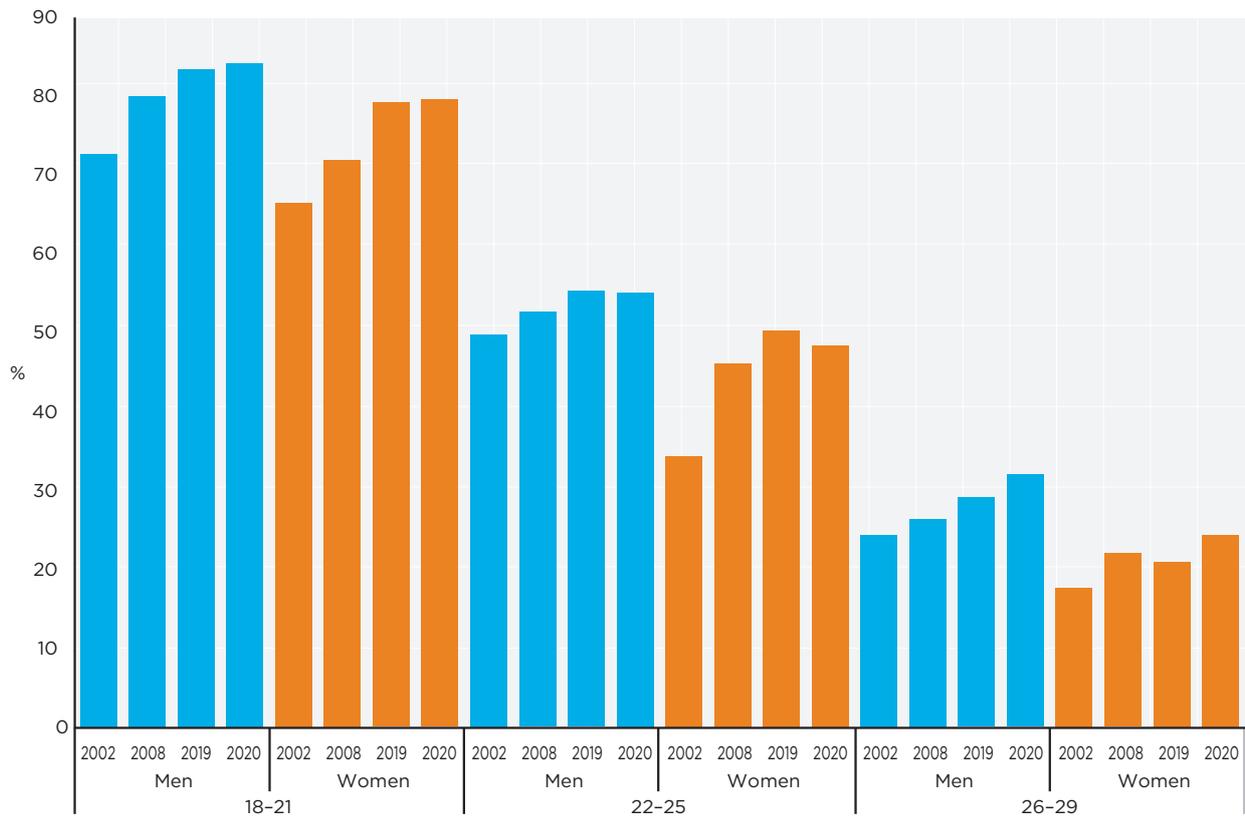
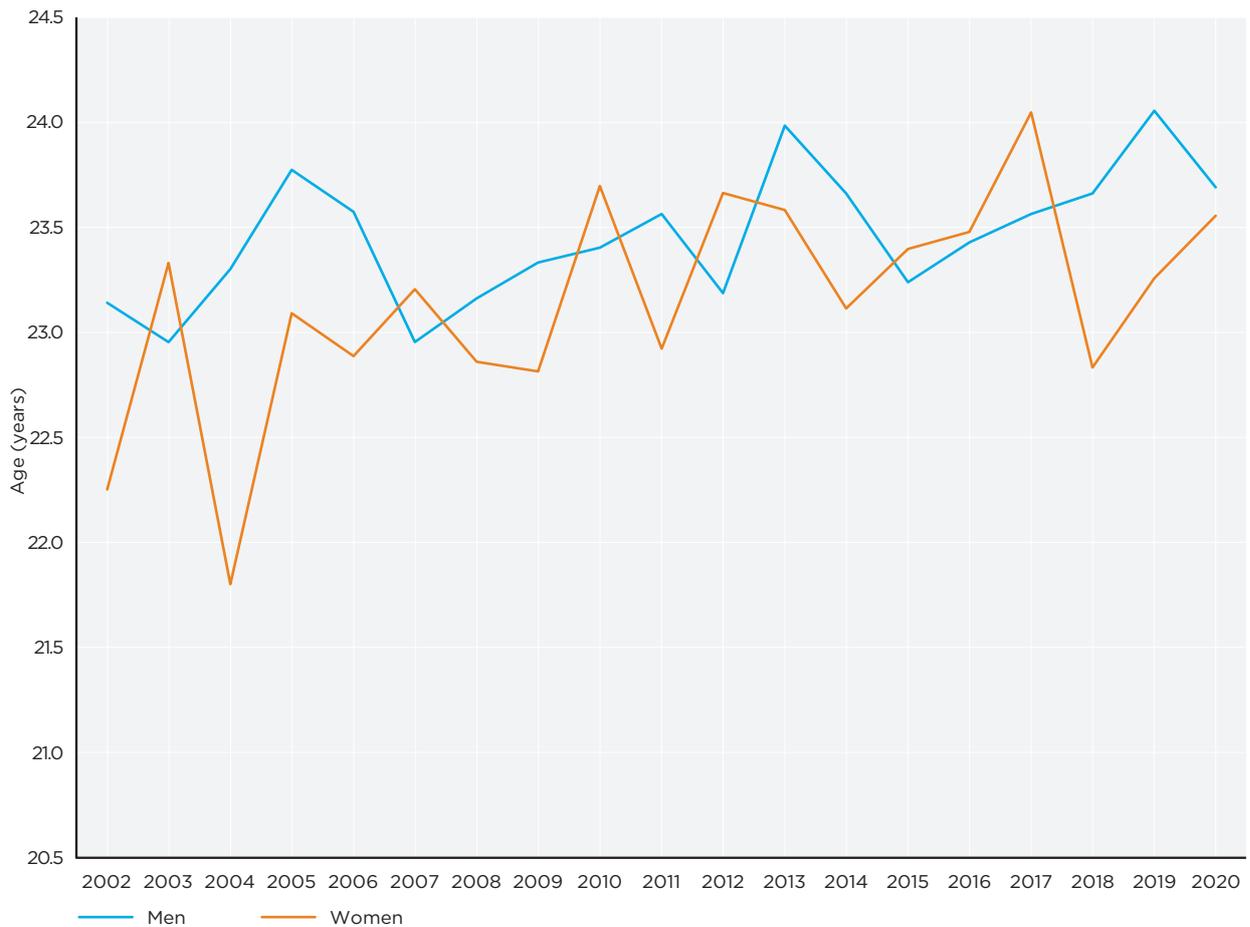


Figure 2.5: Mean age at which young adults (aged 18 to 29) leave the parental home, by gender



disaggregated by age group. Results are reported for years 2002, 2008, 2019 and 2020 to obtain a sense of longer-term trends. As expected, the proportion of young adults living with their parents is highest among the youngest cohort. In 2020, 84.2% of men aged 18 to 21 lived with their parents, compared to 79.6% of women aged 18 to 21. This proportion drops to below 60% for both men and women aged 22 to 25 and approximately 30% or below for those aged 26 to 29.

Across all age groups, we see an increase in the share of young adults living with their parents from 2002 to 2020 (with the exception of the 22 to 25 age group for both men and women

between 2019 and 2020, and women aged 26 to 29 between 2008 and 2019). Particularly notable is the increase between 2019 and 2020 for those aged 26 to 29, at 2.9 percentage points for men and 3.4 percentage points for women.

Figure 2.5 shows the mean age at which young adults leave the parental home—that is, it presents the mean age of those aged 18 to 29 who left the parental home in a given year.⁴ The average age for men to leave was around 24 in 2020, up from 23 in 2002. Women’s average age for leaving the parental home in 2020 was also approximately 24, compared to 22 in 2002. The average age young adults leave the family home has thus

been trending upwards, albeit it with considerable year-to-year fluctuations.

Partnering and separation

The HILDA Survey data provide the opportunity to examine experiences at the individual level of changes to marital status. This section presents a brief analysis of the patterns of partnering and separation.

Table 2.5 provides cross-sectional ‘snapshots’ of the marital status of the population in 2001, 2010 and 2020, disaggregated by gender and age group. Legal marriages (‘married’) are distinguished from de facto marriages (‘de facto’),

⁴ The restriction to young adults aged 18 to 29 means that Figure 2.5 will understate the increase in the mean age of all people leaving the parental home if there has been an increase in the proportion of people leaving the parental home aged 30 and over.

Table 2.5: Marital status by gender and age group, 2001 to 2020 (%)

	2001		2010		2020	
	Married	De facto	Married	De facto	Married	De facto
<i>Men</i>						
18–24	3.5	8.5	2.7	10.8	*1.4	10.4
25–29	25.5	20.0	22.3	24.2	13.0	30.4
30–34	49.7	14.3	47.6	19.2	39.1	26.0
35–39	58.9	12.3	55.1	16.6	62.7	14.3
40–49	69.6	8.7	63.2	11.0	61.8	15.8
50 and over	76.7	4.1	74.1	5.3	68.7	7.8
Total	56.3	9.0	53.3	11.3	50.6	14.1
<i>Women</i>						
18–24	8.1	14.8	5.7	18.1	2.7	15.6
25–29	35.9	18.6	36.1	24.8	25.2	33.0
30–34	60.7	14.3	55.2	17.9	48.7	22.4
35–39	67.6	11.7	61.0	15.5	57.5	17.0
40–49	67.3	7.9	65.8	10.6	60.7	13.8
50 and over	62.2	2.9	60.5	4.1	57.8	6.3
Total	54.5	8.9	51.8	11.3	48.5	13.6

Note: * Estimate not reliable.



where the latter category refers to people who are living with a partner but not legally married.

A decline in the proportion of the population that is married is evident, mirrored to a significant extent by growth in de facto relationships. For men, the proportion married declined from 56.3% in 2001 to 50.6% in 2020 while the proportion in de facto relationships rose from 9.0% to 14.1%. For women, the proportion married declined from 54.5% in 2001 to 48.5% in 2020, while the proportion in de facto relationships rose from 8.9% to 13.6%. For men, the decline in marriage is predominately among those aged 40 and over, whereas for women, the drop is evident in all age ranges. Growth in de facto relationships is noticeable for all age groups, for both men and women.

Individuals' experiences of partnering and separation

Taking a longitudinal perspective, in Table 2.6, we examine partnering by single people and marriage by unmarried people

over five-year time-frames. Panel A presents the proportions of single people who moved in with a partner, disaggregated by gender and age group at the start of the five-year window. Panel B presents the proportions of unmarried people who got married, likewise disaggregated by gender and age group.

Four pooled periods are examined: the five-year periods beginning in 2001, 2002 and 2003; the five-year periods beginning in 2005, 2006 and 2007; the five-year periods beginning in 2009, 2010 and 2011; and the five-year periods beginning in 2013, 2014 and 2015. Thus, for the first pooled period, everyone who was single in 2001 is examined over the period to 2006, everyone single in 2002 is examined over the period to 2007, and everyone single in 2003 is examined over the period to 2008. Therefore, a single person in 2001, 2002 and 2003 would be represented three times in the data used to produce the 2001 to 2003 pooled estimates.

For both men and women, rates of partnering and marriage are strongly related to age. The peak age group for both partnering and marriage is 25 to 29, with rates then declining with age (with the minor exception that, in the 2005 to 2007 period, the partnering rate for women was similar across the 18 to 24, 25 to 29 and 30 to 34 age groups). If we look at the four pooled periods, there are indications of declines in overall partnering and marriage as percentages are higher for the first period (starting 2001) than for the fourth period (starting 2013).

Table 2.7 presents the counterpart to Table 2.6, showing the proportion of people in de facto relationships becoming single, and the proportion of legally married people becoming single, over five-year time-frames. Most commonly, a person will become single due to separating, but some people, particularly in the older age groups, will become single because their partner died. Also, note that a person who is



Table 2.6: Percentage of unpartnered people partnering within five years, and percentage of unmarried people marrying within five years, by gender, age group and period

	<i>Panel A: Initially not partnered: Moved in with a partner</i>				<i>Panel B: Initially not legally married: Got married</i>			
	2001-2003	2005-2007	2009-2011	2013-2015	2001-2003	2005-2007	2009-2011	2013-2015
<i>Men</i>								
18-24	43.9	42.7	34.9	37.7	19.2	16.6	12.0	12.9
25-29	50.3	45.7	48.9	46.2	31.6	29.6	33.0	29.1
30-34	32.3	35.5	39.3	35.4	20.7	26.8	29.9	32.1
35-39	30.9	24.4	38.3	35.2	16.0	13.7	15.6	18.2
40-49	23.9	24.2	20.0	20.1	13.0	13.3	9.7	10.2
50 and over	14.6	11.9	10.7	9.1	9.9	7.5	6.3	5.9
Total	34.1	32.0	30.4	29.3	18.5	17.1	16.0	15.7
<i>Women</i>								
18-24	50.4	48.9	48.1	44.8	23.7	22.0	18.9	15.7
25-29	54.4	48.6	53.4	45.0	35.7	39.3	36.6	29.2
30-34	35.0	47.4	36.2	25.1	22.1	26.9	21.9	19.8
35-39	29.8	31.5	29.4	17.4	16.5	11.8	12.0	15.0
40-49	19.5	20.5	18.3	21.8	13.2	9.4	10.2	10.4
50 and over	3.5	6.5	6.3	5.3	2.0	3.9	4.0	3.1
Total	25.8	28.2	27.5	23.6	15.9	16.2	15.0	12.8

Notes: Persons not initially partnered includes married people separated from their spouse. Persons not legally married includes people living with a partner (i.e., de facto). Column headings indicate the initial years of the five-year periods examined.

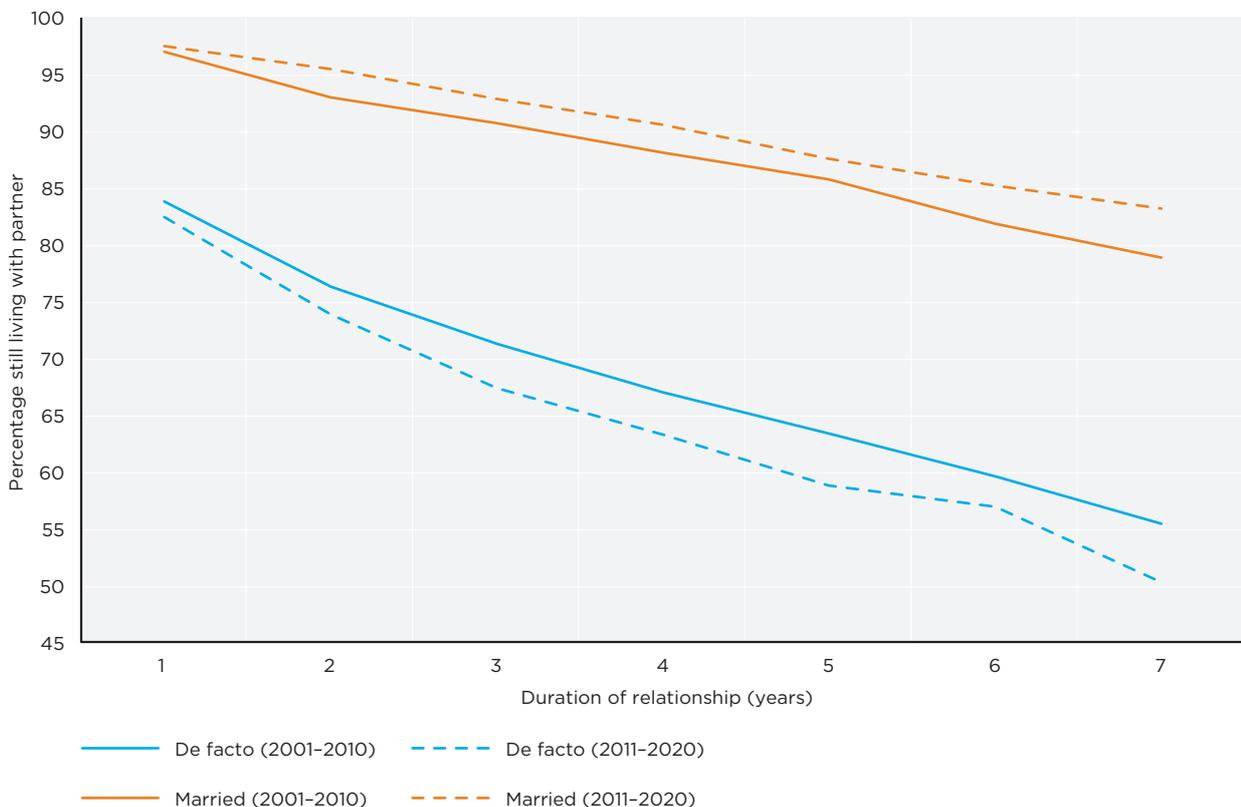
Table 2.7: Percentage of partnered people becoming single within five years, by gender, age group and period

	Initially de facto: Became single				Initially married: Became single			
	2001-2003	2005-2007	2009-2011	2013-2015	2001-2003	2005-2007	2009-2011	2013-2015
<i>Men</i>								
18-24	42.0	37.8	30.3	22.0	*25.2	*10.5	*11.5	*4.5
25-29	32.0	17.9	20.9	24.4	14.1	12.2	8.8	8.4
30-34	24.8	17.6	19.2	15.8	13.2	10.0	10.0	7.5
35-39	28.2	31.5	15.6	25.5	11.5	9.0	6.2	5.9
40-49	24.2	20.2	21.6	17.5	8.8	8.4	8.5	7.8
50 and over	19.4	13.7	11.0	12.5	5.9	4.9	4.8	5.0
Total	27.6	21.5	19.0	18.7	8.5	7.0	6.4	6.1
<i>Women</i>								
18-24	37.6	34.9	29.5	27.5	*13.6	*13.4	*16.2	*10.6
25-29	27.5	17.7	22.3	18.6	11.2	11.7	9.7	7.2
30-34	20.9	21.6	21.6	18.6	10.7	9.3	8.7	5.8
35-39	21.1	28.3	20.7	24.4	7.6	11.3	8.4	7.6
40-49	20.8	15.7	18.2	19.9	10.2	7.4	9.1	8.5
50 and over	21.1	12.1	13.3	11.3	11.1	9.7	10.7	10.2
Total	25.6	21.4	21.1	19.4	10.5	9.5	9.9	9.0

Notes: * Estimate not reliable. Column headings indicate the initial years of the five-year periods examined.



Figure 2.6: Marriage survival rates



partnered in one wave and in the next wave is partnered with a different person is deemed to have 'become single', although it is of course possible that at no stage was the person single.

Perhaps not unexpectedly, de facto couples are more likely to separate than married couples. In contrast to the findings for partnering and marriage, there is no strong association between age and the likelihood of separation. De facto couples aged 18 to 24 are considerably more likely to separate than older de facto couples, but otherwise, separation rates are not substantially different across the age groups.

Figure 2.6 shows how long de facto and legal marriages survive, presenting 'empirical survival functions' for legal marriages and de facto relationships. We distinguish between those relationships that started during the first decade of the 21st century (2001–2010) and those that began in the century's second decade (2011–2020) to identify any changes in individuals' behaviour between the two time-frames.

Each line represents the proportion still living together at each year of duration of marriage—that is, the survival rate, where a marriage is deemed to 'die' once the first separation has occurred. Note that de facto relationships are treated as continuing ('surviving') if the partners become legally married.

Consistent with Table 2.6, de facto relationships are less likely to survive to each duration. For example, between 2001 and 2010, 67.0% of de facto couples were still together after four years, compared with over 88.1% of married couples. Likewise, from 2001 to 2010, 55.4% of de facto couples were still together after seven years, compared with 78.9% of married couples. In general, the longer the relationship, the lower

the likelihood it will end in any given year. This is reflected in the slope of the survival function tending to decrease as relationship duration increases.

Interestingly, when we compare the first and second decades of the 21st century, we observe that marriages were more likely to survive between 2011 and 2020 than between 2001 and 2010. On the contrary, de facto relationships were less likely to survive during the century's second decade than during the century's first.

Factors affecting marital breakdown

In Table 2.8, we analyse the characteristics and events associated with marital breakdown. The table presents 'hazard ratio' estimates from hazard models of the probability of partners separating. The models essentially show the effects of factors on the probability that the marriage ends in a given year. A hazard ratio estimate of greater than 1 indicates a positive association between the explanatory factor and the likelihood of marital breakdown. In contrast, an estimate of less than 1 indicates a negative association (see the Technical Appendix for more information on hazard models).

Two models are presented, one for legal marriages and the other for de facto relationships. The 'unit of analysis' is the marriage,

and the respective samples of the two models are all legal marriages observed in the 2001 to 2020 period, and all de facto relationships observed in the 2001 to 2020 period.

The estimated models include a set of factors separately measured for the male and female members of the couple as well as factors capturing characteristics of the couple, such as whether they have children. For legal marriages, previous marriages have a statistically significant effect for both males and females, increasing the probability of marital breakdown. No statistically significant effects of previous marriages on likelihood of separation are evident for de facto relationships.

For males, labour force status is not significantly associated with likelihood of a marriage ending, but being employed full-time significantly reduces the probability of separation for those in a de facto relationship. For females, both full-time employment and unemployment are strong predictors of separation for those legally married, and unemployment also increases the risk of separation for those in de facto relationships.

Measures of health (see Box 2.4, page 19) included in the models show that only the poor general health of women in a legally married couple is a significant factor affecting separation.

Box 2.4: SF-36 measures of health

The SF-36 Health Survey 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 <<http://www.sf-36.org/>> for further details.

The SF-36 measures of general health and mental health are used in this report. The scores for both measures potentially range from 0 to 100. 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 approximately 10% of the population is at or below this threshold. Similarly, poor mental health is defined as a score less than or equal to 52, on the basis that approximately 10% of the population is at or below this threshold.

Box 2.5: Personality measures in the HILDA Survey

Waves 5, 9, 13 and 17 of the HILDA Survey included a short version of Saucier's (1994) 'Big 5' personality test, from which personality scores are derived for extroversion, agreeableness, conscientiousness, emotional stability, and openness to experience. Administered in the self-completion questionnaire, the personality test involved respondents indicating the extent to which each of 36 words described them. The scores were derived using a process called principal components analysis. See Summerfield et al. (2020) for more information on the derivation of the scores. In this report, the personality scores are assumed to be fixed for each individual at the average values over Waves 5, 9, 13 and 17.

However, the poor mental health of either member of the couple is a strong predictor of relationship breakdown, in all cases approximately doubling the probability of separation in any given year.

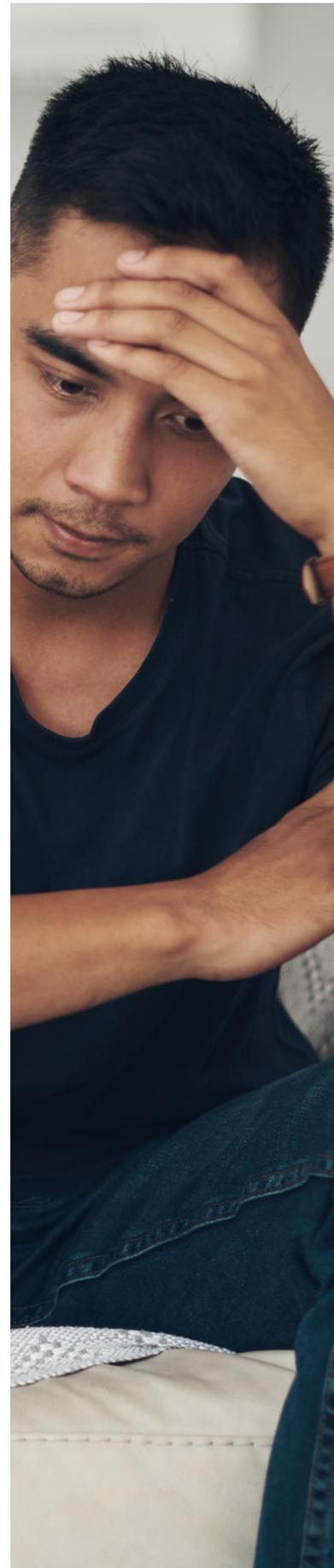
Personality measures (see Box 2.5, p. 20) show statistically significant effects of male openness to experience in de facto relationships, but not in legal marriages. Male extroversion, agreeableness, conscientiousness and emotional stability significantly affect legal marriages, but not de facto relationships. In these cases, greater conscientiousness increases the probability of separation, while greater extroversion, agreeableness and emotional stability decrease separation probability. Greater female extroversion increases the probability of separation for de facto relationships, while the opposite is true for female emotional stability.

Each year, the self-completion questionnaire (SCQ) contains a life events 'inventory', asking whether each of 22 events have occurred in the last 12 months. Variables for the following three life events are included in the models: victim of physical violence (e.g., assault); a major improvement in financial situation

(e.g., winning the lottery, receiving an inheritance); and a major worsening in financial situation (e.g., going bankrupt). The variable in respect of physical violence is defined separately for the two members of the couple and is an indicator for experience of physical violence within the last two years. This is a very strong predictor of separation for females, particularly in legal marriages, and male experience of physical violence is also a predictor in legal marriages. The strong effect evident from this factor may be because the perpetrator of the violence was, in many cases, the partner from whom the individual separated.

The model for legal marriage includes an indicator variable for whether the couple lived together before they got married—that is, they were in a de facto relationship, which is statistically significant, indicating an increase in the probability of ending a legal marriage. The duration of the relationship is not a significant factor for de facto relations or legal marriages. A dependent child significantly increases the likelihood of separation for legal marriages and de facto relationships.

The indicator variables included for major changes in financial situation relate to the 12 months



Box 2.6: Importance of religion

In Waves 4, 7, 10, 14 and 18, the self-completion questionnaire contained a sequence of questions on religious affiliation, frequency of attendance at religious services, and the importance of religion in one's life. The importance of religion was ascertained by the question: *On a scale from 0 to 10, how important is religion in your life?* In this report, for Waves 4 to 20, individuals are assigned their most recently reported value, while in Waves 1 to 3, they are assigned the value reported in Wave 4.



leading up to the previous-wave interview—that is, one to two years prior to the current wave—to ensure that the major change was not itself a result of the marital breakdown. Each variable is equal to 1 if either member of the couple reported the major change (and 0 otherwise). No significant effects are evident.

The remaining explanatory variables capture similarities and differences between partners in terms of country of birth, age, educational attainment, the importance of religion, attitudes to marriage and children, attitudes to parenting and paid work, personality, smoking and drinking. No significant effects are evident for differences in country of birth or age. If the male or female partner has higher educational attainment, they are more likely to separate in legally married couples. Religion being important to both members of the couple (see Box 2.6, page 20) has no significant effects on the likelihood of separation, but if religion is important to only one member of a de facto couple, they are much more likely to separate.

Traditional views on marriage and children (see Box 2.7, page 21) are associated with a lower

Box 2.7: Summary measures of the extent to which one has traditional views on marriage and children and on parenting and paid work

A measure of the extent to which one has 'traditional' views on marriage and children can be derived from the extent of agreement, on a 7-point Likert scale (where 1 is strongly disagree and 7 is strongly agree), with the following eight statements:

- a. *It is alright for an unmarried couple to live together even if they have no intention of marrying*
- b. *Marriage is a lifetime relationship and should never be ended*
- c. *Marriage is an outdated institution*
- d. *It is alright for a couple with an unhappy marriage to get a divorce even if they have children*
- e. *Children will usually grow up happier if they have a home with both a father and a mother*
- f. *It is alright for a woman to have a child as a single parent even if she doesn't want to have a stable relationship with a man*
- g. *When children turn about 18–20 years old they should start to live independently*
- h. *Homosexual couples should have the same rights as heterosexual couples do*

The score for the extent to which views about marriage and children are 'traditional' is calculated as an average across the eight items as follows: $[(8 - a) + b + (8 - c) + (8 - d) + e + (8 - f) + g + (8 - h)]/8$. The score potentially ranges from 1 to 7.

A measure of the extent to which one has traditional views on parenting and work can be derived based on the extent of agreement with the following 14 statements:

- a. *Many working mothers seem to care more about being successful at work than meeting the needs of their children*
- b. *If both partners in a couple work, they should share equally in the housework and care of children*
- c. *Whatever career a woman may have, her most important role in life is still that of being a mother*
- d. *Mothers who don't really need the money shouldn't work*
- e. *Children do just as well if the mother earns the money and the father cares for the home and children*
- f. *It is better for everyone involved if the man earns the money and the woman takes care of the home and children*
- g. *As long as the care is good, it is fine for children under 3 years of age to be placed in child care all day for 5 days a week*
- h. *A working mother can establish just as good a relationship with her children as a mother who does not work for pay*
- i. *A father should be as heavily involved in the care of his children as the mother*
- j. *It is not good for a relationship if the woman earns more than the man*
- k. *On the whole, men make better political leaders than women do*
- l. *A pre-school child is likely to suffer if his/her mother works full-time*
- m. *Children often suffer because their fathers concentrate too much on their work*
- n. *If parents divorce it is usually better for the child to stay with the mother than with the father*

The total score for the extent to which views about parenting and work are 'traditional' is calculated as $[a + (8 - b) + c + d + (8 - e) + f + (8 - g) + (8 - h) + (8 - i) + j + k + l + (8 - m) + n]/14$. Again, the score potentially ranges from 1 to 7.

The marriage and children items were first introduced in 2005. Items a to i of parenting and work were first administered in Wave 1, while additional items j to n were first administered in Wave 5. All items have subsequently been administered in Waves 8, 11, 15 and 19. It is therefore possible to construct the two summary measures in Waves 5, 8, 11, 15 and 19.

probability of separation in legal marriages, but not de facto relationships. No significant effects of differences in attitudes to parenting and paid work are found.

A measure of personality differences between the partners—simply the sum of the absolute differences in scores for

each of the five dimensions—indicates that personality differences do not impact marital breakdown. The impacts of differences in smoking and drinking behaviour are captured by indicator variables for whether (only) one partner is a smoker and whether (only) one partner is a regular drinker (three or more

Table 2.8: Factors impacting marital breakdown—Hazard ratios

	Legal marriage		De facto	
	Male characteristics	Female characteristics	Male characteristics	Female characteristics
Previously married	1.35	1.57	<i>ns</i>	<i>ns</i>
<i>Labour force status (Reference category: NILF)</i>				
Employed full-time in previous wave	<i>ns</i>	1.25	0.61	<i>ns</i>
Employed part-time in previous wave	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Unemployed in previous wave	<i>ns</i>	2.22	<i>ns</i>	1.54
Poor general health	<i>ns</i>	1.51	<i>ns</i>	<i>ns</i>
Poor mental health	2.23	1.78	1.77	1.81
<i>Personality</i>				
Extroversion	<i>ns</i>	<i>ns</i>	0.92	1.11
Agreeableness	<i>ns</i>	1.11	0.82	<i>ns</i>
Conscientiousness	<i>ns</i>	<i>ns</i>	1.12	<i>ns</i>
Emotional stability	<i>ns</i>	<i>ns</i>	0.87	0.92
Openness to experience	1.18	<i>ns</i>	<i>ns</i>	<i>ns</i>
Victim of physical violence in last 2 years	1.63	4.67	<i>ns</i>	2.55
	Couple characteristics		Couple characteristics	
Lived together before getting married	1.26		–	
<i>Relationship duration (Reference category: < 3 years)</i>				
3–5 years	<i>ns</i>		<i>ns</i>	
10–19 years	<i>ns</i>		<i>ns</i>	
20 or more years	<i>ns</i>		<i>ns</i>	
<i>Mean age of couple (Reference category: < 30)</i>				
30–39	0.45		0.62	
40–49	0.31		0.48	
50–59	0.20		0.37	
60 and over	0.11		0.27	
Have a dependent child	1.34		1.32	
Major improvement in financial situation 1–2 years ago	<i>ns</i>		<i>ns</i>	
Major worsening of financial situation 1–2 years ago	<i>ns</i>		<i>ns</i>	
Born in different countries	<i>ns</i>		<i>ns</i>	
Male is 5 or more years older	<i>ns</i>		1.25	
Female is 5 or more years older	<i>ns</i>		<i>ns</i>	
Male has higher educational attainment	1.29		<i>ns</i>	
Female has higher educational attainment	1.31		<i>ns</i>	
Religion important to both partners	<i>ns</i>		<i>ns</i>	
Religion important to only one partner	<i>ns</i>		1.80	
<i>Extent to which couple has traditional views on marriage and children</i>				
Mean of couple	0.74		<i>ns</i>	
Absolute difference between partners	<i>ns</i>		<i>ns</i>	
Extent to which male has more traditional views on parenting and work than female	<i>ns</i>		<i>ns</i>	
Absolute difference in personality	<i>ns</i>		<i>ns</i>	
One partner (only) smoker in previous wave	1.55		1.45	
One partner (only) regular drinker in previous wave	<i>ns</i>		<i>ns</i>	
Number of couples in sample	7,842		5,464	
Number of break-ups	1,027		1,316	

Notes: Table reports hazard ratios from Cox proportional hazard regression models. See the Technical Appendix for details. Samples comprise all legal marriages/de facto relationships observed in the HILDA Survey period (2001–2020). NILF—not in the labour force. *ns* indicates estimate is not significantly different from 1 at the 10% level.

times per week). These are measured in the previous wave to ensure that the smoking or drinking behaviour took place while the couple was together. The estimates indicate that differences in smoking behaviour matter, but differences in drinking behaviour do not.

Relationship satisfaction of partners

Each year, the SCQ contains a question asking respondents to rate the extent to which they are satisfied with their partner on a scale from 0 (completely dissatisfied) to 10 (completely satisfied).

Table 2.9 presents the mean ratings for men and women in 2005, 2010, 2015, 2019 and 2020, distinguishing de facto and legally married couples. Two clear patterns are evident. First, men are more satisfied with their partners than women on average. Second, men legally married are more satisfied with their partners on average. That said, average ratings are very high, in all cases lying somewhere between 8 and 9. Also notable is that mean satisfaction did not decline in 2020, despite the onset of the pandemic; indeed, mean satisfaction was slightly higher than in 2019 for married couples and women in de facto marriages.

Results of regression models of the determinants of relationship satisfaction (measured on the 0-10 scale), estimated for men and women separately, are presented in Table 2.10. Unsurprisingly, the table shows that the differences between de facto and legal marriages in



relationship satisfaction evident in Table 2.9 derive from differences in other factors (such as duration of the relationship) rather than from the relationship types themselves. Holding other factors constant, there is no significant difference between de facto and legally married couples in relationship satisfaction for men or women. However, a number of the other factors considered in Table 2.10 are found to significantly impact on relationship satisfaction.

The length of a relationship impacts one's satisfaction with it, although the effects differ slightly between de facto and legal marriages. For both men and women, the longer the duration of the relationship, the lower the satisfaction. The presence of dependent children also decreases relationship satisfaction by 0.30 for men and 0.35 for women.

Age is not a strong predictive factor for men, with the exception that men aged 40 to 49 and 50

to 59 are, all else equal, significantly less satisfied with their partner. For women, relationship satisfaction decreases in age up to the 50 to 59 age category. An age difference of five or more years does not impact on men's satisfaction, but women are, holding other factors constant, 0.14 less satisfied if their partner is five or more years older.

Compared with holding less than Year 12 qualifications, a partner holding a Year 12 qualification decreases satisfaction by 0.13 for women, while the partner holding any other post-school qualification also reduces men's satisfaction by 0.09. The labour force status of both oneself and one's partner also impacts relationship satisfaction, with unemployment of the woman negatively impacting the satisfaction of both members of the couple, and unemployment of the man negatively impacting his partner's satisfaction. Interestingly, employment—particularly of the female

Table 2.9: Mean satisfaction with relationship with partner (0-10 scale)

	2005		2010		2015		2019		2020	
	Men	Women								
Married	8.5	8.2	8.5	8.3	8.5	8.2	8.5	8.2	8.6	8.3
De facto	8.3	8.2	8.4	8.2	8.4	8.2	8.4	8.1	8.4	8.2

Table 2.10: Factors affecting relationship satisfaction

	Men	Women
<i>Legally married</i>	<i>ns</i>	<i>ns</i>
<i>De facto relationship duration (Reference category: < 3 years)</i>		
3–5 years	–0.30	–0.34
6–9 years	–0.43	–0.56
10–19 years	–0.56	–0.64
20 or more years	–0.77	–0.88
<i>Marriage duration (Reference category: < 3 years)</i>		
3–5 years	–0.30	–0.35
6–9 years	–0.44	–0.53
10–19 years	–0.57	–0.65
20 or more years	–0.58	–0.66
Have a dependent child	–0.30	–0.34
<i>Age (Reference category: 18–29)</i>		
30–39	<i>ns</i>	<i>ns</i>
40–49	–0.08	–0.21
50–59	<i>ns</i>	–0.23
60 and over	<i>ns</i>	<i>ns</i>
Partner is 5 years or more older	<i>ns</i>	–0.14
Partner is 5 years or more younger	<i>ns</i>	<i>ns</i>
<i>Partner’s education (Reference category: Less than Year 12)</i>		
Degree	<i>ns</i>	<i>ns</i>
Other post-school	–0.09	<i>ns</i>
Year 12	<i>ns</i>	–0.13
<i>Labour force status (Reference category: Not in the labour force)</i>		
Employed full-time	–0.06	–0.11
Employed part-time	<i>ns</i>	–0.12
Unemployed	<i>ns</i>	–0.19
<i>Partner’s labour force status (Reference category: Not in the labour force)</i>		
Employed full-time	–0.11	<i>ns</i>
Employed part-time	–0.08	<i>ns</i>
Unemployed	–0.10	–0.15
Works 50 or more hours per week	<i>ns</i>	<i>ns</i>
Partner works 50 or more hours per week	<i>ns</i>	<i>ns</i>
Partner’s annual personal labour earnings (\$’000, December 2020 prices)	<i>ns</i>	<i>ns</i>
Partner in poor general health	–0.09	–0.11
Partner in poor mental health	–0.37	–0.44
<i>Partner’s personality</i>		
Extroversion	<i>ns</i>	<i>ns</i>
Agreeableness	0.07	0.09
Conscientiousness	<i>ns</i>	0.04
Emotional stability	0.08	0.08
Openness to experience	–0.04	<i>ns</i>
<i>Absolute difference in ...</i>		
Extroversion	<i>ns</i>	<i>ns</i>
Agreeableness	–0.05	<i>ns</i>
Conscientiousness	–0.04	<i>ns</i>
Emotional stability	<i>ns</i>	–0.04
Openness to experience	<i>ns</i>	–0.03
Non-smoker and partner is a smoker	–0.25	–0.19
Non-regular drinker and partner is regular drinker	<i>ns</i>	–0.06
Major improvement in financial situation	<i>ns</i>	0.06
Major worsening of financial situation	–0.33	–0.29
Constant	8.56	8.01
Number of observations	66,306	66,619

Notes: Table reports coefficient estimates from linear random-effects regression models. See the Technical Appendix for details. The sample comprises all partnered people and estimation is on all 20 waves (2001–2020). *ns* indicates the estimate is not significantly different from 0 at the 10% level. Year and state dummies are also included.

partner—is also a negative factor (compared with being out of the labour force) for relationship satisfaction of both men and women. However, given employment, there is no evidence of additional adverse effects of long (50 or more) work hours. It also does not seem to matter how much one’s partner earns.

The health, and particularly mental health, of one’s partner is an important determinant of one’s relationship satisfaction. The effects are similar for men and women, with poor general health of the partner decreasing relationship satisfaction by approximately 0.1, and poor mental health decreasing it by approximately 0.4.

The personality of one’s partner also appears to matter, and to some extent, so do differences in personality between the partners. Greater agreeableness and emotional stability of one’s



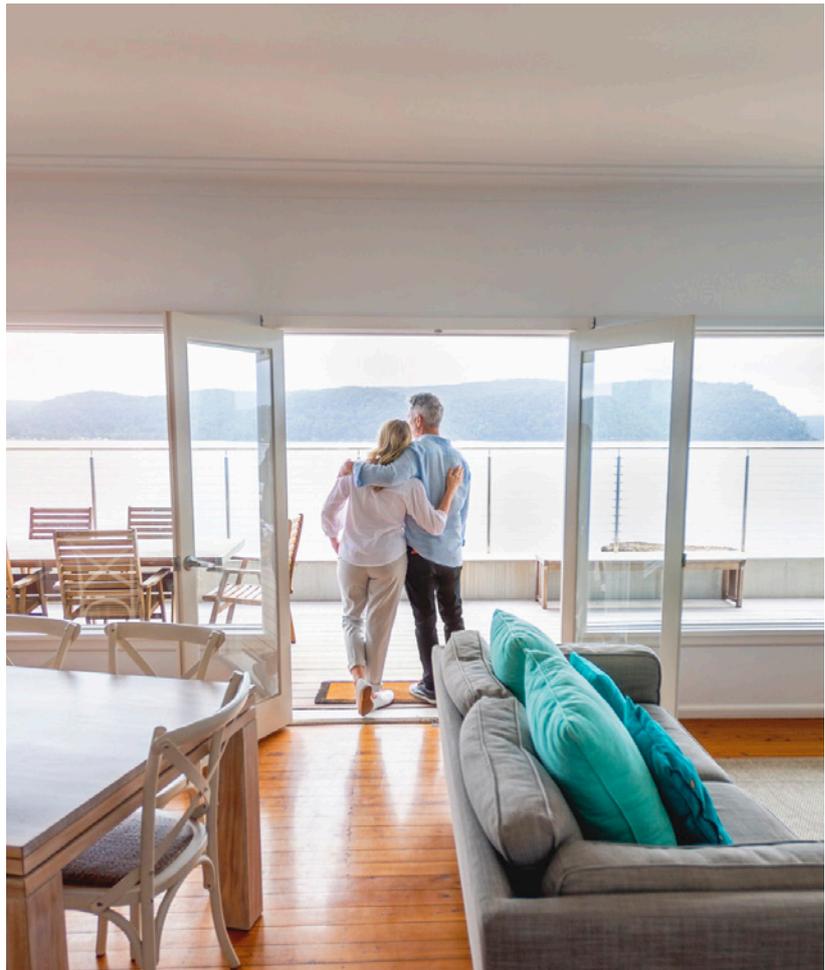
partner increases satisfaction, while greater conscientiousness of the male partner increases women's satisfaction, and greater openness to experience of the female partner decreases men's satisfaction.

The effects of personality differences are quite different for men and women. For men, a greater difference in agreeableness and conscientiousness decreases relationship satisfaction, while differences in the other traits do not significantly affect their satisfaction. For women, greater differences in emotional stability and openness to experience decrease relationship satisfaction.

Similar to the findings for marital breakdown (Table 2.8), being a non-smoker and having a partner who smokes lowers relationship satisfaction, by 0.25 for men and 0.19 for women, while differences in drinking behaviour do not seem to matter. Finally, a major improvement in financial situation does not affect relationship satisfaction, but a major worsening of the financial situation has significant negative effects, decreasing satisfaction by approximately 0.3 for both men and women.

The characteristics and wellbeing of carers

Despite no financial remuneration and often high personal costs, unpaid (volunteer) carers are crucial in caring for older people and people with severe disabilities. In every wave since Wave 5, respondents have been asked whether they provide ongoing help with self-care, mobility or communication to someone who is elderly or has a disability. Information collected includes whether they live with the person they care for, their



relationship with that person and whether they are the main carer. In this section, we draw on this information to briefly examine the number of people who are carers and the type of caring they do. The information on caring is then combined with other information available in the HILDA Survey to examine carers' personal characteristics and wellbeing.

Prevalence of caring

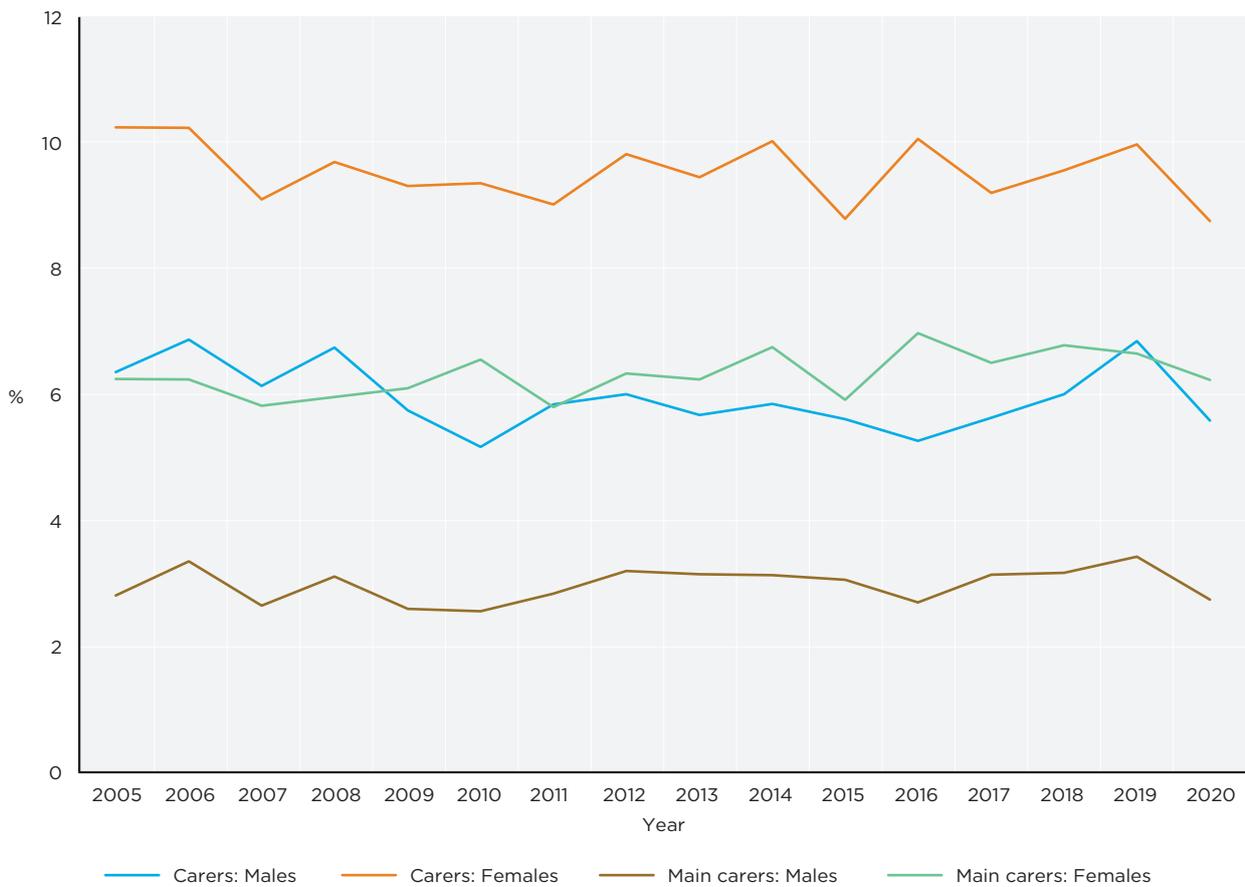
Figure 2.7 presents the proportion of males and females aged 15 and over who report being unpaid carers over the 2005 to 2020 period.

Results are provided for the overall proportion of individuals who are carers and the proportion who describe themselves as the *main* carer of the care recipient. Females are considerably more likely to be carers than males, with 10.3% of

females aged 15 and over providing unpaid care on an ongoing basis in 2005, compared with 6.3% of males aged 15 and over. Females are also much more likely to be the main carer for their care recipient, with 6.3% of females and 2.8% of males being the main carer in 2005.

Over the period 2005 to 2019, the proportion of the population providing unpaid care has remained relatively stable. However, we observe a noticeable decline in the proportion providing care between 2019 and 2020. The proportion of females aged 15 and over who are carers fell from 10.0% in 2019 to 8.8% in 2020, while the proportion of males aged 15 and over who are carers fell from 6.9% in 2019 to 5.6% in 2020. Restrictions on movement during lockdowns are unlikely to explain this given

Figure 2.7: Percentage of people aged 15 and over who are unpaid carers



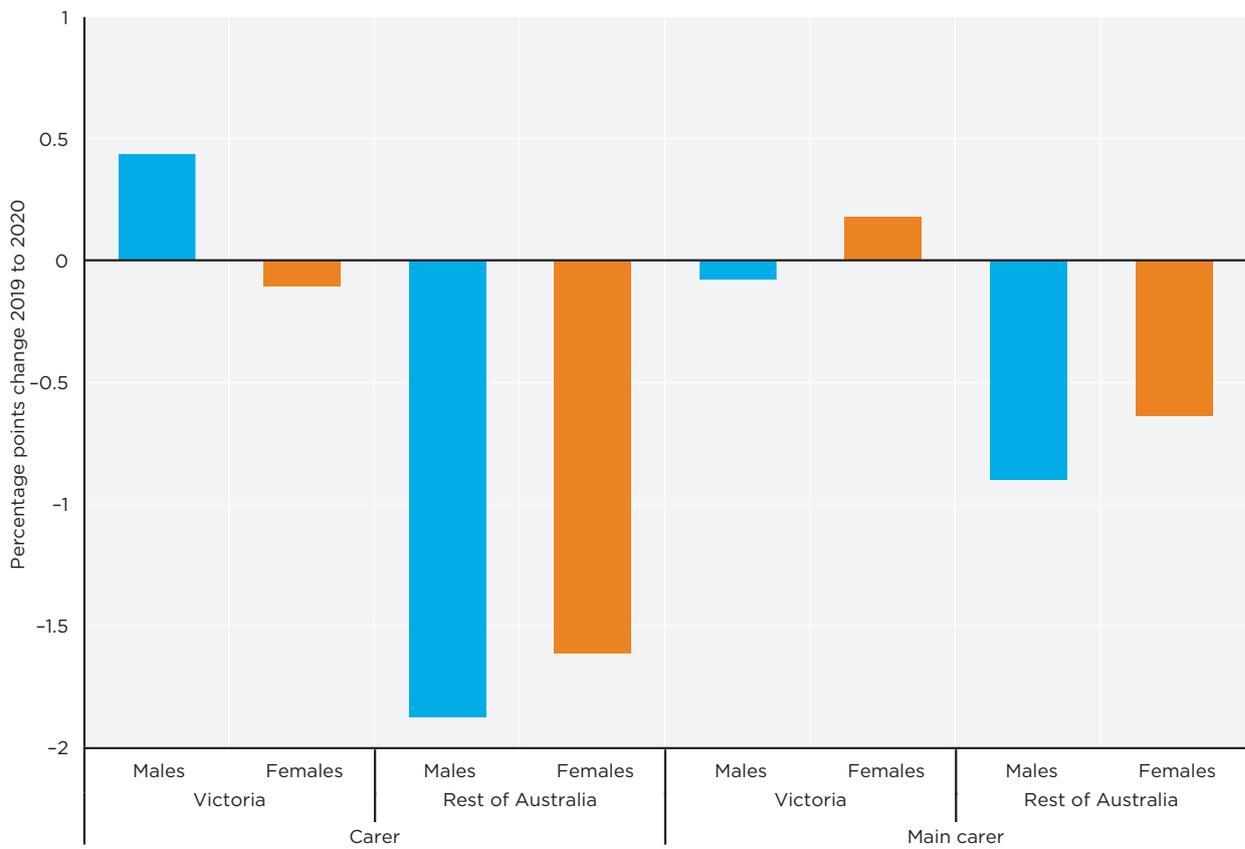
explicit exemption of caring activities; rather, fear of spreading the virus to vulnerable people is likely to have been the driver of this decline.

Figure 2.8 further disaggregates the results provided in Figure 2.7 by state for the last two years, 2019 and 2020. Despite the overall decreasing trend in the

percentage of people aged 15 years and over who are carers, we observe an increase of 0.4 percentage points in the share of male carers and 0.2 percentage



Figure 2.8: Change in the percentage of people who are carers between 2019 and 2020 by gender, state and type of care



points in the share of female main carers in Victoria.

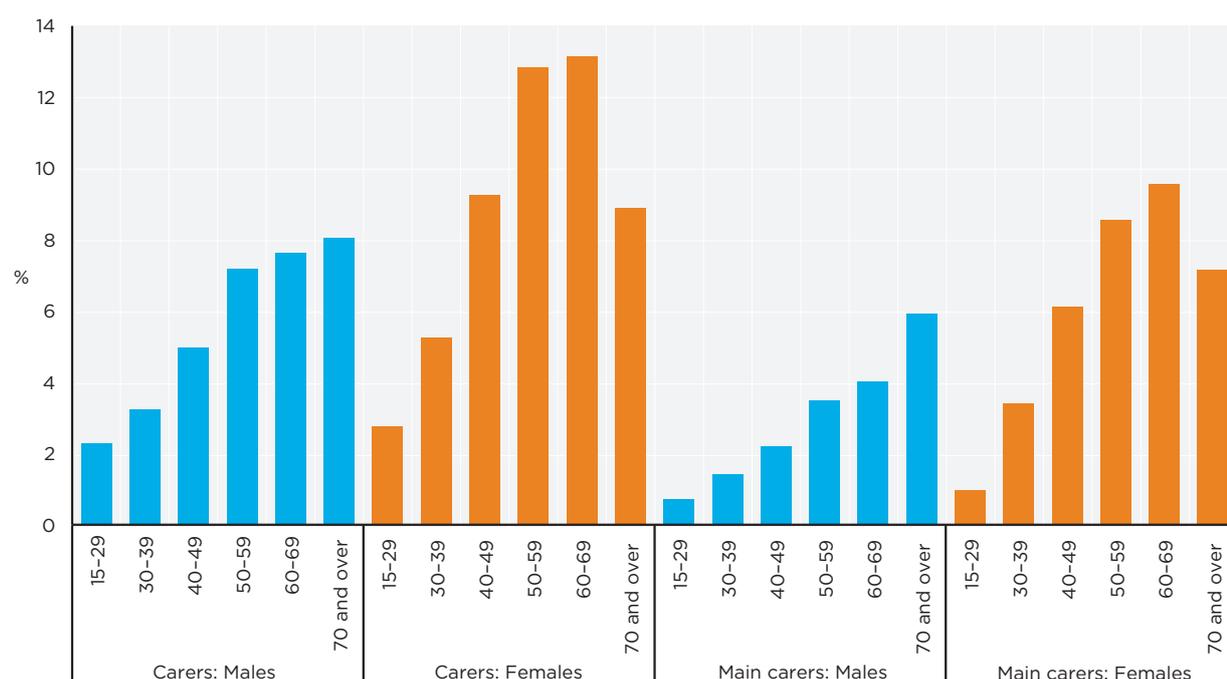
Differences in carer prevalence by age group and gender are examined in Figure 2.9 for the whole period (2005 to 2020). Women aged 50 to 69 are clearly the biggest providers of unpaid ongoing care, with over 12% caring for a person with disability or an older person. However, relatively high proportions of women aged 40 to 49, and 70 and over, are also carers. For males, caring activity monotonically increases with age: those aged under 30 are the least likely to be carers, and those aged 70 and over are the most likely to be carers.

Nature of caring

The care location and the relationship of the care recipient to the carer are examined in Table 2.11. Where a person is the main carer, in 81.5% of cases, care is



Figure 2.9: Proportion of people who are carers, by age group, 2005 to 2020 pooled



provided in their own home. By contrast, 62.7% of other carers provide care in their own home. Main carers most commonly care for their partner in their own home (41.7% of cases), although significant numbers care for a parent living in the carer's home (15.0%), a parent living elsewhere (13.7%), an adult child living in the carer's own home (11.8%) or a young child living at home (11.6%). Other carers care for partners who live in the carer's own home (26.6% of cases), a parent living elsewhere (20.7% of cases), followed by a parent living in the carer's own home (14.1%).

Characteristics of carers

Consistent with the evidence presented in Figure 2.7, Table 2.12 shows that 68.7% of main carers are female, and 62.3% of other carers are female. Carers, particularly main carers, are on average older than non-carers: the mean age of main carers is 55.2 years, compared with 52.2 for other carers and 43.9 for non-carers.

Comparisons across groups defined by immigrant and

Table 2.11: Location of care and relationship, by whether main carer, 2005 to 2020 pooled (%)

	Main carer	Other carer
<i>Location</i>		
At home	81.5	62.7
Elsewhere	18.5	37.3
<i>Relationship to recipient and location</i>		
Partner at home	41.7	26.6
Own parent at home	15.0	14.1
Partner's parent at home	0.9	1.4
Adult child at home	11.8	10.5
Young child at home	11.6	10.3
Other relative at home	3.1	3.4
Other person at home	1.7	1.4
Partner elsewhere	0.5	0.8
Own parent elsewhere	13.7	20.7
Partner's parent elsewhere	1.4	3.8
Adult child elsewhere	1.4	1.8
Young child elsewhere	0.2	0.6
Other relative elsewhere	2.8	6.6
Other person elsewhere	1.8	4.1

Note: Percentages add up to more than 100 because carers may provide care in more than one location and to more than one person.



Table 2.12: Characteristics of carers, 2005 to 2020—Persons aged 15 years and over (pooled means)

	Main carers	Other carers	Non-carers
Female (%)	68.7	62.3	50.0
Age (years)	55.2	52.2	43.9
<i>Immigrant and Indigenous status (%)</i>			
Indigenous	3.6	3.3	2.2
Non-Indigenous Australian-born	66.1	68.7	69.4
Born in one of the main English-speaking countries	9.7	9.0	10.2
Born in other country	20.6	19.0	18.2
Total	100.0	100.0	100.0
<i>Region (%)</i>			
Major urban	61.6	64.1	68.4
Other urban	24.6	23.7	21.1
Other region	13.8	12.2	10.5
Total	100.0	100.0	100.0
SEIFA decile	4.7	5.1	5.7

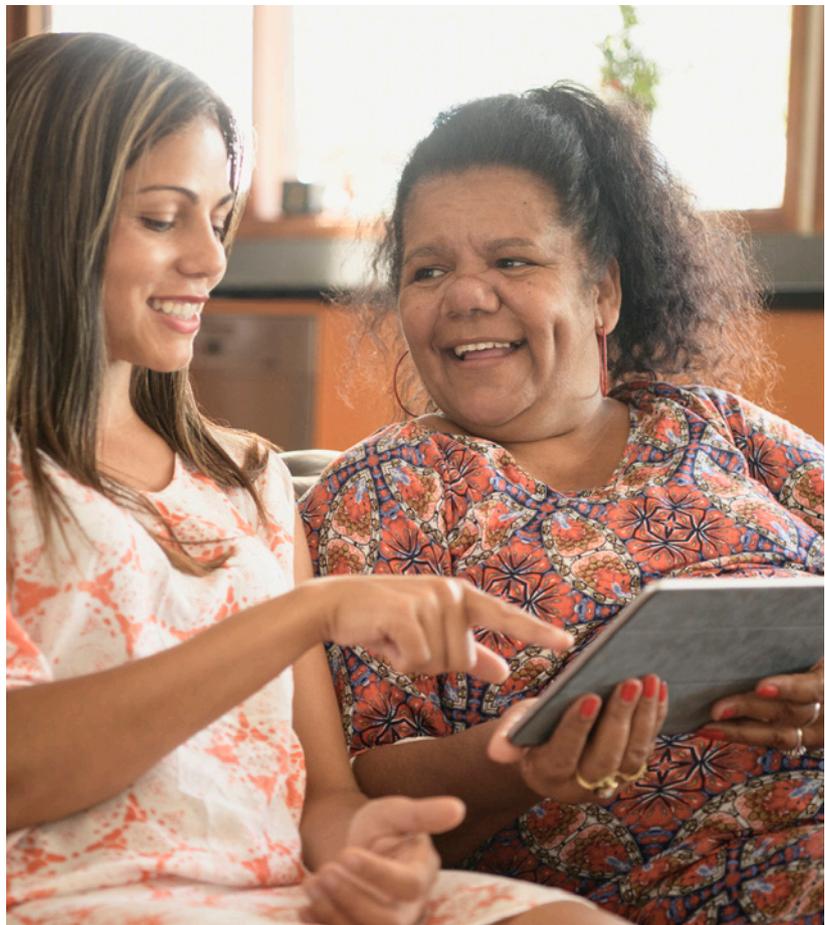
Indigenous status show that main carers are disproportionately immigrants from non-English speaking countries (often referred to as culturally and linguistically diverse (CALD) immigrants) or Indigenous Australians (see Box 2.8, page 29). CALD immigrants account for 20.6% of main carers, but only 18.2% of non-carers; Indigenous Australians account for 3.6% of main carers, but only 2.2% of non-carers. Immigrants from the main English-speaking countries (MESC immigrants) are relatively unlikely to be carers, be it main carers or other carers.

Table 2.12 compares carers' location of residence with that of non-carers. It shows that carers are considerably more likely to be living in urban areas, with 13.8% of main carers and 12.2% of other carers living in non-urban regions, compared with 10.5% of non-carers. Main carers are also relatively less likely to live in major urban centres, with 61.6% of main carers living in major urban areas, compared with 64.1% of other carers and 68.4% of non-carers. Main carers tend to live in more socio-economically disadvantaged areas, as measured by the Socio-Economic Index for Areas (SEIFA)

Box 2.8: Classification of place of birth and Indigenous status

In this report, two groups of immigrants are distinguished: those born in one of the main English-speaking countries (MESC, which comprise the United Kingdom, the United States, Canada, Ireland, New Zealand and South Africa; and those born in other countries, referred to as immigrants from culturally and linguistically diverse backgrounds (CALD immigrants).

Among people born in Australia, a distinction is drawn between people who self-identify as Aboriginal and/or Torres Strait Islander (Indigenous) and other people.



Index of Relative Socio-Economic Advantage and Disadvantage (see Box 9.1, page 130). Lower values are associated with greater disadvantage. Results show that the mean SEIFA decile for main carers is equal to 4.7, compared with 5.7 for non-carers.

Wellbeing of carers

Caring often places heavy demands on the providers of that care, raising important questions about how well they cope with those demands. We can briefly consider this issue by examining some socio-economic outcomes of carers and how these differ by the length of time an individual has been a carer.

We begin in Table 2.13 by comparing mean levels of various objective and subjective measures of the wellbeing of main carers, other carers and non-carers aged 15 and over. As expected, compared with other carers and non-carers, main carers have the lowest mean household equivalised income and employment rates. They have the highest severe and moderate disability rates (see Box 2.9, page 30), and the highest rates of poor general health and poor mental health (as measured by the SF-36 general health measure, see Box 2.4, page 19). In addition,

they have the lowest average levels of satisfaction with their financial situation, health and the amount of free time they have (see Box 2.10, page 30). Other carers generally fall somewhere

between main carers and non-carers on these measures.

Table 2.14 focuses on main carers only and examines whether there is any evidence that their outcomes depend on the length of

Box 2.9: 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.

Disability severity 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'.

Box 2.10: HILDA Survey measures of subjective wellbeing

The HILDA Survey has asked Australians to report on life satisfaction as well as satisfaction in various areas or domains of life in every wave since 2001. Life satisfaction is measured by asking respondents *All things considered, how satisfied are you with your life overall?*, with responses ranging from 0 (completely dissatisfied) to 10 (completely satisfied), and where 5 represents 'neither satisfied nor dissatisfied'.

Questions on domain satisfaction are asked in a similar manner, such as *All things considered, how satisfied are you with your financial situation?* These domain satisfactions are also ranked from 0 (completely dissatisfied) to 10 (completely satisfied).

For employed people, there is an additional battery of questions on satisfaction with the (main) job overall and with aspects of the job. These questions have the same 0–10 response options.

Table 2.13: Outcomes experienced by carers, 2005 to 2020 (pooled means)

	Main carers	Other carers	Non-carers
Equivalised income (\$, December 2020 prices)	42,862	48,039	54,722
Employed full-time (%)	17.2	26.0	43.6
Employed part-time (%)	18.1	19.7	20.3
Disability, no work restriction (%)	12.2	12.2	8.3
Disability, moderate work restriction (%)	28.6	24.8	13.2
Disability, severe work restriction (%)	7.3	6.1	3.8
Poor general health (%)	18.8	16.6	10.5
Poor mental health (%)	22.7	20.9	14.3
Life satisfaction (mean, 0–10 scale)	7.6	7.6	7.9
Satisfaction with financial situation (mean, 0–10 scale)	6.1	6.2	6.5
Satisfaction with feeling part of local community (mean, 0–10 scale)	6.7	6.7	6.7
Health satisfaction (mean, 0–10 scale)	6.6	6.8	7.3
Satisfaction with amount of free time (mean, 0–10 scale)	6.2	6.3	6.8

Table 2.14: Differences in characteristics and outcomes of main carers, by duration of caring, 2008 to 2020 (pooled means)

	Duration of caring			
	<1 year	1 to <2 years	2 to <3 years	3 or more years
<i>Characteristics</i>				
Female (%)	59.7	63.2	65.1	67.4
Age (years)	50.5	53.3	54.1	56.9
SEIFA decile	5.3	5.1	5.0	4.7
<i>Outcomes</i>				
Equivalised income (\$, December 2020 prices)	50,021	47,486	46,638	45,135
Employed full-time (%)	30.8	25.3	21.7	17.1
Employed part-time (%)	20.9	19.6	20.4	17.4
Disability, no work restriction (%)	12.4	12.2	11.3	12.5
Disability, moderate work restriction (%)	22.5	25.5	26.3	30.7
Disability, severe work restriction (%)	5.4	6.2	5.6	7.7
Poor general health (%)	15.8	16.9	16.3	18.8
Poor mental health (%)	20.4	20.2	21.0	21.5
Life satisfaction (mean, 0–10 scale)	7.7	7.7	7.6	7.5
Satisfaction with financial situation (mean, 0–10 scale)	6.3	6.4	6.3	6.3
Satisfaction with feeling part of local community (mean, 0–10 scale)	6.7	6.7	6.6	6.6
Health satisfaction (mean, 0–10 scale)	6.9	6.8	6.7	6.6
Satisfaction with amount of free time (mean, 0–10 scale)	6.5	6.4	6.2	6.0

time the individual has been a (main) carer. Four duration categories are examined: less than one year; one to less than two years; two to less than three years; and three or more years. Since these duration categories require information on carer status in up to three waves prior to the current wave, the estimates presented in Table 2.14 relate only to Waves 8 to 20—that is, in Waves 5, 6 and 7, carer status three years ago is not known.

Considering the upper panel first, the proportion of main carers who are female is highest, at 67.4%, for the longest duration category (three or more years),

and monotonically increases the longer the duration of care. Those who have been caring for at least three years tend to be older than those who have been caring for less than three years. Socio-economic disadvantage of region of residence, as measured by SEIFA decile, tends to be greater for longer-duration carers.

Turning to other socio-economic outcomes, average equivalised income is clearly ordered by duration of caring, with the mean falling from a high of \$50,021 among those who have been main carers for less than one year to a low of \$45,135 among those who have been main carers for at

least three years. For the remaining outcomes considered in Table 2.14, they are generally ordered by duration of caring—specifically, the longer the care duration, the lower the rate of employment, the higher the rate of disability and poor general health, and the lower the mean levels of the subjective wellbeing measures. Notable exceptions are for poor mental health, which has a similar prevalence rate across the four duration categories, and mean satisfaction with financial situation, which is likewise similar across the four duration categories.



3

Household economic wellbeing

Roger Wilkins

Study of the distribution of income, and how an individual's income changes over time, is integral to understanding the economic fortunes of the Australian population. The HILDA Survey is the only nationally representative data source in Australia that has the capacity to provide information on both the distribution of household income at a point in time and how incomes of households change over time.

The HILDA Survey also regularly collects other information relevant to the assessment of economic wellbeing, most notably on household expenditure and wealth. Moreover, in addition to objective financial data, information is regularly collected on the experience of financial stress, the ability to raise funds at short notice, perceived adequacy of household income, saving habits, saving horizon, attitudes to financial risk and satisfaction with one's financial situation.

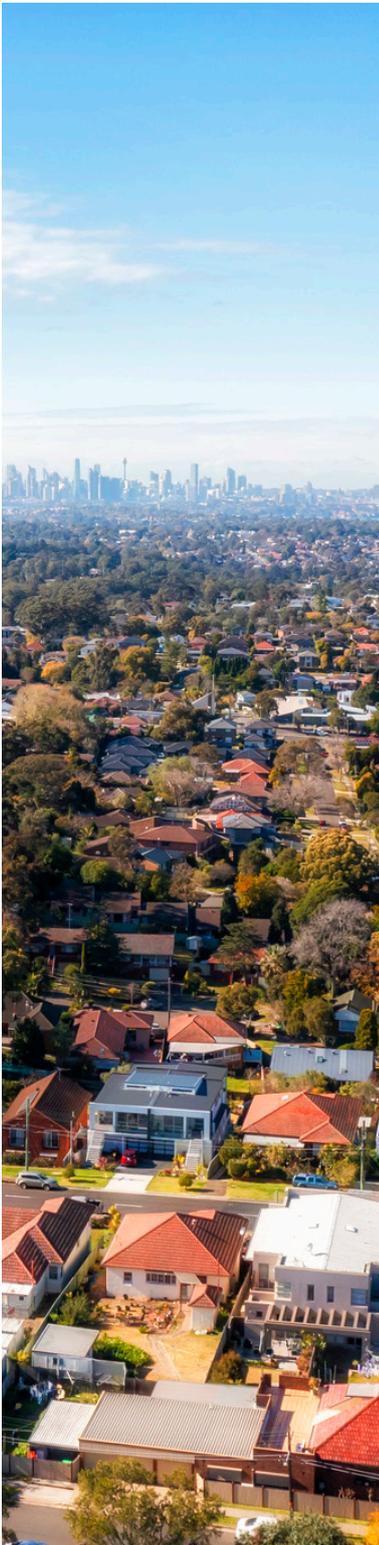
This chapter examines the evolution and dynamics of economic wellbeing in Australia from a number of perspectives, considering not only household incomes, but also experiences of financial stress and food insecurity. An important theme in this year's report is how things changed in 2020 with the onset of the COVID-19 pandemic. The chapter also examines financial literacy in Australia and how it has changed in recent years. In addition, Chapter 6 by Ferdi Botha analyses data collected for the first time in 2020 on a measure of financial wellbeing.

Income levels and income inequality

Annual income

Cross-sectional estimates of mean and median household annual disposable income (as defined in Box 3.1, page 33) are presented in Table 3.1. 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.

Mean and median household disposable incomes grew very strongly over the eight-year period from 2001 to 2009. Expressed at December 2020 prices, the mean increased by \$20,786, or \$2,598 per year; the median increased by \$20,090 over the same period. Most of this growth in fact occurred between 2003 and 2009, when both the mean and median grew by over \$3,000 per year. However, between 2009 and 2018, growth in both the mean

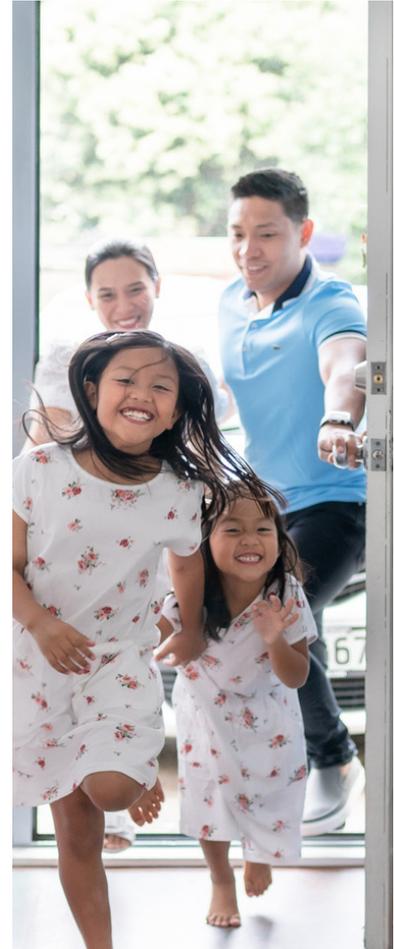


Box 3.1: Measurement of household income in the HILDA Survey

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 (for example, 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 December 2020 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. 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, it is *regular* disposable income that is examined.

^a Following the Australian Bureau of Statistics' (ABS) practice in its Survey of Income and Housing (ABS, 2017), Commonwealth Rent Assistance is included as income, despite being a rental subsidy.



and median was much weaker. Over the nine years from 2009 to 2018, the mean household income grew by only \$2,250, or 2.4%, while the median in 2018 was \$1,689 lower than in 2009 (having fallen between 2009 and 2011,

risen in 2012, and remained broadly unchanged thereafter). Since 2018, there has been somewhat stronger growth in mean and median incomes, with the mean rising by \$4,210 and the median rising by \$4,516, although

Table 3.1: Household annual disposable incomes, 2001 to 2020

	Mean (\$, December 2020 prices)	Median (\$, December 2020 prices)	Number of households	Number of people
2001	74,356	64,057	7,281,363	18,824,376
2002	75,464	65,400	7,357,079	19,039,091
2003	75,191	65,187	7,433,838	19,258,414
2004	77,958	67,339	7,505,562	19,468,325
2005	81,492	71,794	7,589,921	19,714,426
2006	85,373	73,594	7,686,360	20,013,529
2007	89,407	77,339	7,836,760	20,382,461
2008	91,665	79,083	8,009,920	20,809,743
2009	95,142	84,147	8,175,735	21,216,949
2010	94,660	81,763	8,298,875	21,521,079
2011	95,026	80,007	8,413,537	21,834,344
2012	96,499	83,559	8,578,027	22,221,454
2013	97,441	83,777	8,737,151	22,594,836
2014	97,045	82,403	8,882,149	22,929,927
2015	96,483	82,048	9,028,434	23,266,630
2016	96,201	82,867	9,192,118	23,656,265
2017	96,906	82,298	9,355,903	24,047,180
2018	97,392	82,458	9,519,919	24,426,212
2019	100,615	84,625	9,683,252	24,801,028
2020	101,602	86,974	9,783,510	25,009,822



most of this growth occurred between 2018 and 2019. Moreover, at least some of the growth between 2019 and 2020 is attributable to government income supports introduced in response to the COVID-19 pandemic in 2020, a topic directly considered later in this chapter.

Box 3.2: 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 the age and gender of household members, health and disability of household members (since poor health and/or disability increase the costs of achieving a given standard of living), region of residence (since living costs differ across regions) and home-ownership status (since the income measure does not usually include imputed rent for owner-occupiers).

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 have used the 'modified OECD' scale (Hagenaars et al., 1994), 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 (for example, 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 3.2 considers the distribution of household income, taking into account potential changes to household composition by examining 'equivalised' income per person (see Box 3.2, page 34, for an explanation of how equivalised income is calculated and Box 3.3, page 34, for an explanation of the statistics presented in the table). The individual is the unit of observation, meaning the statistics presented are for the distribution of equivalised incomes across all individuals in the population, including children.

Patterns in average level of income between 2001 and 2020 evident for incomes of households are also evident for equivalised incomes of individuals. This is unsurprising

given that changes in household composition of the population between 2001 and 2020 have been relatively modest (see Table 2.1, page 7).

The HILDA Survey indicates that there was little net change in income inequality between 2001 and 2019. For example, the Gini coefficient, a common measure of overall inequality, remained between 0.29 and 0.31 over the entire 19-year period. However, 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. (See Box 5.2, page 92, for a brief timeline of the pandemic and

Box 3.3: 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 3.2: Distribution of individuals' household equivalised income, 2001 to 2020

	<i>Mean (\$, December 2020 prices)</i>	<i>Median (\$, December 2020 prices)</i>	<i>Ratio of 90th percentile to the median</i>	<i>Ratio of median to the 10th percentile</i>	<i>Gini coefficient</i>
2001	44,007	38,910	1.918	2.11	0.304
2002	44,657	39,230	1.915	2.07	0.301
2003	44,616	39,546	1.886	2.07	0.296
2004	46,049	41,484	1.835	2.11	0.294
2005	48,086	42,989	1.843	2.07	0.292
2006	50,287	44,217	1.915	2.04	0.297
2007	53,219	46,930	1.902	2.16	0.306
2008	53,956	47,313	1.911	2.13	0.302
2009	56,217	50,289	1.843	2.16	0.295
2010	55,705	48,937	1.902	2.09	0.300
2011	56,105	48,776	1.967	2.13	0.309
2012	56,996	50,022	1.894	2.04	0.299
2013	57,483	49,811	1.914	2.03	0.302
2014	57,306	50,238	1.916	2.00	0.300
2015	57,270	50,153	1.912	1.99	0.295
2016	57,060	50,072	1.887	1.99	0.295
2017	57,560	50,243	1.914	2.04	0.304
2018	57,941	50,996	1.904	2.06	0.299
2019	59,969	52,987	1.871	2.11	0.303
2020	60,700	53,933	1.861	1.99	0.289

associated public health measures.) Indeed, the Gini coefficient decreased from 0.303 in 2019 to 0.289 in 2020, the lowest level ever recorded by the HILDA Survey, albeit by a slim margin.

Income differences by family type

Figure 3.1 compares median equivalised incomes across family types (defined in Box 3.4, page 36). A reasonably consistent ordering by type of family is evident across the 20 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,



Box 3.4: Family types

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

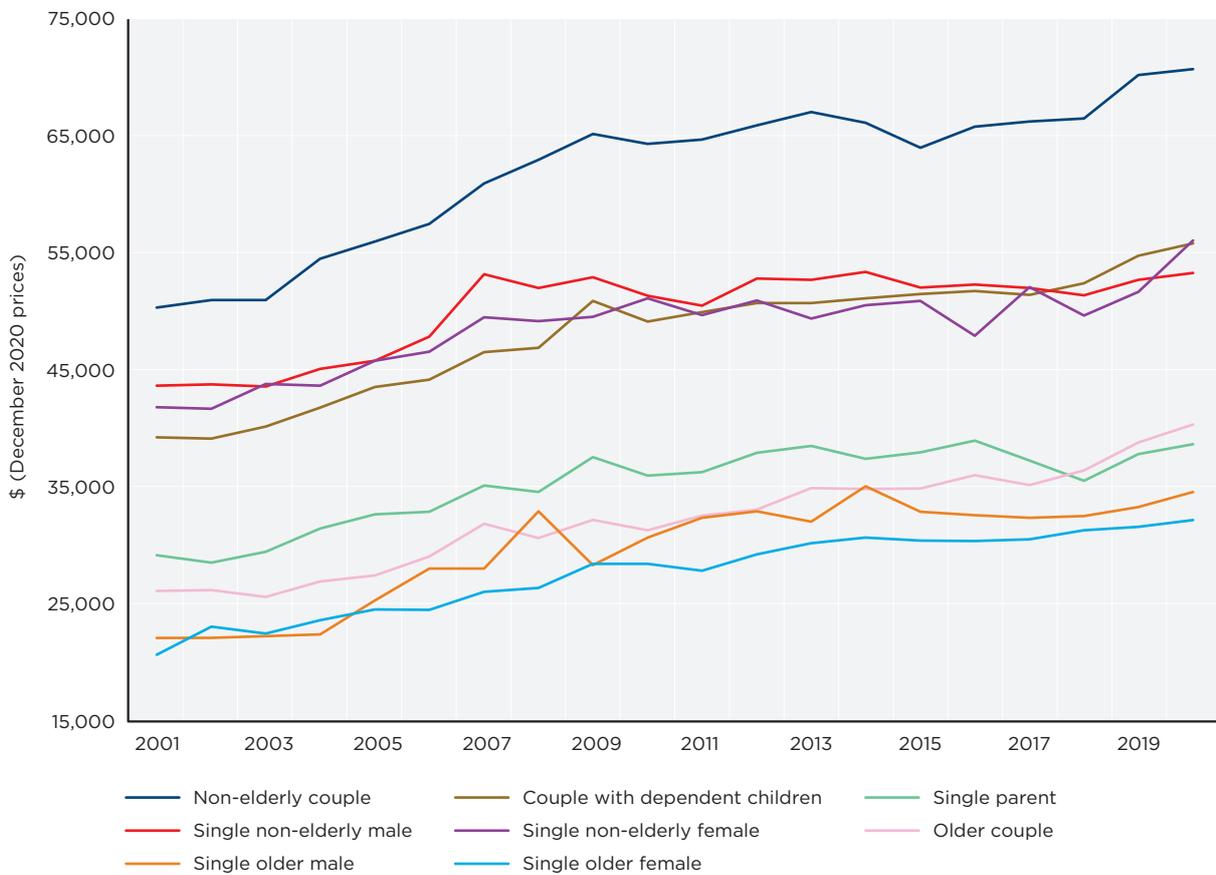
Note that some households will contain multiple 'families'. For example, a household containing a non-elderly couple living with a non-dependent son will contain a non-elderly couple family and a non-elderly single male. Both of these families will, of course, have the same household equivalised income. 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. 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.

who have low incomes. All family types have exhibited growth in median incomes between 2001 and 2020, with non-elderly couples without children faring slightly better than other family types.

Income differences by region

There is much public discussion about how economic fortunes differ across regions, with particular interest in how regional

Figure 3.1: Median equivalised income, by family type



Box 3.5: 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) Australian Standard Geographical Classification 2011 'Section of State' (ABS, 2011), 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 regions (towns with populations of less than 1,000, and rural and remote areas). The HILDA Survey data show that, in 2016, approximately 65% of the population resided in major urban areas, 20% resided in other urban areas and 15% resided in non-urban areas.

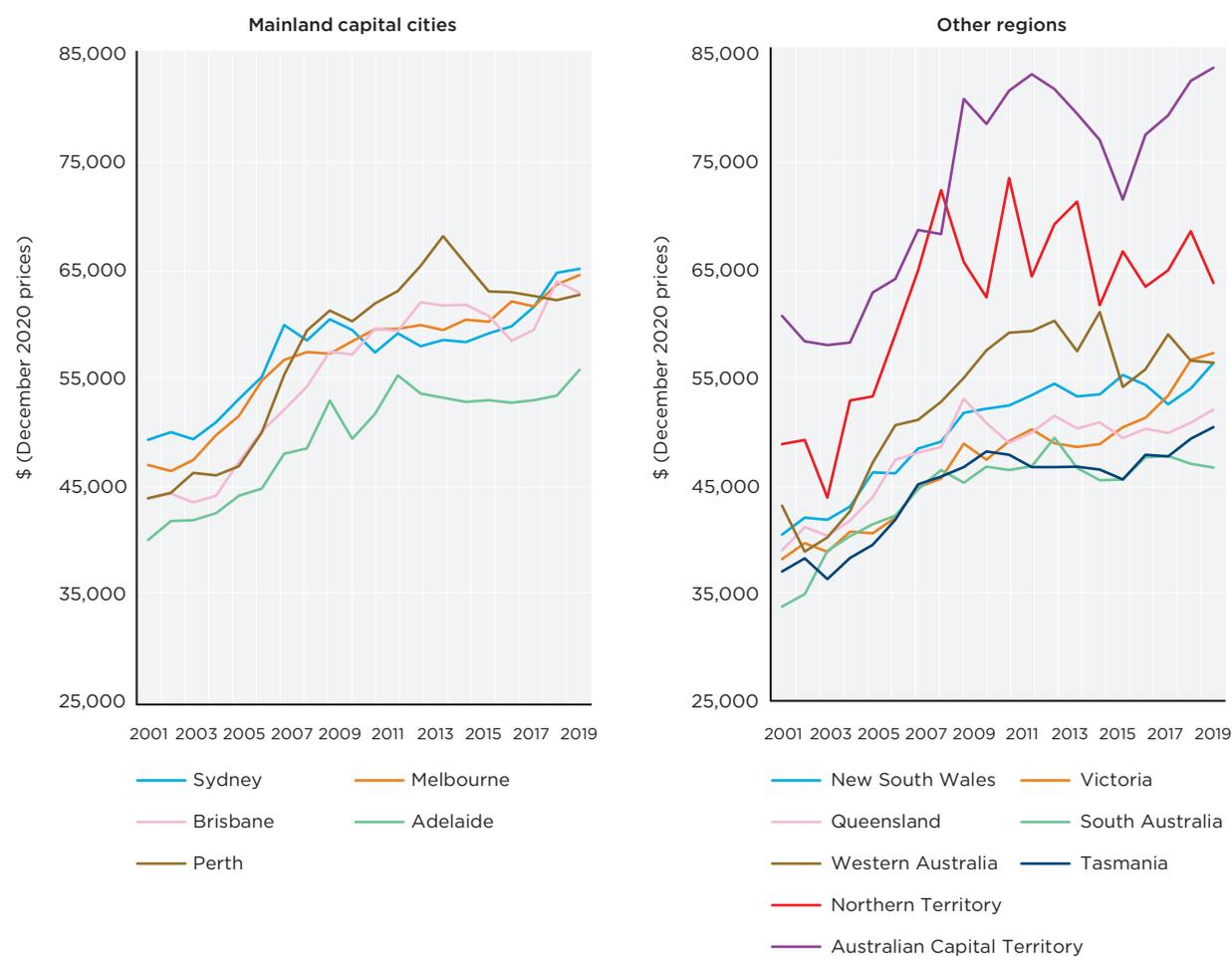
In more detailed analysis by region undertaken in this report, information on state or territory of residence and whether resident of the state's capital city is combined to create 13 distinct regions, each of which has a sufficient sample size to support the statistical analyses presented. The regions comprise: (1) Sydney; (2) Rest of New South Wales; (3) Melbourne; (4) Rest of Victoria; (5) Brisbane; (6) Rest of Queensland; (7) Adelaide; (8) Rest of South Australia; (9) Perth; (10) Rest of Western Australia; (11) Tasmania; (12) Australian Capital Territory; and (13) Northern Territory. Additionally, in some analysis, non-urban regions of Australia are distinguished (as a single category) and urban Northern Territory is combined with Australian Capital Territory, to give the following categories: (1) Sydney; (2) Other urban New South Wales; (3) Melbourne; (4) Other urban Victoria; (5) Brisbane; (6) Other urban Queensland; (7) Adelaide; (8) Other urban South Australia; (9) Perth; (10) Other urban Western Australia; (11) Urban Tasmania; (12) Urban Northern Territory and Australian Capital Territory; and (13) Non-urban Australia.

areas are faring compared with the major cities. Figure 3.2 compares mean equivalised incomes over the 2001 to 2020 period across 13 regions of Australia (see Box 3.5, page 37).

Mean incomes are considerably higher in the mainland capital cities than in the other regions of each state. Tasmania also has a relatively low mean income. The mean income in the Australian Capital Territory is the highest of all the regions examined in Figure 3.2, a situation which has persisted across almost the entire 2001 to 2020 period, despite a substantial decline in mean income in the territory between 2012 and 2016.

Figure 3.2 also indicates that, among the mainland capital cities, Adelaide consistently has

Figure 3.2: Mean household equivalised income, by region



Notes: Mainland capital cities are 'greater capital cities'. States are 'rest of state' (that is, excluding greater capital city).

the lowest mean income. The mean income in Perth surged between 2010 and 2014, giving the city the highest mean income of the mainland capital cities, but its mean income fell between 2014 and 2016 and in 2020 was similar to that of Sydney, Melbourne and Brisbane.

Effects of government income taxes and transfers on household incomes

Government income taxes and benefits substantially impact the incomes households have available for consumption and saving. Table 3.3 provides an indication of these impacts. The upper panel presents measures of the distribution of income before income taxes are paid and government benefits are received—which can be considered ‘private’ income—while the lower panel shows how much different these measures are from those for disposable (after income taxes and benefits) income.

It is important to emphasise that this is not the ‘true’ impact of income taxes and benefits on household incomes, because people are likely to behave differently if their private incomes are not taxed and the government does not pay any



Box 3.6: Additional income supports introduced in response to the COVID-19 crisis

In the face of the shutdown of a significant share of the economy as a result of the COVID-19 pandemic, in March 2020 and in the months following, the Australian Government announced a series of fiscal measures to protect the economic wellbeing of the Australian community. The largest of these measures was the **JobKeeper Payment**, which was paid to employers and the self-employed (see Box 3.7, page 40). However, several important measures in respect of the income support (welfare) system were also introduced. In the financial year ending 30 June 2020, these included the **Economic Support Payment**, a \$750 payment in March 2020 to recipients of social security and veterans’ payments, Family Tax Benefit and Farm Household Allowance as well as holders of certain concession cards; and the **Coronavirus Supplement**, a \$550 per fortnight supplement from 27 April 2020 payable to recipients of JobSeeker Payment, Parenting Payment, Youth Allowance, Farm Household Allowance and Special Benefit. Eligibility criteria for JobSeeker Payment, Parenting Payment and Youth Allowance were also temporarily relaxed, including waiving the assets test and various waiting periods, and—for JobSeeker Payment—relaxing the partner income test, measures which expanded the number of people who were eligible for the payments.

benefits. For example, it is likely that some people would increase their labour market participation. Nonetheless, it is valuable to measure the scale of government intervention in household incomes via income taxes and benefits, and to consider how the extent to which it redistributes income has changed over time.

Income taxes and benefits on average decrease household incomes, as indicated by the negative values for their effects on the mean and median equivalised disposable income. For example, in 2020, income taxes and benefits decreased mean income by \$7,582 and median income by \$6,845. They also reduce income inequality, although the extent to which they do this has diminished somewhat since the beginning of this century. For example, income taxes and government benefits reduced the Gini coefficient by 0.154 in 2001, but by 0.141 in

2020. The effect on the Gini coefficient in 2020 was in fact slightly larger than in the preceding two years. This reflects the impacts of additional income supports introduced in March and April of 2020, namely the Economic Support Payment and the Coronavirus Supplement (see Box 3.6, page 38).

Impacts of the JobKeeper scheme up to 30 June 2020

The estimates presented in Table 3.3 do not include the effects of JobKeeper, a hybrid wage subsidy and income transfer payment introduced in March 2020 and removed in April 2021 (see Box 3.7, page 40). Ascertaining the impacts of JobKeeper on household incomes is made difficult by uncertainty over the extent of wage losses employees would have experienced in the absence of the scheme. However, we can obtain an upper bound of its impacts by assuming no JobKeeper payments supplanted wages that would have been paid in the absence of the subsidy.¹

¹ In Chapter 4 we show that receipt of JobKeeper Payment appears to be slightly under-reported by HILDA Survey respondents. This will tend to reduce the estimated impact of JobKeeper Payment on the distribution of income.

Table 3.3: Impact of income taxes and government benefits on distribution of household income, 2001 to 2020

	Mean (\$, December 2020 prices)	Median (\$, December 2020 prices)	Ratio of 90th percentile to the median	Ratio of median to the 10th percentile	Gini coefficient
<i>Equivalised income before income taxes and government benefits (private income)</i>					
2001	49,031	42,411	2.32	58.82	0.458
2002	49,598	42,502	2.33	50.00	0.461
2003	49,747	43,338	2.26	47.62	0.454
2004	51,075	45,214	2.23	71.43	0.453
2005	53,405	46,565	2.26	32.26	0.448
2006	56,188	48,234	2.30	21.28	0.444
2007	59,023	50,351	2.25	25.64	0.446
2008	59,388	50,900	2.26	15.87	0.436
2009	60,047	51,683	2.24	17.86	0.440
2010	60,491	52,789	2.21	18.18	0.441
2011	60,959	51,561	2.34	16.13	0.447
2012	62,141	53,298	2.26	13.70	0.440
2013	62,681	53,071	2.31	16.67	0.448
2014	62,500	53,577	2.31	21.74	0.449
2015	63,425	53,821	2.32	20.00	0.445
2016	63,152	54,915	2.20	21.28	0.441
2017	64,771	55,841	2.23	24.39	0.445
2018	65,663	57,717	2.21	23.81	0.432
2019	67,965	59,087	2.17	17.86	0.439
2020	68,282	60,778	2.15	22.22	0.430
<i>Impact of income taxes and government benefits</i>					
2001	-5,024	-3,501	-0.40	-56.71	-0.154
2002	-4,941	-3,272	-0.41	-47.93	-0.160
2003	-5,131	-3,792	-0.38	-45.55	-0.158
2004	-5,026	-3,730	-0.39	-69.32	-0.159
2005	-5,319	-3,576	-0.42	-30.19	-0.156
2006	-5,901	-4,017	-0.39	-19.24	-0.147
2007	-5,804	-3,421	-0.35	-23.48	-0.140
2008	-5,432	-3,587	-0.35	-13.75	-0.134
2009	-3,830	-1,394	-0.39	-15.70	-0.145
2010	-4,786	-3,852	-0.31	-16.09	-0.141
2011	-4,854	-2,785	-0.37	-14.00	-0.138
2012	-5,145	-3,276	-0.37	-11.66	-0.141
2013	-5,198	-3,260	-0.40	-14.64	-0.146
2014	-5,194	-3,339	-0.39	-19.74	-0.149
2015	-6,155	-3,668	-0.41	-18.01	-0.150
2016	-6,092	-4,843	-0.31	-19.28	-0.146
2017	-7,211	-5,598	-0.32	-22.35	-0.141
2018	-7,722	-6,721	-0.30	-21.75	-0.133
2019	-7,996	-6,100	-0.30	-15.75	-0.136
2020	-7,582	-6,845	-0.29	-20.23	-0.141



Box 3.7: JobKeeper Payment

The JobKeeper Payment, introduced by the Australian Government on 30 March 2020 in response to the COVID-19 pandemic, was a wage subsidy and income support program of unprecedented scale, with a total cost in excess of \$100 billion. In the first phase of the scheme, most employers significantly affected by the pandemic were eligible for \$1,500 per fortnight for each of their employees who was employed on 1 March 2020. Employees on temporary migrant visas and casual employees who had been with the employer for less than 12 months were excluded from the scheme. Employers were required to fully pass the payments through to employees. The self-employed were also eligible for the scheme.^a

From 3 August 2020 the scheme was extended to adversely impacted employers in respect of employees employed on 1 July 2020. From 28 September 2020 two payment tiers were introduced, the upper tier payable for employees usually working at least 20 hours per week and the lower tier payable for employees usually working fewer than 20 hours per week. From 28 September 2020 to 3 January 2021, the upper tier was \$1,200 per fortnight and the lower tier was \$750 per fortnight. From 4 January until 28 March 2021, when the scheme was wound up, the upper tier was \$1,000 per fortnight and the lower tier was \$650 per fortnight.

In total, the scheme was in operation for 26 fortnights, of which 11 were at the \$1,500 payment level, nine were at the \$1,200/\$750 level and six were at the \$1,000/\$650 level. Thus, the maximum JobKeeper payable in respect of a single employee was \$33,300 for those usually working at least 20 hours per week and \$27,150 for those usually working fewer than 20 hours per week. The financial year ending 30 June 2020 contained the first 92 days of the JobKeeper scheme, implying up to \$9,857 was paid per eligible employee in the 2019 to 2020 financial year, with the remainder paid in the financial year ending 30 June 2021.

For more details about the JobKeeper scheme, see Treasury (2021).

^a Treasury (2020) shows why the scheme was a hybrid wage subsidy and income transfer program. Essentially, the payment represented an income transfer to the extent it was not subsidising wages normally payable for the hours worked. For example, it represented an income transfer for stood down employees (who were not working), but a wage subsidy for workers who continued working and did not experience an increase in employment income due to the payment. For workers who continued working and experienced an increase in employment income due to the payment, it represented a combination of a wage subsidy and an income transfer.

The HILDA Survey asked respondents if they (or the employer on their behalf) received JobKeeper. Respondents were not asked the value of the payments but, given the nature of the scheme, a reasonable approximation is that each recipient received the full amount of the subsidy payable in the 2019–20 financial year. This

translates to \$9,857 per recipient based on the scheme being in operation for 13 weeks and one day in the 2019–20 financial year. This is nonetheless an approximation, since actual amounts received will depend on the dates and frequency of wage payments.

Table 3.4 presents statistics showing the contribution of the

JobKeeper scheme to the income distribution in the 2019–20 financial year. It examines gross (pre-tax) incomes rather than disposable incomes because income taxes would need to be recalculated for incomes excluding JobKeeper to ascertain the impacts on disposable income. The upper panel examines the distribution of household incomes across households (analogous to Table 3.1), while the lower panel examines the distribution of equivalised household incomes across individuals (analogous to Table 3.2).

The mean value of JobKeeper payments across all households was \$2,765, while the mean *equivalised* value of payments received by households was \$1,677. Overall, JobKeeper acted to decrease income inequality, as reflected by a lower Gini coefficient when JobKeeper payments are included. However, the scheme acted to increase inequality below the median, with the ratio of the median to the 10th percentile higher when JobKeeper payments are included than when they are excluded. This is likely to reflect the fact that low-income households are much less likely to have a household member in employment.

Table 3.4: JobKeeper’s contribution to household gross incomes in the 2019–20 financial year (\$, December 2020 prices)

	Mean (\$, December 2020 prices)	Median (\$, December 2020 prices)	Ratio of 90th percentile to the median	Ratio of median to the 10th percentile	Gini coefficient
<i>Household income</i>					
Including JobKeeper	125,491	101,499	2.351	3.650	0.413
Excluding JobKeeper	122,726	98,460	2.377	3.623	0.416
Difference	2,765	3,039	-0.026	0.027	-0.003
<i>Household equivalised income of individuals</i>					
Including JobKeeper	75,362	63,817	2.063	2.331	0.340
Excluding JobKeeper	73,685	61,717	2.107	2.299	0.345
Difference	1,677	2,100	-0.044	0.032	-0.005

Note: Household gross income is total household income before deduction of income taxes.

Which households received JobKeeper?

Table 3.5 briefly considers which households benefited from the JobKeeper program. The upper panel compares across households by quintile in the income distribution and confirms that low-income households were less likely to receive JobKeeper. Overall, 23.1% of households received JobKeeper, with those in the middle and fourth quintiles having the highest rates of receipt of 29.5% and 31.6%, respectively. Only 5.1% of households in the bottom quintile

received JobKeeper, reflecting the low rate of employment of these households. The second quintile also had a relatively low rate of receipt, while 28.1% of households in the top quintile received the payment.

Consistent with the high rate of receipt among households in the fourth quintile, the mean value of JobKeeper payments received was highest for these households. Over all households in the fourth quintile, the mean value of payments was \$3,882, compared with approximately \$3,500 for the middle and top

quintiles, \$2,343 for the second quintile, and only \$558 for the bottom quintile.

Comparing across family types, the rate of receipt was highest for working-age couples, followed by single people, single parents and then older people. The mean value of payments received is similarly ordered across family types, although it is notable that working-age couples without dependent children had the highest payments in equivalised terms (that is, adjusted for household composition).

Table 3.5: Receipt of JobKeeper in the 2019-20 financial year, by household location in the income distribution and family type

	<i>Household received JobKeeper (%)</i>	<i>Mean value of payments received by household (\$, December 2020 prices)</i>	<i>Mean equivalised value of payments received by household (\$, December 2020 prices)</i>
All households	23.1	2,765	1,533
<i>Income quintile</i>			
Bottom	5.1	558	363
Second	21.1	2,343	1,327
Middle	29.5	3,509	1,925
Fourth	31.6	3,882	2,094
Top	28.1	3,536	1,957
<i>Family type</i>			
Young couple	32.8	4,154	2,346
Couple with dependent children	34.5	4,280	1,881
Single parent	18.1	1,993	1,083
Single non-elderly male	23.0	2,569	1,761
Single non-elderly female	20.8	2,365	1,602
Older couple	8.1	1,098	490
Single older male	3.4	342	245
Single older female	3.3	342	248





Income mobility and income changes

Table 3.6 takes advantage of the longitudinal information from the HILDA Survey to examine income mobility over the short to medium term. For each quintile of the equivalised income distribution, it shows the proportions of people moving to a lower quintile, staying in the same quintile and moving to a higher quintile. The more people who move up or down, the greater is income mobility. The table examines mobility over

three time-frames: one year, five years and 10 years. The analysis is also presented separately for three sub-periods of the 2001 to 2020 period based on the initial year in which the income quintile is measured: 2001 to 2007, 2008 to 2013 and 2014 to 2019.

As an example to aid interpretation, the upper right cell of the table shows that, of those in the bottom quintile in any given year between 2014 and 2019, on average 30.3% were in a higher quintile in the next year. The remaining 69.7% stayed in the bottom quintile. (Note that it is not possible to move down from the bottom quintile or move

up from the top quintile, so the corresponding cells are always zero.)

The table shows that 'stickiness' is greatest for the bottom and top quintiles. The proportion remaining in the same quintile is always highest for these two quintiles, regardless of the time-frame over which mobility is measured. For example, over a one-year time-frame, the proportion of the bottom quintile remaining in the bottom quintile is always just under 70%, while the proportion of the top quintile remaining in the top quintile is always just over 70%. For other quintiles, the proportion

Table 3.6: Movements of individuals in income distribution, by initial income quintile (%)

Initial years	2001–2007			2008–2013 ^a			2014–2019 ^b		
	Moved down	No change	Moved up	Moved down	No change	Moved up	Moved down	No change	Moved up
<i>One-year changes</i>									
Bottom quintile	0.0	68.6	31.4	0.0	67.6	32.4	0.0	69.7	30.3
Second quintile	21.2	49.4	29.4	21.1	49.4	29.5	21.2	50.1	28.7
Middle quintile	26.8	45.4	27.8	26.8	46.3	26.8	26.0	47.1	26.8
Fourth quintile	30.8	49.1	20.1	28.7	51.0	20.3	29.5	51.7	18.8
Top quintile	29.4	70.6	0.0	27.9	72.1	0.0	26.0	74.0	0.0
<i>Five-year changes</i>									
Bottom quintile	0.0	59.4	40.6	0.0	58.4	41.6	0.0	56.3	43.7
Second quintile	25.2	35.9	38.9	25.2	35.5	39.3	26.1	35.5	38.4
Middle quintile	33.7	29.5	36.8	32.5	32.3	35.2	33.2	31.9	34.9
Fourth quintile	39.8	35.3	24.8	38.6	35.1	26.3	40.4	34.0	25.5
Top quintile	44.8	55.2	0.0	43.6	56.4	0.0	42.9	57.1	0.0
<i>10-year changes</i>									
Bottom quintile	0.0	52.9	47.1	0.0	52.7	47.3	–	–	–
Second quintile	26.6	27.9	45.5	28.0	30.0	42.1	–	–	–
Middle quintile	35.5	25.2	39.4	34.5	26.3	39.3	–	–	–
Fourth quintile	45.9	27.5	26.7	47.1	28.2	24.7	–	–	–
Top quintile	52.3	47.7	0.0	53.5	46.5	0.0	–	–	–

Notes: ^a Ten-year changes are for initial years 2008, 2009 and 2010 only. ^b Five-year changes are for initial years 2014 and 2015 only.

Table 3.7: Changes in individuals' household equivalised income, 2018 to 2019 compared with 2019 to 2020

<i>Distribution of changes</i>	<i>Mean change (\$, December 2020 prices)</i>	<i>Median change (\$, December 2020 prices)</i>	<i>10th percentile of changes (\$, December 2020 prices)</i>	<i>90th percentile of changes (\$, December 2020 prices)</i>	<i>Income declined (%)</i>					
2018 to 2019	1,880	1,502	-16,353	19,721	42.0					
2019 to 2020	201	1,128	-19,170	18,905	44.4					
<i>Changes by decile of the income distribution</i>										
	<i>Bottom</i>	<i>2nd</i>	<i>3rd</i>	<i>4th</i>	<i>5th</i>	<i>6th</i>	<i>7th</i>	<i>8th</i>	<i>9th</i>	<i>Top</i>
<i>Mean income change (\$, December 2020 prices)</i>										
2018 to 2019	8,632	5,331	1,973	3,520	3,466	2,552	1,192	1,326	-1,337	-7,872
2019 to 2020	10,738	4,161	3,958	4,033	2,717	961	-910	-1981	-4,124	-16,780
<i>Percentage for whom income declined</i>										
2018 to 2019	22.9	33.6	44.9	39.7	37.8	42.1	45.3	44.2	52.1	56.8
2019 to 2020	17.2	30.2	35.9	36.4	42.0	49.5	51.9	57.2	54.9	66.0

remaining in the same quintile from one year to the next is approximately 50%. For example, over the period from 2014 to 2019, the proportion remaining in the same quintile from one year to the next was 50.1% for the second quintile (that is, the second-lowest quintile), 47.1% for the middle quintile and 51.7% for the fourth quintile (that is, the second-highest quintile).

The greater stickiness of the top and bottom quintiles is unsurprising, since it is only possible for people in these quintiles to move in one direction—down for the top quintile, and up for the bottom quintile. Perhaps also reflecting the greater scope for upward movements for those initially in the lower quintiles, and the greater scope for downward movements for those initially in the higher quintiles, is that the likelihood of moving to a higher quintile tends to be higher the lower the initial quintile, while the likelihood of moving to a lower quintile tends to be higher the higher the initial quintile. For example, in the 2014 to 2019 period, the proportion moving up from one year to the next was 30.3% for the bottom quintile, 28.7% for the second quintile, 26.8% for the middle quintile and 18.8% for the fourth quintile.

The table also shows that, the longer the time-frame, the greater is income mobility. Over a 10-year time-frame, the proportion of those in the top quintile remaining in that quintile is approximately 47% (compared with over 70% over a one-year time-frame), and the proportion of those in the bottom quintile remaining in that quintile is approximately 53% (compared with approximately 68% over a one-year time-frame). For other quintiles, the proportion in the same quintile 10 years later is always 30% or less (compared with approximately 50% over a one-year time-frame).

The estimates for the three time-periods show that short-term income mobility has reduced slightly this century. For all quintiles, the proportion remaining in the same quintile one year later was higher in the 2014 to 2019 period than in the 2001 to 2007 period. Most notable is that the proportion of the top quintile remaining in that quintile rose from 70.6% in the 2001 to 2007 period to 74.0% in the 2014 to 2019 period. However, this pattern is not evident for medium-term (five-year) or long-term (10-year) income mobility.

Table 3.7 considers individuals' household income changes from one year to the next, focusing on

the changes between 2018 and 2019 and between 2019 and 2020. The upper panel presents statistics for the distribution of income changes, while the lower panel examines how changes differ by decile of the initial income distribution.

The distribution of changes is quite different over the two periods, no doubt reflecting the impacts of the COVID-19 pandemic, despite its effects being constrained to the last three months of the 2019–20 financial year. Median and especially mean income growth was much lower between 2019 and 2020, and the proportion experiencing income declines was somewhat higher, at 44.4% compared with 42.0% between 2018 and 2019.

Perhaps more significant is how income changes by initial decile of the income distribution differ over the two periods. Income growth tended to be stronger between 2019 and 2020 for those at the lower end of the income distribution (specifically, for three of the bottom four deciles), and income growth was smaller (or more negative) for those at the higher end of the income distribution (specifically, for all of the top six deciles). The income supports introduced in March and April of 2020 are likely to be the

main reason for this pattern, boosting the incomes of lower-income individuals, but doing less to protect the incomes of higher-income individuals. The notable exception is that mean income growth of the second decile was smaller between 2019 and 2020 than between 2018 and 2019, although mean growth between 2019 and 2020 was, at \$4,161, still relatively high.

Longer-term incomes

Figure 3.3 examines inequality of income measured over five years. For each five-year period available in the data (for example, 2001 to 2005, 2002 to 2006, and so on), five-year income is calculated for each individual as the sum of inflation-adjusted annual equivalised income over the five years—that is, equivalised income is obtained for each of the years and these values are then added together. To the extent that income fluctuates

from year to year, distributional statistics for five-year income can provide a clearer sense of longer-term inequality.

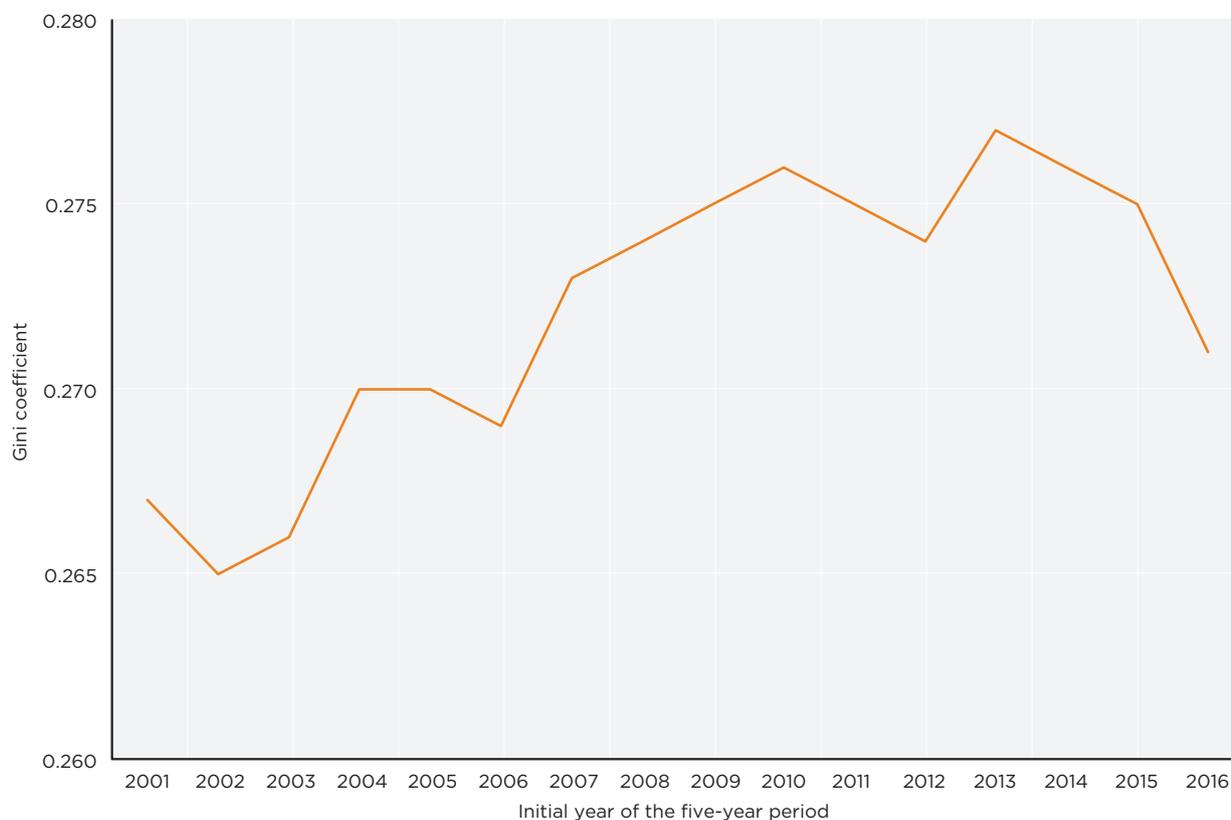
The figure shows that inequality in five-year income, as measured by the Gini coefficient, is lower than inequality in one-year income (Table 3.2). The differences are not large, however, implying there is a high degree of persistence in household incomes.

The Gini coefficient for five-year income increased by approximately 4.5% between 2002–2006 and 2013–2017, but has since fallen by approximately 2%. This rise and then fall in inequality in five-year income contrasts with the finding of little change in inequality of one-year income since 2001 and reflects the fact that inequality of five-year income is affected by the extent to which people move up and down the income distribution

from one year to the next. The more mobility in incomes, the lower will be five-year income inequality relative to one-year income inequality.



Figure 3.3: Inequality of five-year income (Gini coefficient)



Thus, while the increase in income stability from year to year up to the 2013–2017 period was a positive development for people with high incomes, this was not a good development for people with low incomes, since they are more likely to have *persistently* low incomes. From this perspective, the recent decline in inequality of five-year income is a welcome development.

Income poverty

A wide variety of definitions or measures of poverty, or material deprivation, 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 socio-economic disadvantage, and which measure deprivation in terms of inadequacy of *income* (see Box 3.8, page 45). 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.

Cross-sectional poverty rates

Figure 3.4 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 3.8 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

Box 3.8: 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 income is less than 50% of the median household equivalised 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 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. A second problem is that the OECD equivalence scale used to adjust household incomes for household composition (see Box 3.2, page 34) 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.

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.

The estimated poverty rate is approximately one to two percentage points higher for income net of housing costs than for total income. For both measures, the proportion of the population below the relative poverty line has fluctuated over time, ranging between 9.7% and 12.8% for total income and between 11.5% and 14.0% for after-housing income. Both measures trended downwards between 2007 and 2015, but then trended upward up until 2019. In 2020, poverty fell sharply, likely reflecting the early effects of the income supports introduced in March and April of 2020 (see Box 3.6, page 38 and Box 3.7, page 40).

Poverty by family type

Figure 3.5 shows that relative poverty rates vary substantially by family type (see Box 3.4, page 36), 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. Nonetheless, poverty rates are consistently high among *single* older people, although they declined substantially between 2009 and 2014.

Poverty rates are also high for people living in single-parent families and indeed in recent years they have had the highest (or close to highest) rate of poverty for income net of housing. By contrast, people in non-elderly couple families,

Figure 3.4: Percentage of the population in relative income poverty

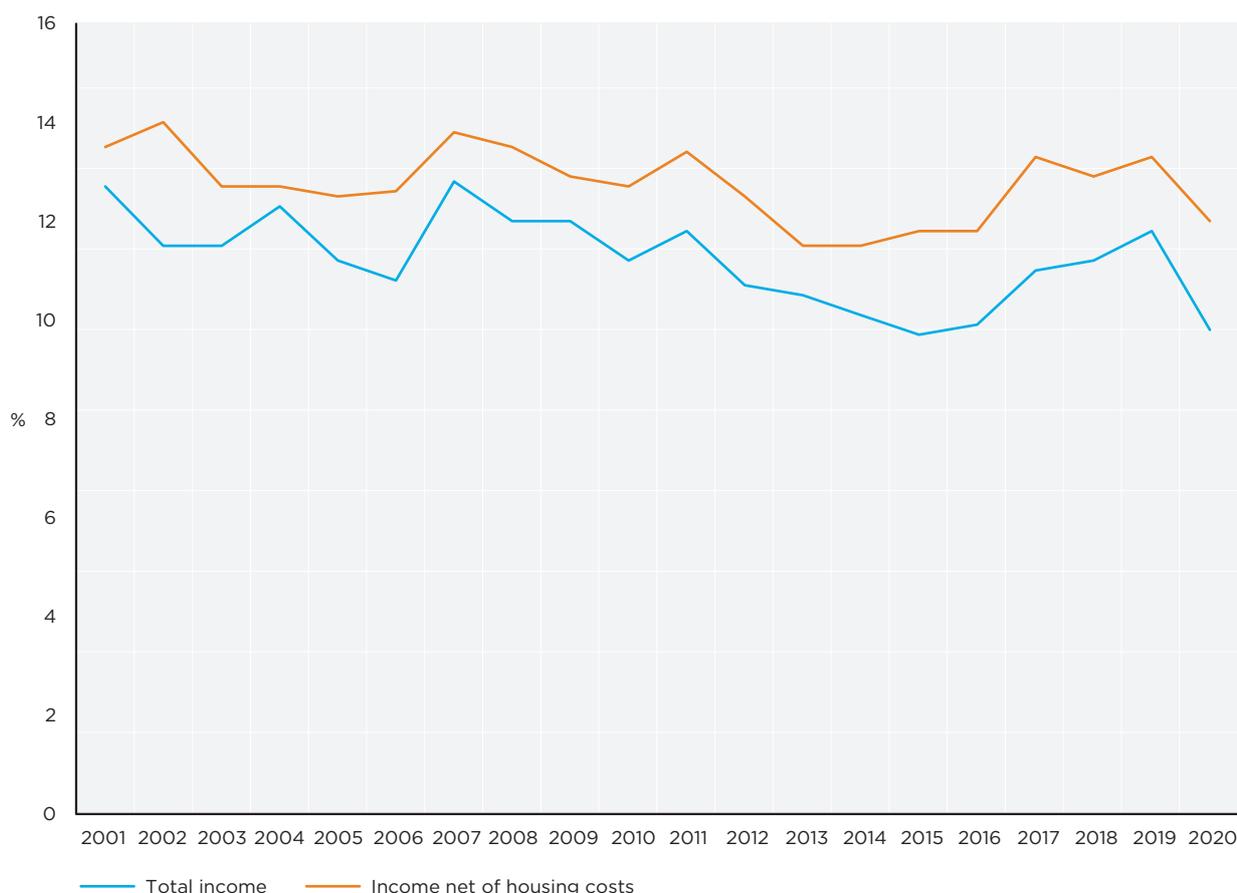


Table 3.8: Poverty lines for selected household types, 2001 and 2020 (\$, December 2020 prices)

	Total income		Income net of housing costs	
	2001	2020	2001	2020
Single person	\$19,455	\$26,967	\$16,518	\$22,471
Couple	\$29,183	\$40,451	\$24,777	\$33,707
Single parent with 2 children	\$31,128	\$43,147	\$26,429	\$35,954
Couple with 2 children	\$40,856	\$56,631	\$34,688	\$47,189

whether with or without dependent children, have consistently low poverty rates, which in the most recent years have been in the vicinity of 5% for total income and 7% for income after deducting housing costs.

Significantly, all family types other than single older men experienced a decline in the poverty rate in 2020.

Child poverty

Child poverty is a particular concern for policy-makers because of the damage poverty may cause to children's future

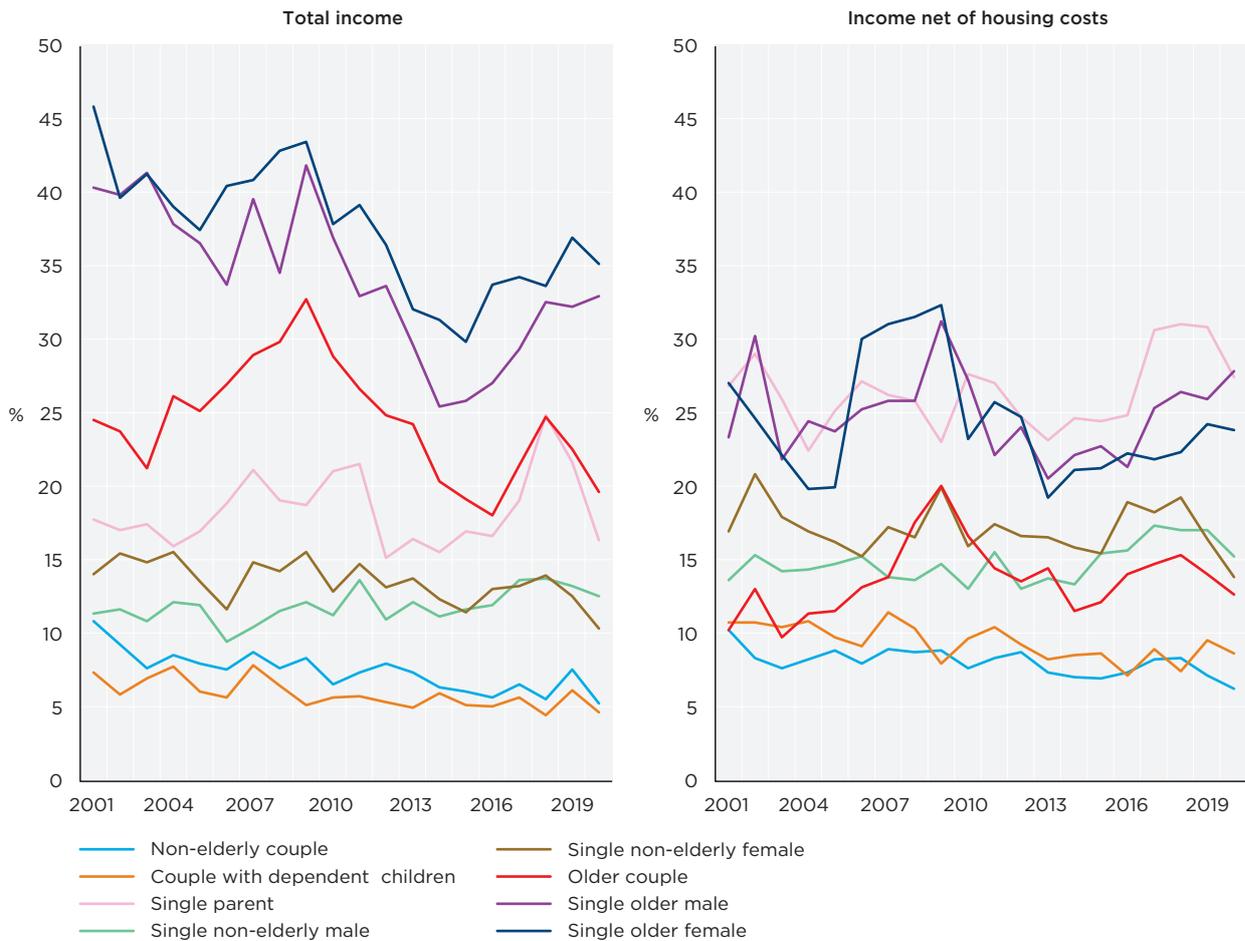
productive capacity and life prospects more generally. Figure 3.6 presents child relative poverty rates for dependent children aged under 18, in total and separately for children in couple-parent families and children in single-parent families.

The overall child poverty rate for total income is consistently below the community-wide poverty rate, in most years being below 10%, and in 2020 equal to 7.4%. 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 3.5, poverty is considerably more prevalent among children in single-parent families than among children in couple-parent families. In all years, the poverty rate for children in single-parent families is over twice the poverty rate for children in couple-parent families. Between 2016 and 2018, the poverty rate for children in single-parent families rose from 17.7% to 28.2% for total income and from 26.7% to 33.8% for income net of

Figure 3.5: Relative poverty rates by family type



housing costs. Since 2018, there has been a sizeable decline in poverty among children living in single-parent families, particularly for the measure based on total income.

Long-term poverty

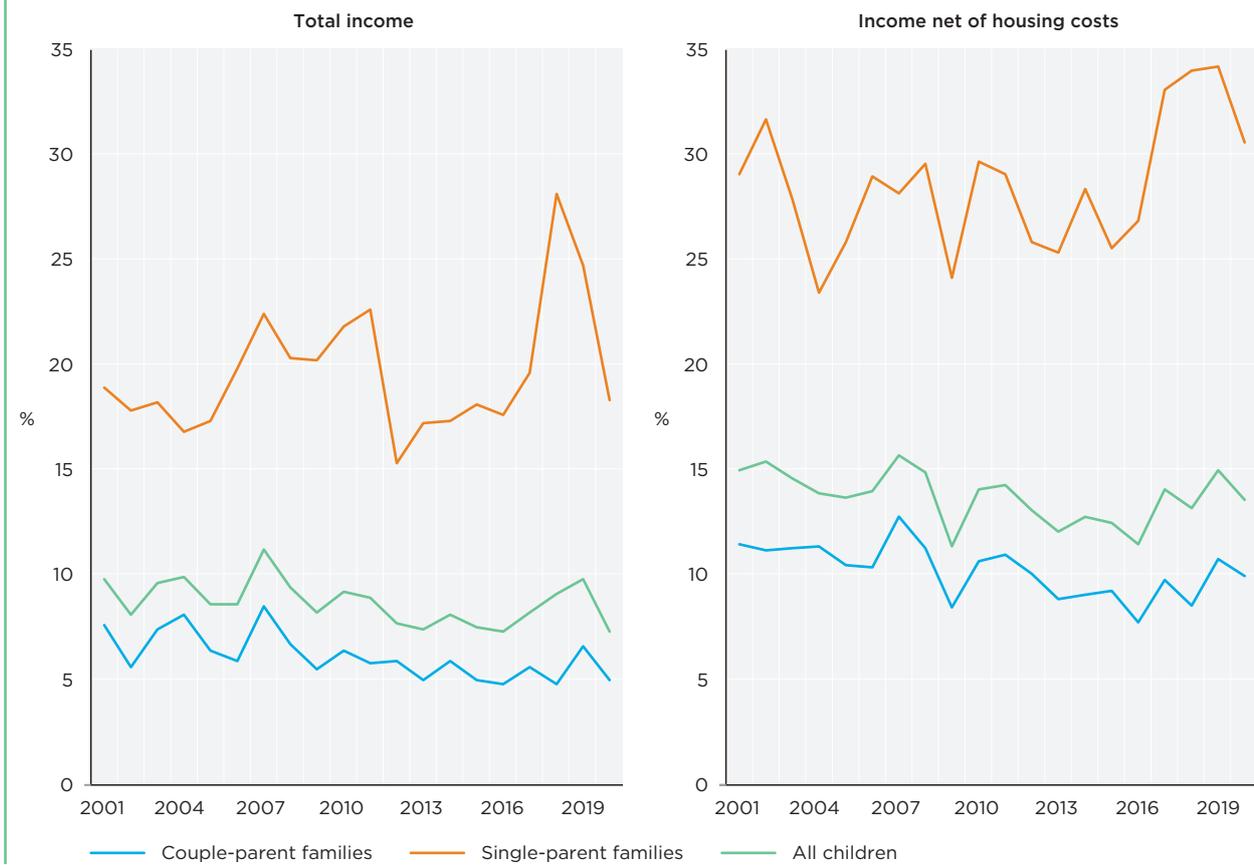
While poverty experienced for a short period of time is undesirable, there is a great deal more public policy concern attached to long-term or

entrenched poverty. Table 3.9 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 are examined, and separate estimates are produced for men and women in each of two age groups (aged 18 to 55 at the start of the period and aged 65 and over at the start of the period) and in each of two 10-year periods (2001 to 2010 and 2011 to 2020). The first age group broadly corresponds to people who were 'working-age' adults for the entire period (being 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.

Considering first the younger age group, for the poverty measure



Figure 3.6: Child poverty rates by family type—Dependent children aged under 18



based on total income, approximately 73% of men and 69% of women aged 18 to 55 in 2001 did not experience income poverty in that year or any of the subsequent nine years, necessarily implying that approximately 27% of men and 31% of women did experience poverty in at least one year. For approximately 17% of men and 19% of women, poverty was experienced in only one or two years, and a further 5.5% of men and 5.9% 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 6.4% of women who were in poverty in at least five of the 10 years.

Consistent with the downward trend in the rate of poverty over the HILDA Survey period as a whole (Figure 3.4), the 10 years from 2011 to 2020 saw slightly lower proportions of working-age

people experience poverty at any stage over the 10-year period.

For the measure of poverty based on income net of housing costs, higher proportions of both men and women of working age experience 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 2011 to 2020 period, the proportion of men and women experiencing poverty in seven or more years increased slightly for the net-of-housing-costs measure, whereas it remained unchanged (men) or decreased (women) 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



Table 3.9: 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	
<i>Persons aged 18-55 at the start of the 10-year period</i>						
<i>Total income</i>						
<i>2001-2010</i>						
Men	73.3	16.6	5.5	2.1	2.5	100.0
Women	68.6	19.1	5.9	3.5	2.9	100.0
<i>2011-2020</i>						
Men	72.8	15.7	6.0	3.0	2.5	100.0
Women	72.2	15.6	6.7	3.2	2.3	100.0
<i>Income net of housing costs</i>						
<i>2001-2010</i>						
Men	62.5	23.9	7.0	3.1	3.4	100.0
Women	57.6	25.9	8.0	4.7	3.8	100.0
<i>2011-2020</i>						
Men	62.0	24.0	7.3	3.0	3.7	100.0
Women	61.9	21.5	8.5	3.9	4.1	100.0
<i>Persons aged 65 and over at the start of the 10-year period</i>						
<i>Total income</i>						
<i>2001-2010</i>						
Men	29.1	24.7	13.9	9.8	22.5	100.0
Women	23.0	23.3	17.8	7.4	28.4	100.0
<i>2011-2020</i>						
Men	39.7	22.6	14.9	8.3	14.5	100.0
Women	29.3	23.6	14.1	11.9	21.1	100.0
<i>Income net of housing costs</i>						
<i>2001-2010</i>						
Men	42.6	31.2	8.8	9.4	8.1	100.0
Women	33.0	33.5	14.7	9.4	9.4	100.0
<i>2011-2020</i>						
Men	50.2	27.3	9.8	4.6	8.1	100.0
Women	42.8	32.9	8.8	3.5	12.0	100.0

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

income) in seven or more of the 10 years from 2001 to 2010 than it was to avoid poverty in all 10 years—28.4% were in poverty in seven or more years, whereas only 23.0% were never in poverty.

Similar to what is found for working-age people, older men are less likely to experience poverty, and less likely to experience entrenched poverty, than older women. The decline in experience of poverty between the 2001 to 2010 period and the 2011 to 2020 period evident for 'working-age' people is also

evident for older people.

Moreover, a substantial decline in entrenched poverty among older people is evident. The proportion experiencing poverty in seven or more years fell from 22.5% to 14.5% for men, and from 28.4% to 21.1% for women.

In contrast to working-age adults, the proportion of older people experiencing poverty at some stage of the 10-year period is lower for income net of housing costs than for total income. As with the total-income poverty measure, the proportion

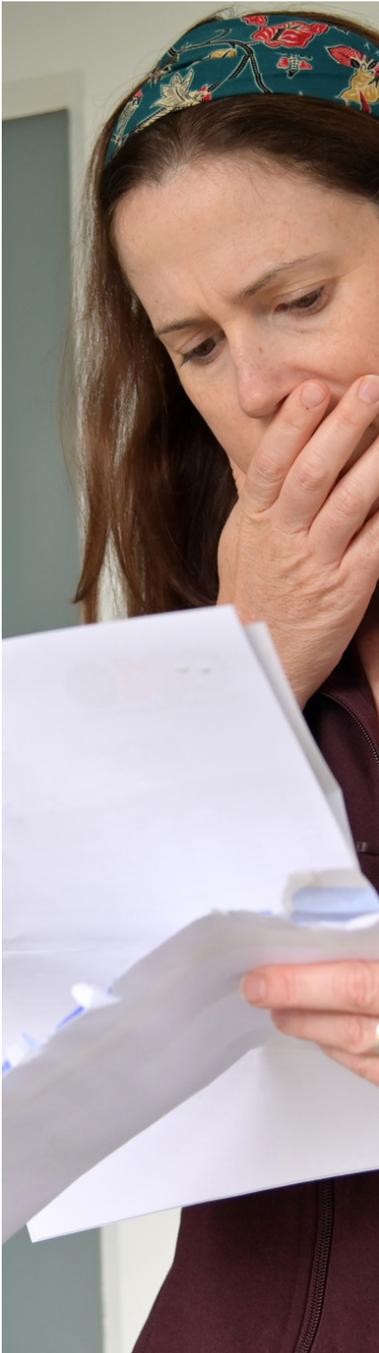
experiencing poverty over 10 years based on income net of housing costs was lower in the second decade. However, in contrast to the total-income poverty measure, the proportion of older women in poverty for seven or more of the 10 years based on income net of housing costs actually rose from 9.4% in the first decade to 12.0% in the second decade.

Long-term poverty experiences of children are considered in Table 3.10 by examining the number of years children were in

Table 3.10: 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	68.5	19.4	7.0	3.2	1.8	100.0
Born 1 July 2005 to 30 June 2010	72.4	17.4	4.9	2.7	2.5	100.0
<i>After-housing costs poverty measure</i>						
Born 1 July 2000 to 30 June 2005	50.7	28.0	8.9	7.0	5.4	100.0
Born 1 July 2005 to 30 June 2010	55.4	23.1	10.3	5.0	6.2	100.0

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



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 figure examines children born in the period from 1 July 2000 to 30 June 2010. Two birth cohorts are compared: those born between 1 July 2000 and 30 June 2005, and those born between 1 July 2005 and 30 June 2010.

The upper panel of the table, examining poverty based on total income, shows that 68.5% 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 72.4% for those born between 1 July 2005 and 30 June 2010. For the earlier cohort, 19.4% were in poverty for one or two years, 7.0% were in poverty for three or four years, 3.2% were in poverty for five or six years, and 1.8% were in poverty for seven or more of the 10 years. For the more recent cohort, there were lower proportions in poverty in one or two years, three or four years and five or six years, but a slightly higher proportion were in poverty in seven 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 poverty in the first 10 years of life for the more recent cohort.

Financial stress

While income approaches remain the most widely used basis for defining and measuring inadequacy in material living standards, other measures also potentially provide useful information on individuals’ economic wellbeing. Measures of ‘financial stress’ provide one such piece of supplemental 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 on 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 and going without meals, which facilitates the construction of measures of financial stress. (Box 3.9, page 51, itemises all seven events.)

Figure 3.7 shows the prevalence of each of these seven indicators of financial stress among people aged 15 and over between 2001 and 2020.² Inability to pay electricity, gas or telephone bills on time and asking for financial help from friends or family are

² Estimates are not available for 2010.

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 steadily decline, except that there was some rise in the proportion of people reporting selling something because of a shortage of money. It is possible that the rise of low-cost online platforms for selling possessions increased the attractiveness of this option as a response to a shortage of

Box 3.9: HILDA Survey measure of financial stress

In each wave, the self-completion questionnaire contains the following question:
Since January [survey year] did any of the following happen to you because of a shortage of money?

- Could not pay electricity, gas or telephone bills on time
- Could not pay the mortgage or rent on time
- Pawned or sold something
- Went without meals
- Was unable to heat home
- Asked for financial help from friends or family
- 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.

money. Between 2017 and 2019, there was a slight uptick in the prevalence of all indicators other than inability to pay electricity,

gas or telephone bills on time. Between 2019 and 2020, there was a significant drop in the proportion of people reporting

Figure 3.7: Proportion of people experiencing each indicator of financial stress

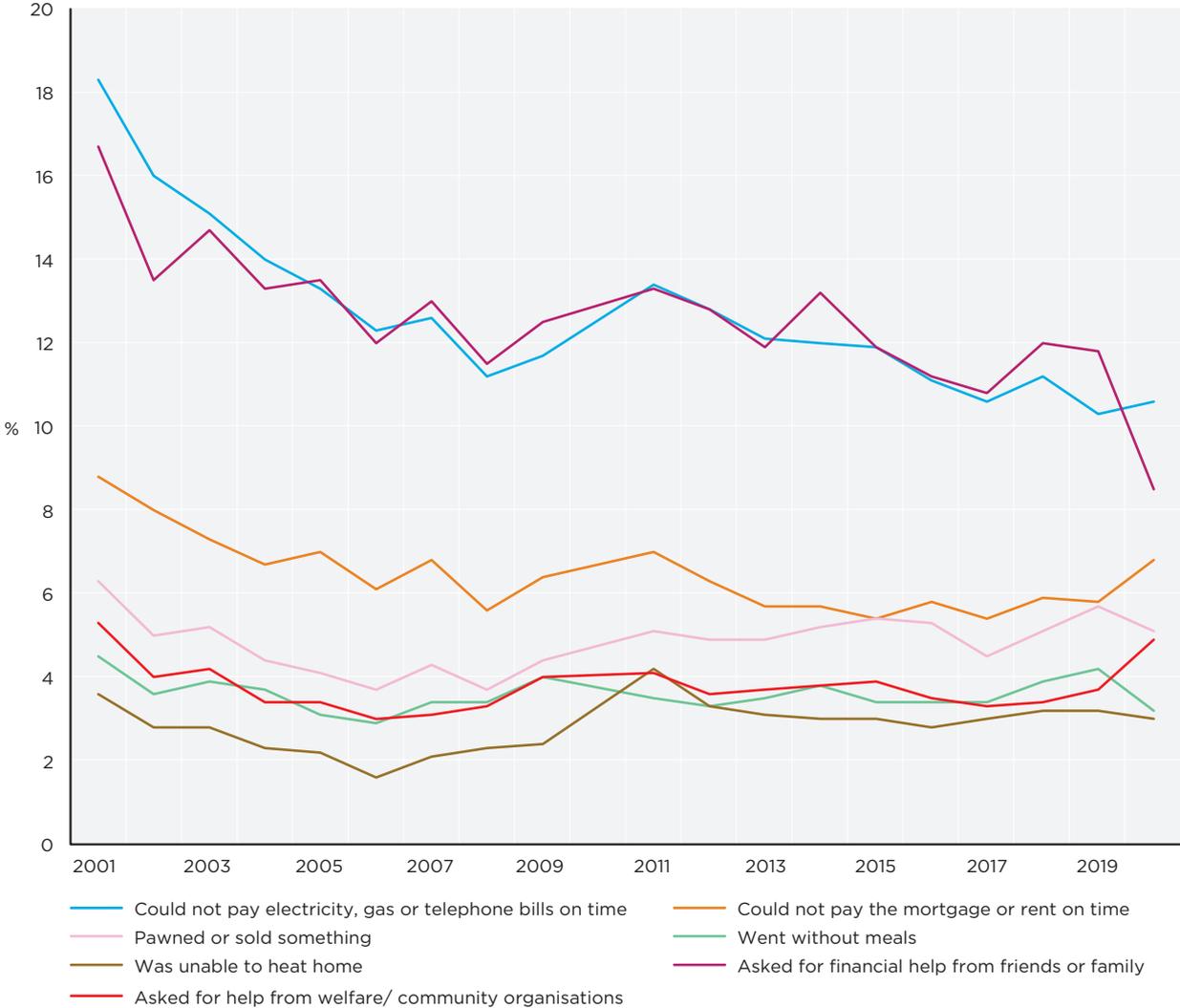
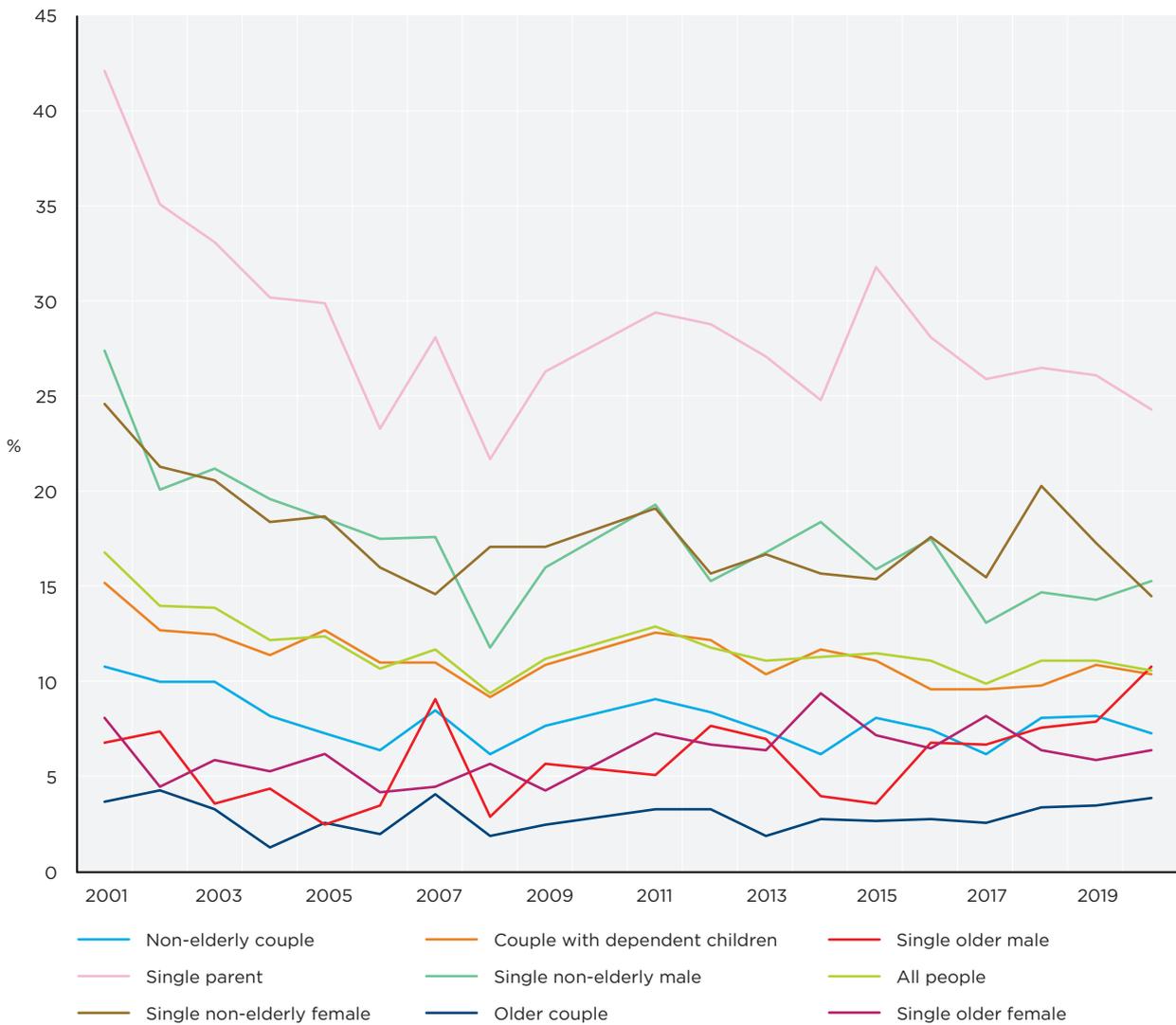


Figure 3.8: Proportion of people experiencing two or more indicators of financial stress, by family type



asking for financial help from friends or family, but sizeable upticks in the proportion asking for help from welfare or community organisations and the proportion unable to pay the mortgage or rent on time.

Figure 3.8 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 3.7. The figure presents estimates for all persons and for each of eight family types (see Box 3.4, page 36, for an explanation of the family types).

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, and thereafter remaining relatively stable. However, 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.

In a marked contrast to the findings on poverty rates, even when income net of housing costs is examined (Figure 3.5), the elderly have very low rates of financial stress. This likely reflects their relatively high wealth more broadly as opposed to just housing (see Wilkins et al., 2020),

as well as their lower expenditure needs (itself partly a reflection of government in-kind assistance and subsidies targeted to older people).

Food insecurity

A further 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 (see Box 3.10, page 53). 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.

Figure 3.9 presents the proportion of people aged 15 and over experiencing each of the eight events. Most commonly experienced was eating only a few kinds of foods, applying to 8.5% of people, followed by inability to eat healthy and nutritious food, applying to 7% of people. Least-commonly experienced was the household running out of food, applying to 2.9% of people. In total, 13.2% of the population aged 15 and over experienced at least one of the events.

The association between demographic characteristics and severity of food insecurity is investigated by estimating a regression model 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

Box 3.10: The Food Insecurity Experience Scale (FIES)

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-SM 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 Wave 20 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 zero to eight) will produce the same ranking of individuals' severity of food insecurity.

8 corresponding to the most severe level of food insecurity that can be identified by the questions.³

The estimation results are presented in Table 3.11. Comparing across family types, people in single-parent families have the highest food insecurity, followed by single non-elderly males and females. Food insecurity is lowest among older



Figure 3.9: 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 ...



³ 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.

Table 3.11: Association between demographic characteristics and severity of food insecurity, 2020

<i>Family type (Reference category: Non-elderly couple)</i>	
Couple with dependent children	<i>ns</i>
Single parent	0.384
Single non-elderly male	0.250
Single non-elderly female	0.277
Older couple	-0.288
Single older male	-0.255
Single older female	-0.357
<i>Number of dependent children</i>	
	<i>ns</i>
<i>Age of youngest dependent child (Reference category: No dependent children aged under 15)</i>	
Under 5	0.176
5-9	0.205
10-14	<i>ns</i>
Indigenous	0.223
<i>Educational attainment (Reference category: No post-school qualifications)</i>	
University degree	-0.108
Other post-school qualification	<i>ns</i>
Has a moderate or severe disability	0.329
In poor general health	0.271
In poor mental health	0.585
<i>Region of residence (Reference category: Major urban)</i>	
Other urban	<i>ns</i>
Other region	<i>ns</i>
<i>Quintile in the distribution of household equivalised income (Reference category: Middle quintile)</i>	
Bottom quintile	0.348
Second quintile	0.177
Fourth quintile	-0.070
Top quintile	-0.099
<i>Housing tenure type (Reference category: Owner outright)</i>	
Owner with mortgage	<i>ns</i>
Renter of private housing	0.311
Renter of social housing	0.529
Regular smoker	0.586
Regular drinker	<i>ns</i>

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

people. The presence of children aged under 10 is also associated with greater food insecurity.

Indigenous Australians have greater food insecurity, other characteristics held constant, while those with university qualifications have lower food

insecurity. Disability, poor general health and poor mental health (see Box 2.4, page 19, and Box 2.9, page 30) are all associated with greater food insecurity.

There are no significant differences by population density of region of residence, 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.

Renting, particularly of social housing, is associated with greater food insecurity. There is no evidence of an association between alcohol consumption and food insecurity, but being a regular smoker is associated with greater food insecurity.

Welfare reliance

Reliance on social security (welfare) payments remains a significant concern for policy-makers in Australia (see Box 3.11, page 55, for a brief explanation of the Australian social security system). It is associated with significant demands on government budgets and reduced economy-wide market output. Moreover, reliance on welfare is often associated with long-term poverty, social exclusion and other adverse outcomes for recipients and their children.

That said, the social security system provides an important 'safety net'. Indeed, it may be important in assisting people to 'bounce back' from adverse shocks, and could conceivably be beneficial to both economic output and the government budget over the longer term. In any case, it is clear that policy concern should be greatest for long-term or entrenched reliance on welfare.

The HILDA Survey is an important data source for understanding welfare reliance, 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.

Box 3.11: 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 (a consolidation of the previous Newstart Allowance and several other payments from 20 March 2020 on), 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. Studies of reliance on welfare 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.^a

^a 'Welfare' is a contested term, and many would argue that a much broader range of government expenditures than income support and non-income support payments should be classified as welfare benefits. However, the approach taken in this report is consistent with the approach taken by most Australian researchers on welfare reliance.

The HILDA Survey is therefore a key data source for policy-makers seeking to address long-term reliance.

Income support receipt and welfare reliance over a one-year time-frame

Figures 3.10 and 3.11 respectively present cross-sectional estimates of income support receipt and welfare reliance for 'working-age' people, defined here as people aged 18 to 64. In the financial

year ending 30 June 2020, 32.2% 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 at the beginning of the HILDA Survey in 2001, when the corresponding figure was 38.2%, but considerably up on 2019, when it was 29.0%. Most of the decline in household income support receipt up until 2019 was between 2002 and 2009 and between 2014 and 2018.

Figure 3.11 presents estimates of welfare reliance for two definitions of welfare reliance (as explained in Box 3.12, page 56): more than 50% of annual household income comes from welfare; and more than 90% of annual household income comes from welfare. As would be expected, the proportion of the population classified as welfare-reliant depends on whether the 50% or 90% threshold is employed. However, the two measures show similar trends, both declining between 2004 and 2008 and since remaining broadly unchanged. Interestingly, in 2020 there was an uptick in the proportion obtaining more than 90% of income from welfare, but no uptick in the proportion obtaining more than 50% of income from welfare.

Figure 3.12, examining family types (see Box 3.4, page 36), shows that welfare reliance among working-age people is very much associated with living in single-parent families. For each year from 2001 to 2020, the

Figure 3.10: Receipt of income support payments by persons aged 18-64

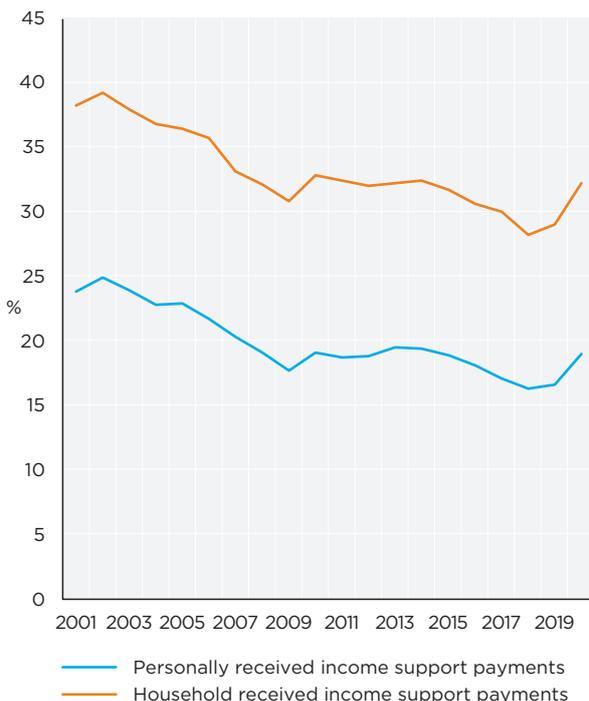
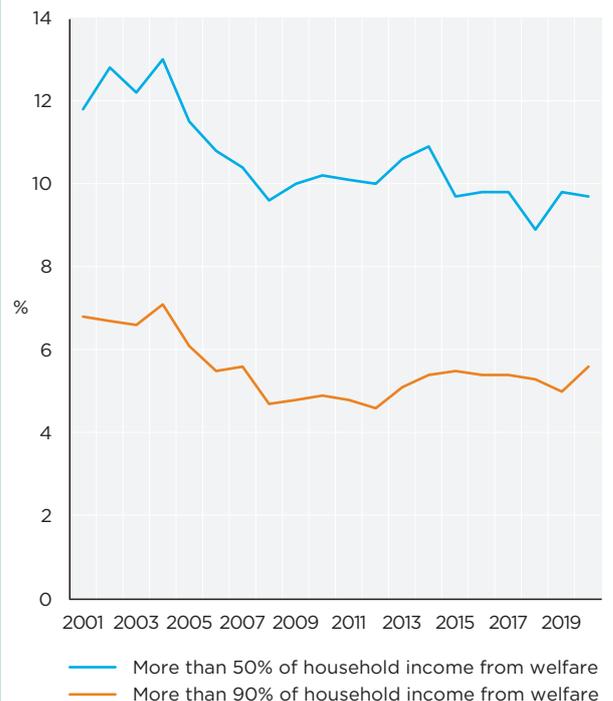


Figure 3.11: Reliance on welfare among persons aged 18-64





Box 3.12: Definitions of welfare reliance

Welfare reliance is usually conceived as a situation in which welfare 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 welfare 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.

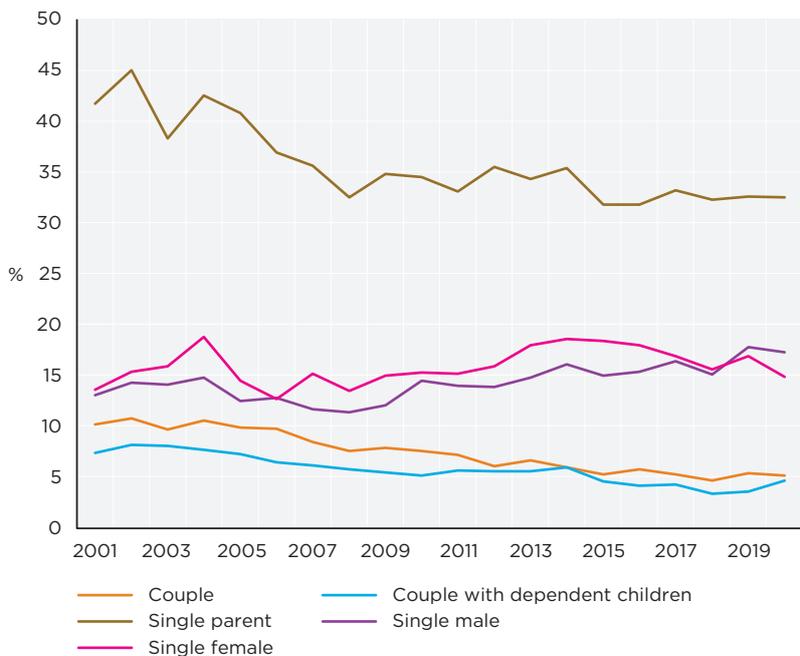
figure presents the proportion of individuals in each family type obtaining more than 50% of financial-year household income from welfare benefits. Single parents have considerably higher rates of welfare reliance than other family types, although there was some decline in single-parent welfare reliance between 2002 and 2008, falling from 45.0% to 32.5%. Since 2008, however, welfare reliance among single parents has remained essentially unchanged, and indeed was still 32.5% in 2020.

Individuals in couple families, with or without dependent children, have the lowest rates of welfare reliance, and have also exhibited

declines in welfare reliance over most of the two-decade period to 2020. Overall, the proportion of people who were welfare-reliant fell from 7.4 % in 2001 to 4.7% in 2020 for couples with dependent children, and from 10.2% in 2001 to 5.2% in 2020 for couples without dependent children. However, since 2018 there has been a slight increase in welfare reliance among couples with dependent children, rising from 3.4% to 4.7%.

Single men and women have welfare-reliance rates somewhat higher than couples, and have exhibited no trend decline in welfare reliance. Indeed, between 2008 and 2014, there was a

Figure 3.12: Welfare reliance of people aged 18 to 64 years, by family type



Note: A person is defined to be welfare-reliant if more than 50% of household annual income comes from welfare.

significant rise in welfare reliance among single people, rising from 13.5% to 18.6% for women and from 11.4% to 16.1% for men. Since 2014, there has been a slight trend decline in welfare reliance of single women, but a slight trend increase for men. In 2020, welfare reliance among single men was 17.3%, compared with 14.9% for single women. Overall, the gap between couples (with or without dependent children) and single people (without dependent children) has risen over the HILDA Survey period.

Table 3.12 considers further how the rate of income support receipt changed following the onset of the COVID-19 pandemic. Panel A presents the proportion of people aged 18 to 64 personally receiving an income support payment at the time of interview in 2019 and in 2020, disaggregated by region of residence. Panel B presents the proportion of people aged 18 to 64 living in a household in which at least one household member was receiving an income support payment at the time of interview, again for 2019 and 2020 and disaggregated by region.

In the country as a whole, the rate of personal income support receipt at the time of interview increased from 14.8% in 2019 to 18.5% in 2020, while the rate of household receipt increased from 27.2% to 32.4%. There is considerable variation across the 13 regions distinguished in Table 3.11 in both the rate of receipt and the change in receipt. In 2019, receipt was lowest in the territories, followed by the mainland capital cities. However, the territories experienced the greatest growth in both personal and household income support receipt. For example, household receipt increased by 11.6 percentage points in the Northern Territory and by 13.3 percentage points in the Australian Capital Territory, compared with 5.2 percentage points for the whole of Australia. Greater Melbourne had the next highest increases in income support receipt, with personal receipt increasing by 5.0 percentage points and household receipt increasing by 8.0 percentage points. Income support receipt was relatively unchanged in Tasmania and regional Western Australia.



Table 3.12: Current receipt of income support in 2019 and 2020, by region of residence—Persons aged 18 to 64 (%)

	<i>Panel A: Personal receipt</i>			<i>Panel B: Household receipt</i>		
	<i>2019</i>	<i>2020</i>	<i>Change</i>	<i>2019</i>	<i>2020</i>	<i>Change</i>
Greater Sydney	11.9	14.6	2.7	27.7	31.7	4.0
Rest of New South Wales	20.0	23.5	3.5	30.0	36.8	6.8
Greater Melbourne	11.8	16.8	5.0	25.3	33.3	8.0
Rest of Victoria	20.5	24.0	3.5	30.0	34.9	4.9
Greater Brisbane	12.7	16.0	3.3	25.0	29.2	4.2
Rest of Queensland	20.4	22.6	2.2	33.7	34.3	0.6
Greater Adelaide	18.3	21.9	3.6	29.0	33.4	4.4
Rest of South Australia	23.1	27.1	4.0	29.0	33.5	4.5
Greater Perth	13.6	18.4	4.8	23.5	28.9	5.4
Rest of Western Australia	19.1	19.8	0.7	28.2	31.9	3.7
Tasmania	21.9	22.4	0.5	32.2	30.8	-1.4
Northern Territory	2.2	8.7	6.5	6.7	18.3	11.6
Australian Capital Territory	6.4	11.6	5.2	11.5	24.8	13.3
Australia	14.8	18.5	3.7	27.2	32.4	5.2

Note: Current receipt refers to receipt of income support at the time the respondent was interviewed.

Income support receipt and welfare reliance 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 3.13 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 gender and age group and, as in the analysis

of poverty presented in Table 3.9, two 10-year periods are examined: 2001 to 2010 and 2011 to 2020.

The bottom-right cell of the top panel of the table shows that 64.5% 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, 40.9% 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 3.10), this indicates that the income support system was indeed providing temporary rather than long-term support for most recipients, and was potentially playing a very important safety-net role. Contact with the income support system was lower over the 10 years from 2011 to 2020

(lower panel of Table 3.13), but still substantial, with 57.7% having household contact and 35.0% having personal contact.

Rates of household contact with the income support system are high across all age groups. For both men and women, in all age groups, and in both the 2001 to 2010 and 2011 to 2020 periods, household contact with the income support system is approximately 50% or higher.

Personal contact with the income support system varies more by gender, age group and indeed 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 26.8% of the 25 to 34 age group to 36.1% of the 45 to 55 age group. In the 2011 to 2020 period,

Table 3.13: Income support receipt over 10 years, by gender 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					
<i>Men</i>					
Personal receipt	48.3	26.8	29.4	36.1	33.4
Household receipt	78.2	58.3	61.1	61.1	62.9
<i>Women</i>					
Personal receipt	61.1	51.0	46.6	41.7	48.3
Household receipt	75.1	61.0	64.4	67.9	66.0
<i>People</i>					
Personal receipt	54.5	38.7	38.2	39.0	40.9
Household receipt	76.7	59.7	62.8	64.6	64.5
2011–2020					
<i>Men</i>					
Personal receipt	47.0	22.8	25.4	28.6	29.5
Household receipt	69.7	49.1	48.2	57.4	55.0
<i>Women</i>					
Personal receipt	59.2	39.3	35.8	35.0	40.2
Household receipt	75.2	52.8	53.1	66.1	60.3
<i>People</i>					
Personal receipt	52.9	31.3	30.8	31.9	35.0
Household receipt	72.3	51.0	50.8	61.9	57.7

Table 3.14: Welfare benefit receipt over 10 years—People aged 18 to 55 at the beginning of the 10-year period (%)

	2001–2010		2011–2020	
	Men	Women	Men	Women
<i>Number of years of household income support receipt</i>				
0	37.1	33.9	45.1	39.7
1–3	32.2	29.1	25.4	27.6
4–6	13.2	14.5	11.3	11.6
7–9	8.4	11.2	6.8	9.4
10	9.1	11.3	11.4	11.7
Total	100.0	100.0	100.0	100.0
Mean proportion of household income from welfare benefits—All persons	11.4	15.1	10.7	13.1
Proportion obtaining more than 50% of 10-year household income from welfare benefits	6.7	10.4	6.4	8.9

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

rates of personal contact show a similar pattern by age.

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 likely to be at least partly due to women being a high proportion of single parents. That said, the gap between men and women in the 25 to 44 age range was considerably smaller in the 2011 to 2020 period than in the earlier 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 3.14. 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 63.0% of women had contact with the system in three or fewer of the 10 years, while over the 2011 to 2020 period, 70.5% of men and 67.3% of women had contact with the system in three or fewer of the 10 years.

The bottom panel of Table 3.14 examines the extent of welfare reliance over a 10-year period, presenting the mean proportion of household income deriving from welfare over the 10 years for all people and the proportion of the population who were reliant on welfare over the 10-year

period as a whole (defined as obtaining more than 50% of household income over the 10 years from welfare). On average, working-age men derived 11.4% of household income from welfare payments between 2001 and 2010, while working-age women on average derived 15.1% of household income from welfare. These figures dropped to 10.7% and 13.1%, respectively, in the 2011 to 2020 period. Comparing the same two 10-year periods, the proportion who were welfare-reliant over the 10-year period as a whole fell from 10.4% to 8.9% for women, and from 6.7% to 6.4% for men.

Income support receipt among people aged 65 and over

While many people continue to work in paid employment beyond 65 years of age (and the Age Pension age is gradually



increasing to 67 by 1 July 2023), as shown in Figure 3.13, most people aged 65 and over are retired. We would correspondingly expect welfare reliance to be relatively high among this age group. Indeed, income support for people aged 65 and over primarily comprises the Age Pension, the payment designed to support people in retirement.

Figures 3.13 and 3.14 show that income support receipt and welfare reliance is, as expected, considerably higher among people aged 65 and over than among people aged 18 to 64 (Figures 3.10 and 3.11). For example, the proportion of people aged 65 and over obtaining more than half of household income from welfare is greater than 45% across the entire 2001 to 2020 period, compared with less than 15% of people aged 18 to 64. There has, however, been a decline in income support receipt, particularly since 2014, while welfare reliance has also declined.



In 2003, 59.1% of older people relied on welfare for more than 50% of their income, and 34.8% relied on welfare for more than 90% of their income; by 2020, these figures had respectively fallen to 47.5% and 27.9%. Increased reliance on superannuation is likely to be an important contributor to this decline.

Figure 3.15 examines welfare reliance among older people disaggregated into four age groups. Welfare reliance tends to be more prevalent in older age groups, although between 2004 and 2010 it was higher for the 75 to 79 age group than for the 80 and over age group. Reliance decreased for the three youngest age groups between 2001 and 2020. For the 80 and over age group, there has been a net increase in the proportion reliant on welfare over the period as a whole from 63.1% to 68.1%, although there was a decline between 2003 and 2007.

Figure 3.13: Rates of retirement and personal income support receipt of persons aged 65 and over

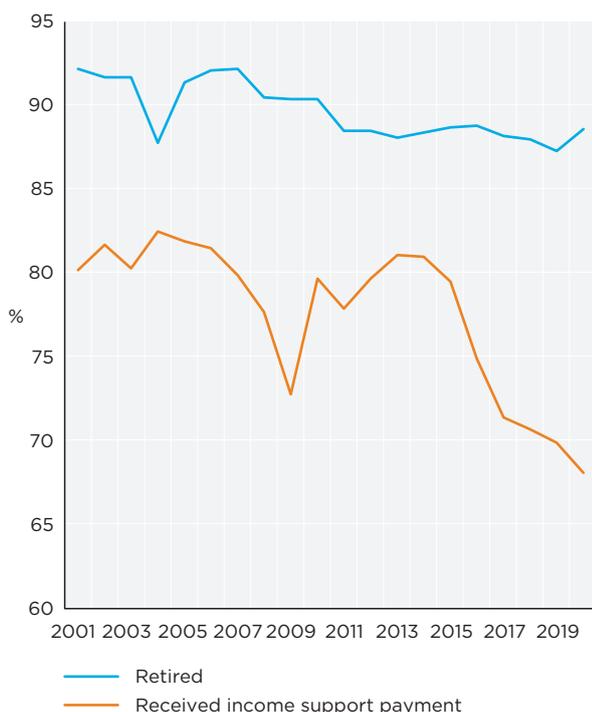


Figure 3.14: Reliance on welfare among persons aged 65 and over

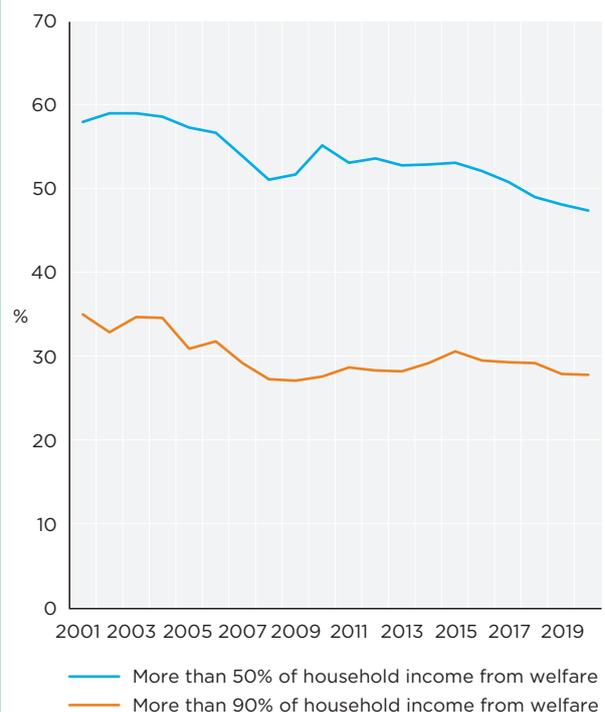
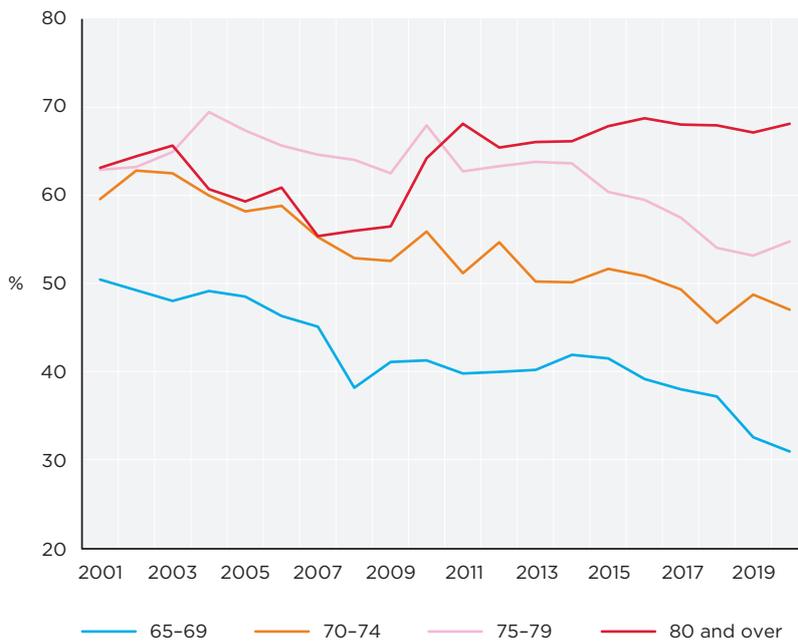


Figure 3.15: Reliance on welfare among persons aged 65 and over, by age group



Notes: A person is defined to be welfare-reliant if more than 50% of household annual income comes from welfare. Age groups are based on age at the beginning of the financial year.

Household expenditure

The HILDA Survey has, from its inception, collected information on household expenditure. Most of the information is collected in the self-completion questionnaire. The items measured in the HILDA Survey 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 and renovations;

rent on primary residence; and mortgage repayments.

As long as this list is, the HILDA Survey does not attempt to measure all components of household expenditure, and therefore does not provide a comprehensive picture of household expenditure decisions. Expenditures on entertainment and sport, council rates, 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.⁴

These limitations notwithstanding, it is likely the household expenditure data collected by the HILDA Survey

can provide insights into economic circumstances and behaviour. In particular, we can consider how expenditure on those items measured changed in 2020 with the onset of the COVID-19 pandemic.

Table 3.15 presents mean household expenditure on each of 21 expenditure items in 2019 and 2020, for Australia as a whole. On the basis that the lockdowns in place in Victoria around the time of the Wave-20 interviews were taking place would have impacted on expenditure, the table also presents mean expenditure in 2019 and 2020 for Victoria versus the rest of Australia.

Unsurprisingly, mean expenditure on groceries increased between 2019 and 2020, while expenditure on meals eaten out decreased, particularly (but not only) in Victoria. Strikingly, expenditure on alcohol increased by approximately 8% across the country, while expenditure on tobacco rose by 18.1% in Victoria and 14.8% in the rest of Australia.

Expenditure on public transport and taxis decreased by 25.5% nationwide, again with the drop considerably larger in Victoria (38.2%) than in the rest of Australia (20.5%). Expenditure on petrol, clothing, private health insurance, medical practitioner fees, medicines, home repairs and renovations, motor vehicle repairs and maintenance, education fees, rent and mortgage repayments also decreased nationally. In almost all cases, the declines were greater in Victoria than in the rest of Australia. Also notable is that, despite people spending more time at home, mean expenditure on home energy

4 Expenditure on infrequently purchased items, such as motor vehicles, holidays and consumer durables, is not amenable to accurate measurement via an annual self-completion questionnaire. 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 Household Expenditure Survey. Expenditure on entertainment was also found to be under-reported. In 2022, the HILDA Survey began collecting expenditure on council rates and owners' corporation/body corporate fees.

Table 3.15: Mean household expenditure on various items, 2019 and 2020 (\$, December 2020 prices)

	Australia			Victoria			Rest of Australia		
	2019	2020	Change (%)	2019	2020	Change (%)	2019	2020	Change (%)
Groceries	9,918	10,394	4.8	10,151	10,634	4.8	9,836	10,310	4.8
Alcohol	1,544	1,667	8.0	1,528	1,657	8.4	1,550	1,670	7.7
Tobacco products	911	1,053	15.6	900	1,063	18.1	915	1,050	14.8
Public transport, taxis and ride-sharing services	683	509	-25.5	740	457	-38.2	663	527	-20.5
Meals eaten out	3,517	3,182	-9.5	3,733	3,045	-18.4	3,441	3,231	-6.1
Motor vehicle fuel	2,212	1,959	-11.4	2,301	1,968	-14.5	2,181	1,956	-10.3
Men's clothing and footwear	518	497	-4.1	561	522	-7.0	503	488	-3.0
Women's clothing and footwear	801	771	-3.7	866	829	-4.3	778	751	-3.5
Children's clothing and footwear	367	345	-6.0	380	366	-3.7	362	338	-6.6
Telephone and internet charges	2,156	2,108	-2.2	2,375	2,401	1.1	2,078	2,005	-3.5
Private health insurance	1,567	1,494	-4.7	1,641	1,566	-4.6	1,541	1,469	-4.7
Other insurance	1,774	1,758	-0.9	1,781	1,773	-0.4	1,772	1,753	-1.1
Fees paid to health practitioners	928	847	-8.7	1,046	906	-13.4	886	827	-6.7
Medicines	471	454	-3.6	479	454	-5.2	468	454	-3.0
Electricity, gas and other heating fuels	1,771	1,737	-1.9	2,132	2,064	-3.2	1,643	1,622	-1.3
Home repairs, renovations and maintenance	3,003	2,820	-6.1	3,531	2,805	-20.6	2,817	2,826	0.3
Motor vehicle repairs and maintenance	980	934	-4.7	1,088	945	-13.1	942	930	-1.3
Education fees	1,711	1,523	-11.0	2,056	1,740	-15.4	1,588	1,446	-8.9
Home rent	5,905	5,747	-2.7	5,475	5,367	-2.0	6,056	5,881	-2.9
Home mortgage repayments	9,572	9,382	-2.0	9,496	9,079	-4.4	9,599	9,488	-1.2
Child care	662	680	2.7	782	766	-2.0	620	650	4.8
All expenditure items	50,971	49,861	-2.2	53,042	50,407	-5.0	50,239	49,672	-1.1

declined between 2019 and 2020. This is likely to reflect price decreases rather than decreases in home energy consumption.

Mean expenditure moved in opposite directions for Victoria and the rest of Australia for two expenditure items. Expenditure on telephone and internet charges declined nationally, but in

Victoria actually rose by 1.1%, almost certainly reflecting the effects of lockdowns. Also likely reflecting the effects of lockdowns, mean expenditure on child care declined in Victoria by 2.0%, in contrast to the 4.8% rise in mean child care expenditure in the rest of the country.

Overall, mean total expenditure measured by the HILDA Survey

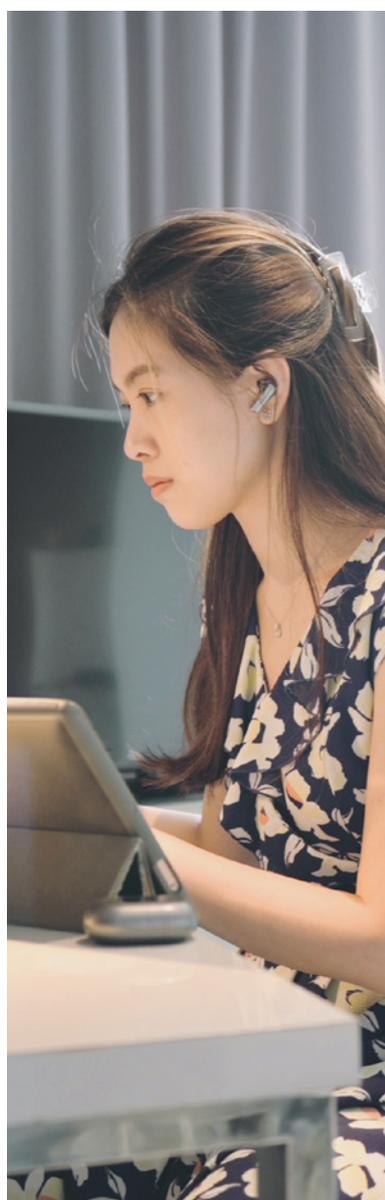
decreased by 5.0% in Victoria and 1.1% in the rest of Australia.

Table 3.16 considers how changes between 2019 and 2020 in mean total expenditure on the items measured by the HILDA Survey differed by household type (see Box 2.3, page 8). Across the country as a whole, expenditure decreased most for couples with

Table 3.16: Mean household expenditure on items measured by the HILDA Survey in 2019 and 2020, by household type

	Australia			Victoria			Rest of Australia		
	2019	2020	Change (%)	2019	2020	Change (%)	2019	2020	Change (%)
Non-elderly couple	51,431	51,445	0.0	51,371	50,115	-2.4	51,449	51,878	0.8
Couple with children	74,279	70,948	-4.5	78,126	70,983	-9.1	72,799	70,934	-2.6
Single parent	43,162	43,088	-0.2	44,920	43,191	-3.8	42,598	43,055	1.1
Single person	36,624	35,040	-4.3	37,106	35,457	-4.4	36,442	34,896	-4.2
Older couple	33,761	33,221	-1.6	33,941	32,889	-3.1	33,697	33,335	-1.1
Older single person	22,685	23,139	2.0	22,633	21,790	-3.7	22,702	23,579	3.9
Other household type	46,432	48,003	3.4	45,155	49,911	10.5	46,934	47,268	0.7

children, followed by single-person households. The decline in mean expenditure for couples with children was, at 9.1%, particularly large in Victoria. Indeed, in the rest of Australia, the decline for these households (2.6%) was less than the decline for single-person households (4.2%). Aside from 'other' (largely group) households, all household types experienced a decrease in average household expenditure in Victoria. In the rest of Australia, the only household types to experience a decline in mean expenditure were couples with children, single persons and older couples.



Financial literacy

Financial literacy is defined by the OECD International Network on Financial Education (2011, p.3) as:

A combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve financial wellbeing.

Despite rising levels of income and wealth in the Australian community, the issue of financial literacy remains highly relevant, with many policy-makers in the wake of the 2008 Global Financial Crisis bemoaning the widespread lack of financial knowledge. US research, for example, has consistently shown that levels of basic financial skills are very poor among sizeable fractions of the population, and that this has ramifications for a wide range of economic decisions (Lusardi and Mitchell, 2014).

In Wave 16, the HILDA Survey included measures of basic financial literacy using an approach pioneered by Lusardi and Mitchell (2014). Five questions, respectively covering

numeracy, inflation, portfolio diversification, risk versus return, and money illusion, were administered in the interview component (see Box 3.13, page 63). In 2020, these questions were re-administered.

Financial literacy of the Australian population

Table 3.17 presents the mean score on the five financial literacy questions disaggregated by gender and age group, where an individual's score potentially ranges from 0 (no correct answers) to 5 (all five questions answered correctly).

As noted in Wilkins and Lass (2018), there is a considerable gender gap in financial literacy. In 2020, the mean score of males was 4.0 and the mean score of females was 3.5. Indeed, the gender gap has widened since 2016, when the difference in mean scores was 0.4. Substantial differences across age groups are also evident. Financial literacy is lowest among individuals aged 15 to 24 and, on average, increases with age up to the 45 to 54 age group. The 55 to 64 age group has a similar level of financial literacy to the 45 to 54 age

Box 3.13: 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 and 20:

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'. (True or false?) [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'. (True or false?) [Correct answer: True]
5. [Money illusion] Suppose that by the year 2020 your income has doubled, but the prices of all of the things you buy have also doubled. In 2020, 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. Note that in Wave 20 the question asked about income and prices doubling by 2024.]

An overall measure of financial literacy can be calculated as simply the sum of correct answers to these five questions.

Table 3.17: Mean score on financial literacy test, 2016 and 2020
—Persons aged 15 and over

	2016	2020
<i>Gender</i>		
Males	4.1	4.0
Females	3.7	3.5
<i>Age group</i>		
15-24	3.4	2.9
25-34	3.9	3.6
35-44	4.1	4.0
45-54	4.2	4.1
55-64	4.2	4.1
65 and over	3.8	3.7

group, while the 65 and over group, on average, has a level of measured financial literacy similar to that of the 25 to 34 age group.

Concerningly, overall there has been a slight decline in financial literacy as measured by the HILDA Survey between 2016 and 2020. The mean score of males fell from 4.1 to 4.0 and the mean score of females fell from 3.7 to 3.5. Comparing across age groups, a decline is evident for all age groups, but is largest for the 15 to 24 age group, followed by the 25 to 34 age group. As a consequence, the 'age gradient' in financial literacy has steepened.

The association between financial literacy and demographic characteristics and other factors is explored in Table 3.18, which presents estimates from regression models of the number of correct responses to the five financial literacy questions.

The table shows that there are large differences across demographic groups. The differences by gender and age group found in Table 3.17 are broadly robust to controlling for other factors, with the exceptions that the 65 and over age group is similar to the 55 to 64 age group once other factors are held constant, and the 55 to 64 group has somewhat higher financial literacy than the 45 to 54 age group holding other factors

constant. Immigrants from countries other than the main English-speaking countries (CALD immigrants; see Box 2.5, page 20) and Indigenous Australians have considerably lower scores on the financial literacy questions, other factors held constant, although language and cultural factors may partly explain this.

Partnered people have higher measured financial literacy, all else being equal. University

education is strongly associated with financial literacy, while those who have not completed high school have the lowest levels of financial literacy, other factors held constant. People with non-university post-school qualifications have similar levels of financial literacy to those who have completed high school.

There is no evidence of an association between region of residence and financial literacy, while the full-time employed have higher literacy than the part-time employed and non-employed. Both higher household income (see Box 3.2, page 34) and higher household wealth (see Box 3.14, page 64) are associated with greater financial literacy, while government income support receipt is also associated with lower financial literacy. Note that this finding does not necessarily mean poor economic outcomes are *causing* low financial literacy. Low financial literacy could in fact be a cause of poor economic outcomes, although most of the

Box 3.14: Measurement of household wealth in the HILDA Survey

The HILDA Survey obtains a measure of household wealth by asking a detailed set of questions on most financial assets, non-financial assets and debts. Total wealth—or net wealth—is equal to total financial and non-financial assets of all members of the household, minus total debts of all members of the household.

The questions employed to measure wealth have remained very similar across the five waves that have specifically collected wealth data, ensuring a high degree of comparability of wealth estimates. In all five waves, the following financial asset components were measured: bank accounts; superannuation; cash investments; equity investments (shares); trust funds; and the cash-in value of life insurance policies. In respect of non-financial assets, wealth data were sought for: the home; other property; business assets; collectables; and vehicles. In Wave 2, the debt components measured comprised: home debt; other property debt; unpaid credit card debt; HECS debt; other personal debt (including car loans, investment loans, hire purchase agreements and loans from friends or relatives not living in the household); and business debt. Very similar information on debts was collected in 2006, 2010, 2014 and 2018, but in these four waves, the value of overdue household bills was also collected, and 'other personal debt' was disaggregated into six components: car loans; hire-purchase loans or agreements; investment loans; other personal loans from financial institutions; loans from other types of lenders such as solicitors, pawn brokers and welfare agencies; and loans from friends and relatives not living in the household.

The only significant component omitted from the HILDA Survey measure of household wealth is 'dwelling contents' (other than collectables), such as furniture and appliances. Estimates from the Australian Bureau of Statistics (ABS) Survey of Income and Housing presented in ABS (2019) indicate that the mean value of household contents, including collectables, was \$70,512 in 2017-18 (at December 2018 prices). The mean value of collectables in Wave 18 of the HILDA Survey was \$4,189, implying dwelling contents not measured by the HILDA Survey in 2018 averaged \$66,323 across all households. However, measuring the value of household contents is inherently difficult and it is not clear how much store should be placed in the ABS estimates.

association between financial literacy and economic outcomes is likely to be caused by other factors (not included in the models estimated in Table 3.12) that determine them both. For example, growing up in a disadvantaged community could lead to both low financial literacy and poor economic outcomes.

Finally, and perhaps most importantly, financial literacy was significantly lower (0.35 lower) in 2020 than in 2016, holding all else constant. Those who answered the questions in 2016 did on average do (0.2) better than those who did not, holding all else constant, but even for these individuals there was a net decline in financial literacy of approximately 0.15 on average. One potential explanation for the decline is that most respondents in 2020 were interviewed by telephone due to the pandemic, which may have negatively impacted scores. However, a control for telephone interview was included in the model and did not have a statistically significant impact on the financial literacy score. The unavoidable conclusion is that no progress has been made on improving the financial literacy of the Australian population since 2016, and in fact we have gone backwards.



Table 3.18: Association between demographic characteristics and financial literacy score

Male	0.456
<i>Age group (Reference category: 35–44)</i>	
15–17	–0.633
18–24	–0.560
25–34	–0.218
45–54	0.084
55–64	0.157
65 and over	0.145
<i>Country of birth and Indigenous status (Reference category: Non-Indigenous Australian-born)</i>	
Born in one of the main English-speaking countries	0.070
Born in other country	–0.509
Indigenous	–0.415
Partnered	0.121
Have dependent children	<i>ns</i>
<i>Educational attainment (Reference category: Less than high-school completion)</i>	
University degree	0.853
Other post-school qualification	0.411
Completed high school	0.481
<i>Region of residence (Reference category: Major urban)</i>	
Other urban	<i>ns</i>
Other region	<i>ns</i>
<i>Labour force status (Reference category: Not in the labour force)</i>	
Employed full-time	0.104
Employed part-time	<i>ns</i>
Unemployed	<i>ns</i>
<i>Quintile in the distribution of household equivalised income (Reference category: Bottom quintile)</i>	
Second quintile	0.064
Middle quintile	0.150
Fourth quintile	0.191
Top quintile	0.234
<i>Quintile in the distribution of household wealth (Reference category: Bottom quintile)</i>	
Second quintile	0.166
Middle quintile	0.197
Fourth quintile	0.313
Top quintile	0.434
Currently receiving income support	–0.196
Year is 2020	–0.353
Year is 2020 and completed test in 2016	0.205
Interviewed by telephone	<i>ns</i>
Constant	3.008
Number of observations	32,872

Notes: The table presents coefficient estimates from regression models of the number of correct responses to the five financial literacy questions. *ns* indicates the estimate is not significantly different from 0 at the 10% level. Household wealth is measured two years prior to measurement of financial literacy (i.e., in 2014 and 2018).

4

The labour market

Roger Wilkins

A major focus of the HILDA Survey is the labour market activity of household members. In each wave, detailed information is obtained from respondents to ascertain their labour force status, earnings, hours worked, type of work undertaken, employer characteristics and a host of other work-related aspects. Perceptions and attitudes on a range of labour market issues, such as preferred hours of work, satisfaction with the current main job and likelihood of retaining the current job, are also collected every year. Periodically, additional information is gathered on retirement intentions, attitudes to work, work-related training and experience of job-related discrimination.

Such an emphasis on the labour market reflects the pivotal role employment plays in determining economic and social wellbeing. Not only is it the key determinant of the majority of households' incomes, it is key to participation in society, both economically and socially. Understanding individuals' labour market outcomes, and the causes and consequences of those outcomes, is correspondingly core to the purpose of the HILDA Survey.

In this chapter, labour force status and earnings levels and dynamics are examined, before turning to how job separations and perceptions of job security have evolved over time and, in particular, have been affected by the onset of the COVID-19 pandemic. Reported labour market impacts of COVID are also considered, and an analysis of who received JobKeeper is presented. Finally, data from new questions introduced in 2020 on digital platform work, often referred to as the 'gig economy', are analysed.

Note also that Chapter 5 considers additional labour market impacts of COVID-19 in 2020 as part of a broader analysis of COVID's impact, while in Chapter 7 Mark Wooden and Trong-Anh Trinh examine working from home and how this was impacted by the pandemic in 2020.

Labour force status

Standard statistical summaries of the labour force, such as those produced by the Australian Bureau of Statistics (ABS) in its monthly labour force statistics, divide the population aged 15 and over into 'employed', 'unemployed' and 'not in the labour force' (see Box 4.1, page 67). The HILDA Survey collects information from respondents each year enabling classification of all respondents into one of these three categories. This allows us to produce cross-sectional labour statistics of the same kind as those produced by

the ABS but, more importantly, it facilitates longitudinal analysis of many aspects of labour force status mobility—that is, movements over time across different labour force states.

Table 4.1 presents cross-sectional HILDA Survey estimates of the labour force status of the population aged 18 to 64 for each year over the 2001 to 2020 period. From 2001 until 2008, employment steadily rose and unemployment fell. Following the onset of the Global Financial Crisis in late 2008, the labour market was subsequently more mixed. For women, the employment rate was relatively stagnant, at approximately 69%



Box 4.1: 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 leading up to 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 usual weekly hours of work in all jobs total less than 35. Otherwise, an employed person is classified as **employed full-time**.^a A person employed part-time who would prefer to work more hours and is available to work additional hours is additionally classified as **underemployed**.
- 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**. Among people not in the labour force, several distinctions are often made based on the degree of 'attachment' to the labour market. This includes identifying the **marginally attached**—people who want to work and are either available to start work but are not currently looking, or are looking for work but are not currently available.

Several key statistics are commonly produced based on these definitions of labour force status, including the **participation rate** (the proportion of the population in the labour force) and the **unemployment rate** (the proportion of those in the labour force who are unemployed).

^a The definition of part-time employment adopted in this report differs from the definition the Australian Bureau of Statistics (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.



to 70%, between 2009 and 2016, but then grew strongly, reaching a record high of 74.2% in 2019. For men, however, the proportion employed has remained below the 2008 peak of 83.6%, fluctuating between 81.1% and 83.2%, while the proportion of men unemployed remained above the 2008 trough. With the onset of the COVID-19 pandemic in early 2020, employment of men and women fell sharply, to 78.3% for men and 71.6% for women. The proportion unemployed rose from 4.0% to 6.3% for men and from 2.9% to 4.0% for women. Significantly, the 2020 employment rate for men was the lowest observed this century and the proportion unemployed was the highest observed this century.

The proportion of men aged 18 to 64 employed part-time trended upwards between 2008 and 2015, but was edging lower up until 2019, before rising sharply to 15.7% in 2020, its highest level in the HILDA Survey period. The proportion of men employed full-time peaked at 73.4% in 2008, then trended downwards until 2016 before bouncing back to 68.1% in 2017, where it remained until 2019. In 2020, full-time employment of men aged 18 to 64 plummeted to 62.6%.

For women aged 18 to 64, the proportion employed full-time peaked at 40.4% in 2019 before falling back to 38.4% in 2020. Part-time employment of women has trended upwards over this century, reaching 33.8% in 2019 before falling back to 33.2% in 2020.

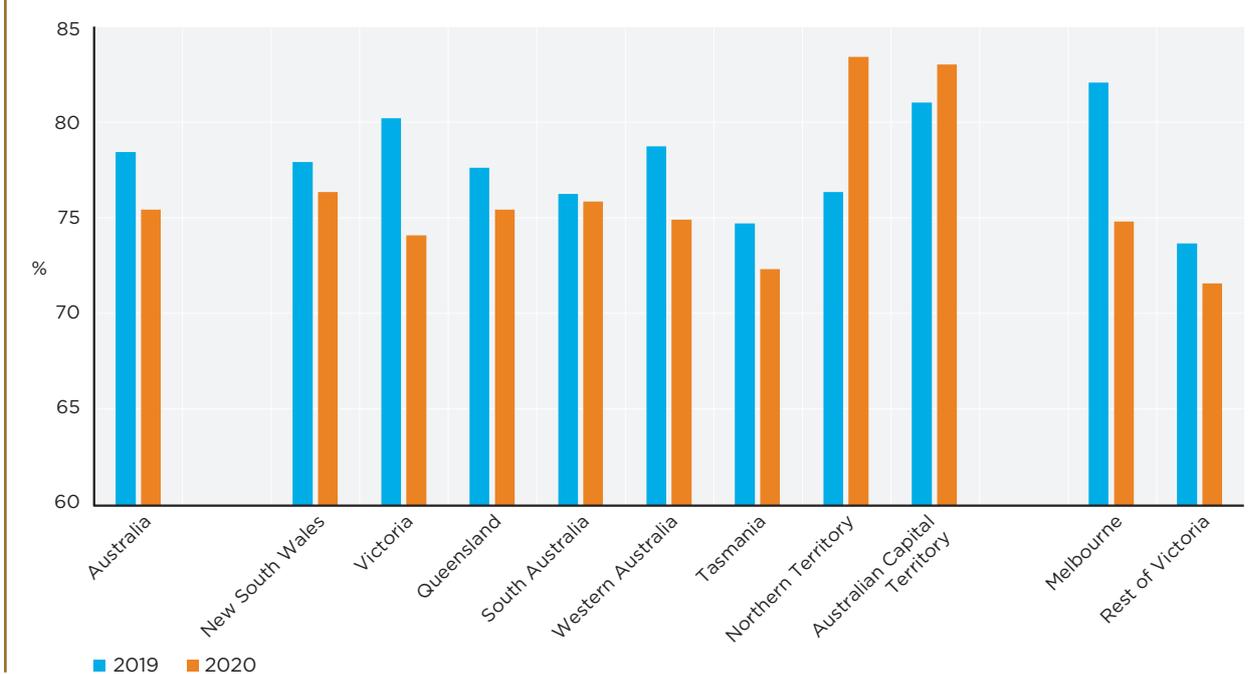
Figure 4.1 further considers the decline in employment of persons aged 18 to 64 between 2019 and 2020, examining differences across regions. Comparing across the states and territories, the decline in employment was greatest in Victoria, falling from approximately 80% to approximately 74%. Western Australia also had a relatively

Table 4.1: Labour force status of the population aged 18 to 64, 2001 to 2020 (%)

	<i>Employed</i>	<i>Unemployed</i>	<i>Not in the labour force</i>	<i>Total</i>	<i>Employed full-time</i>	<i>Employed part-time</i>
<i>Men</i>						
2001	79.7	5.8	14.5	100.0	68.7	11.0
2002	80.3	4.9	14.8	100.0	69.3	11.0
2003	80.5	4.0	15.5	100.0	69.2	11.4
2004	82.0	3.3	14.7	100.0	70.4	11.7
2005	82.2	3.6	14.2	100.0	71.3	10.9
2006	82.4	3.3	14.3	100.0	70.6	11.8
2007	83.0	2.9	14.2	100.0	71.7	11.3
2008	83.6	3.0	13.4	100.0	73.4	10.2
2009	81.7	4.7	13.6	100.0	70.2	11.5
2010	83.2	3.8	13.0	100.0	71.9	11.3
2011	83.0	3.6	13.4	100.0	69.9	13.1
2012	82.5	4.3	13.2	100.0	68.8	13.7
2013	81.4	4.3	14.4	100.0	67.6	13.7
2014	81.6	4.8	13.6	100.0	67.0	14.6
2015	82.1	4.7	13.2	100.0	67.3	14.8
2016	81.1	4.4	14.5	100.0	66.9	14.1
2017	81.8	4.2	14.0	100.0	68.1	13.7
2018	82.3	3.9	13.9	100.0	68.1	14.1
2019	81.5	4.0	14.5	100.0	68.1	13.3
2020	78.3	6.3	15.4	100.0	62.6	15.7
<i>Women</i>						
2001	64.3	3.7	32.0	100.0	35.3	28.9
2002	64.0	3.7	32.3	100.0	34.6	29.4
2003	64.5	3.0	32.5	100.0	34.7	29.8
2004	65.6	3.4	31.0	100.0	35.2	30.4
2005	66.8	3.1	30.1	100.0	35.6	31.2
2006	68.7	2.5	28.7	100.0	37.9	30.9
2007	69.8	2.8	27.5	100.0	39.0	30.8
2008	70.3	3.1	26.7	100.0	39.9	30.4
2009	69.8	3.0	27.3	100.0	38.1	31.6
2010	69.5	3.1	27.4	100.0	38.5	31.0
2011	68.5	3.7	27.8	100.0	37.0	31.5
2012	68.5	3.2	28.4	100.0	36.5	31.9
2013	68.6	3.9	27.5	100.0	37.1	31.5
2014	68.7	3.9	27.5	100.0	36.8	31.8
2015	70.1	3.9	26.1	100.0	37.6	32.5
2016	69.6	3.7	26.7	100.0	38.3	31.3
2017	71.3	3.6	25.1	100.0	39.1	32.2
2018	72.5	3.1	24.5	100.0	39.2	33.3
2019	74.2	2.9	22.9	100.0	40.4	33.8
2020	71.6	4.0	24.4	100.0	38.4	33.2

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

Figure 4.1: Employment-population rates in 2019 and 2020 by region—Persons aged 18 to 64



large decline in employment, while the two territories actually experienced sizeable increases in employment rates. Within Victoria, both Melbourne and the rest of the state experienced employment declines, but the decline was much larger in Melbourne, where the lockdowns were the longest and strictest.

Figure 4.2 examines one-year transitions between employment

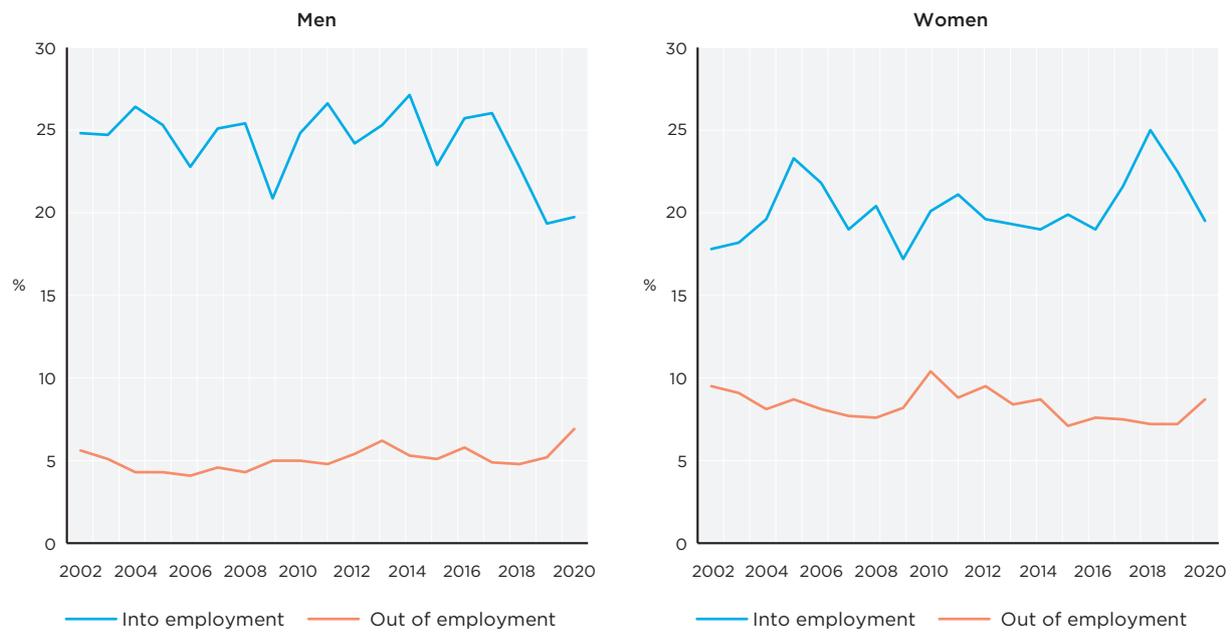
and non-employment of people aged 18 to 64 over the 2001 to 2020 period. The figure shows the proportion of non-employed individuals moving into employment from one year to the next, and the proportion of employed individuals moving into non-employment from one year to the next.

Compared with women, men generally have lower transition

rates out of employment, and higher transition rates into employment, in large part because of the effects of childbirth on women’s employment participation. However, in 2018 and 2019, the rate of entry into employment for males was actually lower than the entry rate for females, and there has also been a slight closing of the gap in exit rates.



Figure 4.2: Rates of movement into and out of employment from one year to the next—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.

The effects of the COVID-19 pandemic are evident, with a rise in the exit rate for both men and women and a fall in the rate of entry to employment for women in 2020. The entry rate did not decline in 2020 for men, although it had declined substantially in 2018 and 2019, and it remained low compared with the rest of the HILDA Survey period in 2020.

Figure 4.3 probes more deeply into labour market transitions by distinguishing between full-time and part-time employment. The top panel presents transitions from non-employment, showing that men have higher rates of transition to full-time employment, while, in most years, women have a higher rate of transition into part-time employment. Between 2009 and 2014, there was a large increase in the male rate of transition from non-employment to part-time employment. However, it subsequently declined, reaching its lowest observed level of 7.9%

in 2019 before partially rebounding in 2020.

While there is considerable volatility in the proportion of non-employed men moving into full-time employment from one year to the next, over the 2001 to 2020 period as a whole there has been a trend decline in this transition rate. Indeed, 2020 saw the proportion of non-employed men moving into full-time employment at its lowest level ever in the HILDA Survey period.

The top panel of Figure 4.3 shows that, for women, the increase in the rate of transition from non-employment into employment between 2016 and 2018 that is evident in Figure 4.2 involved increases in both transitions into part-time employment and transitions into full-time employment. Similarly, the decline in the rate of transitions from non-employment to employment between 2018 and 2020 involved decreases in movements into both part-time and full-time employment.

The second panel of Figure 4.3 examines transitions from part-time employment. Men are much more likely than women to move from part-time employment to full-time employment, although these transitions decreased dramatically for men in 2020. Men and women generally have similar rates of movement from part-time employment to non-employment. In 2020, the rate of transition from part-time employment to non-employment increased for both men and women, but the magnitude of the increase was considerably larger for men.

The bottom panel of Figure 4.3 examines transitions out of full-time employment. Women have higher rates of transition out of full-time employment, to both non-employment and part-time employment. The rate of transition to part-time employment is typically between 10% and 12% for women, compared with approximately 4% for men, while the rate of transition to non-employment is

Figure 4.3: Rates of movement between non-employment, part-time employment and full-time employment from one year to the next—People aged 18 to 64



Note: 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

typically 4% to 5% for women and 3% to 4% for men. In 2020 there was a large increase in the rate of movement from full-time to part-time employment, rising from 4.6% to 7.8% for men and from 11.4% to 13.5% for women. Rates of movement to non-employment also increased in 2020, more so for men than women.

Box 4.2: 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 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.

Labour market earnings

Earnings levels and distribution

Earnings represent 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 value of that worker's labour. Earnings are also an important contributor to an individual's economic wellbeing, being the main income source for most working-age people.

Figures 4.4 to 4.7 provide an overall picture of earnings outcomes and changes over the

period spanned by the HILDA Survey. They present graphs of summary measures of the male and female real earnings distributions over the 2001 to 2020 period, plotting the mean, median, 10th percentile, 90th percentile and Gini coefficient. Figure 4.4 examines weekly earnings of full-time employees, Figure 4.5 examines hourly earnings of part-time employees, Figure 4.6 examines weekly earnings of all employees and Figure 4.7 examines hourly earnings of all employees.¹

Over the full 2001 to 2020 period, the figures show that mean weekly earnings of full-time employees increased from \$1,456 to \$1,870 (a 27.5% increase) for males and from

\$1,160 to \$1,553 (a 33.9% increase) for females. The Gini coefficient (see Box 3.3, page 34) had no net change for males and increased by 8.3% for females. The Gini coefficient for males actually increased between 2001 and 2011, but has since been trending downwards, falling from 0.30 in 2011 to 0.28 in 2020.

While there is considerable growth in mean and median weekly earnings of male full-time employees over the period as a whole, the rate of growth has varied over time. Indeed, there was no increase at all in the mean between 2014 and 2018. Mean and median earnings of female full-time employees, by contrast, have had sustained growth over the whole 2001 to 2020 period.



¹ See Box 4.2, page 72, for an explanation of the earnings measures. Note further that Figures 4.4 to 4.7 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. In addition, in Figures 4.4 and 4.5, where an employee holds more than one job, we restrict analysis to earnings and hours worked in the employee's main job. Figures 4.6 and 4.7 examine earnings in all jobs (combined).

Collectively, the recent movements in both average levels and inequality of male and female full-time employee earnings distributions imply that there has been some convergence between full-time employee male and female earnings distributions in recent years. That said, both wage levels

and wage inequality remain considerably higher among male full-time employees.

For hourly earnings of part-time employees, between 2001 and 2020, the mean increased from \$27.11 to \$35.88 (a 32.3% increase) for males and from \$27.67 to \$35.22 (a 27.3% increase) for females. The Gini

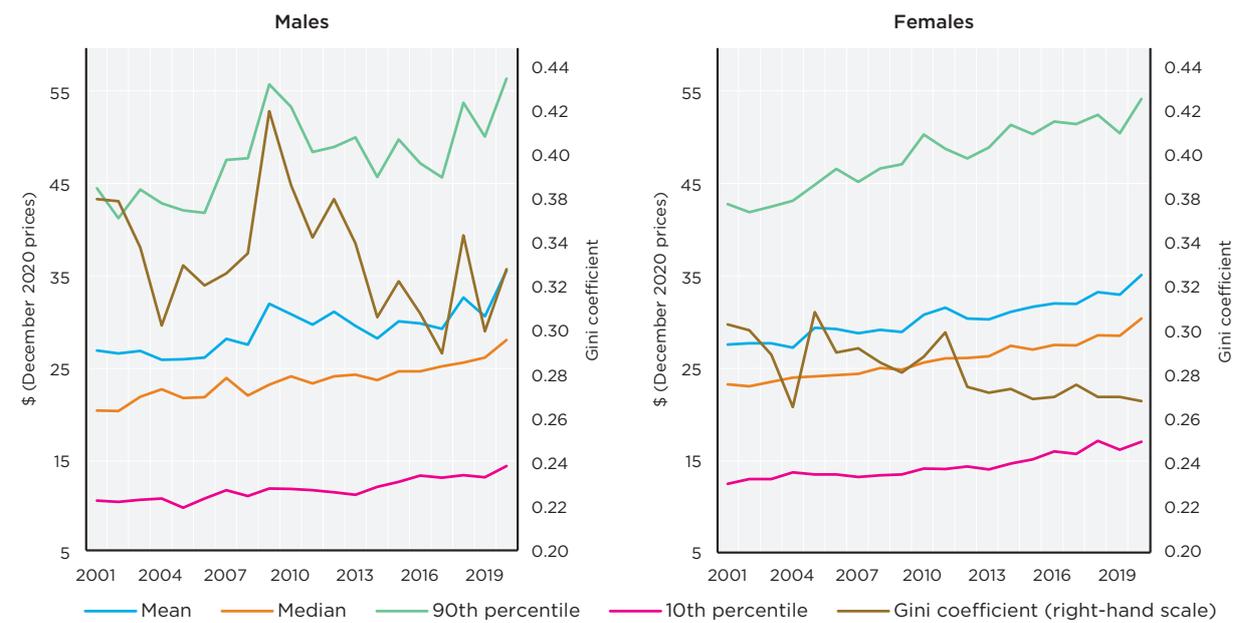
coefficient for hourly earnings of part-time employees exhibits considerable year-to-year fluctuation for males, so it is difficult to discern an underlying trend. However, a downward trend is clearly evident for females since 2005, the Gini coefficient decreasing from approximately 0.32 in that year to approximately 0.28 in 2020.

Figure 4.4: Weekly earnings in main job of full-time employees



Note: Weekly earnings less than \$100 at December 2020 prices have been excluded.

Figure 4.5: Hourly earnings in main job of part-time employees



Note: Hourly wages less than \$2 and more than \$600 at December 2020 prices have been excluded.

Figure 4.6 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, on average, employees are faring, and of the extent of inequality in the labour market.

The growth in mean weekly earnings between 2001 and 2020

is 25.2% for males (rising from \$1,319 to \$1,651) and 36.0% for females (rising from \$871 to \$1,184). The growth in mean weekly earnings of all female employees is markedly higher than the 20.7% increase in mean hourly earnings of female part-time employees. This reflects the growth in full-time employment evident in Table 4.1, as well as growth in the mean weekly hours of female part-time employees (which analysis

of the HILDA Survey data shows has increased from 18.4 in 2001 to 20.2 in 2020).

The Gini coefficient for weekly earnings of all male employees rose sharply between 2007 and 2011, but has been declining since 2013. The sharp rise in the Gini coefficient is not evident for female employees, and indeed, aside from a sharp drop in 2020, the Gini coefficient has hovered at approximately 0.35 for the entire period.

Figure 4.6: Weekly earnings in all jobs of all employees

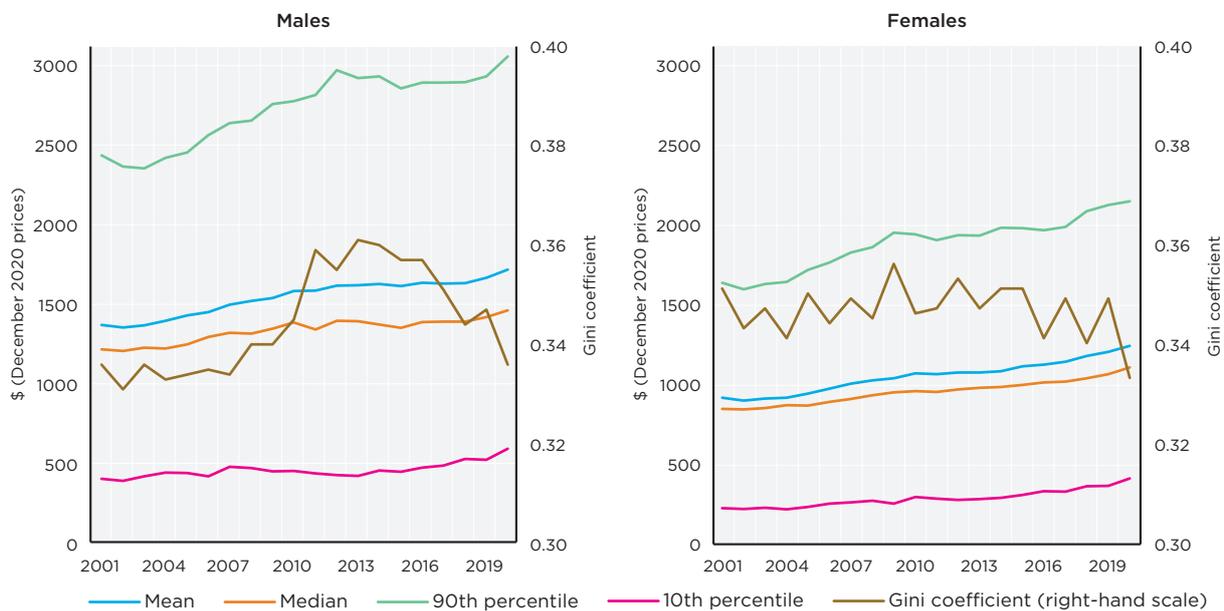


Figure 4.7: Hourly earnings in all jobs of all employees

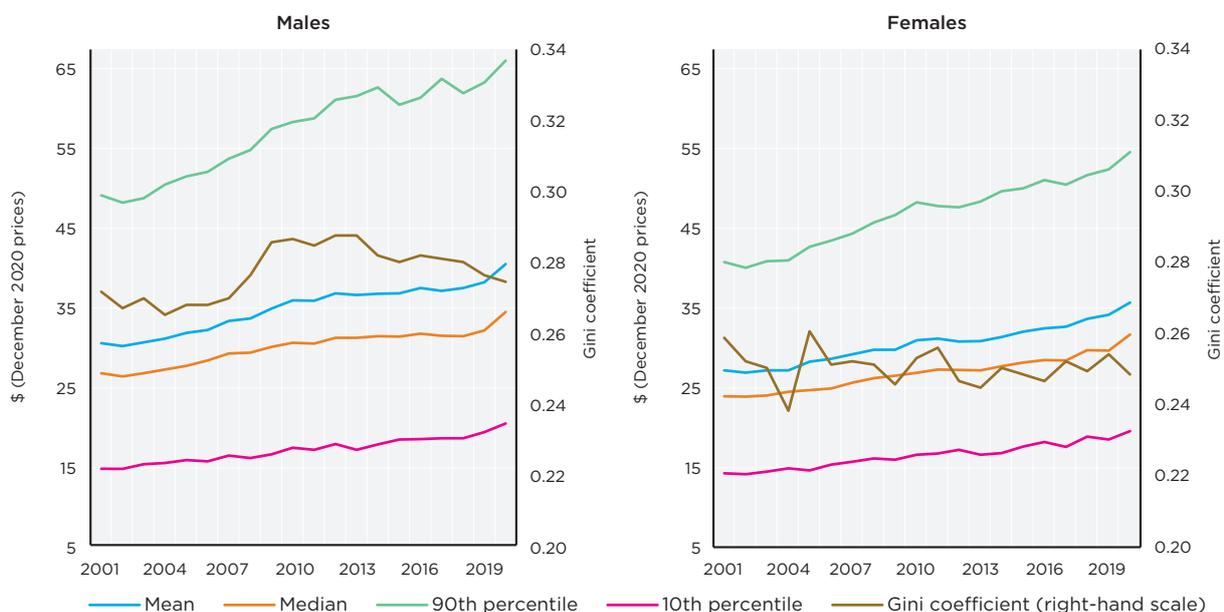


Figure 4.7 provides an overall picture of hourly rates of pay of all employees. Both males and females have sustained consistent growth in mean hourly wages. Inequality in hourly earnings has been broadly unchanged for female employees, while for males there was a substantial increase between 2007 and 2009, since when there has been a gradual but sustained decline.

Employment participation of people aged 65 and over

Analysis of employment participation presented in this

report each year focuses on people aged 18 to 64, which corresponds to a notion of 'working age'². However, people aged 15 to 17 and 65 and over may also be employed. In particular, with the age of eligibility for the Age Pension being progressively increased from 65 to 67 between 1 July 2017 and 1 July 2023, it is likely we will see increased employment participation among people aged over 65.

Figure 4.8 presents employment rates of people aged 65 and over, disaggregated by gender and age group. It shows that employment participation has increased considerably over the course of this century, particularly among those aged 65 to 69. For

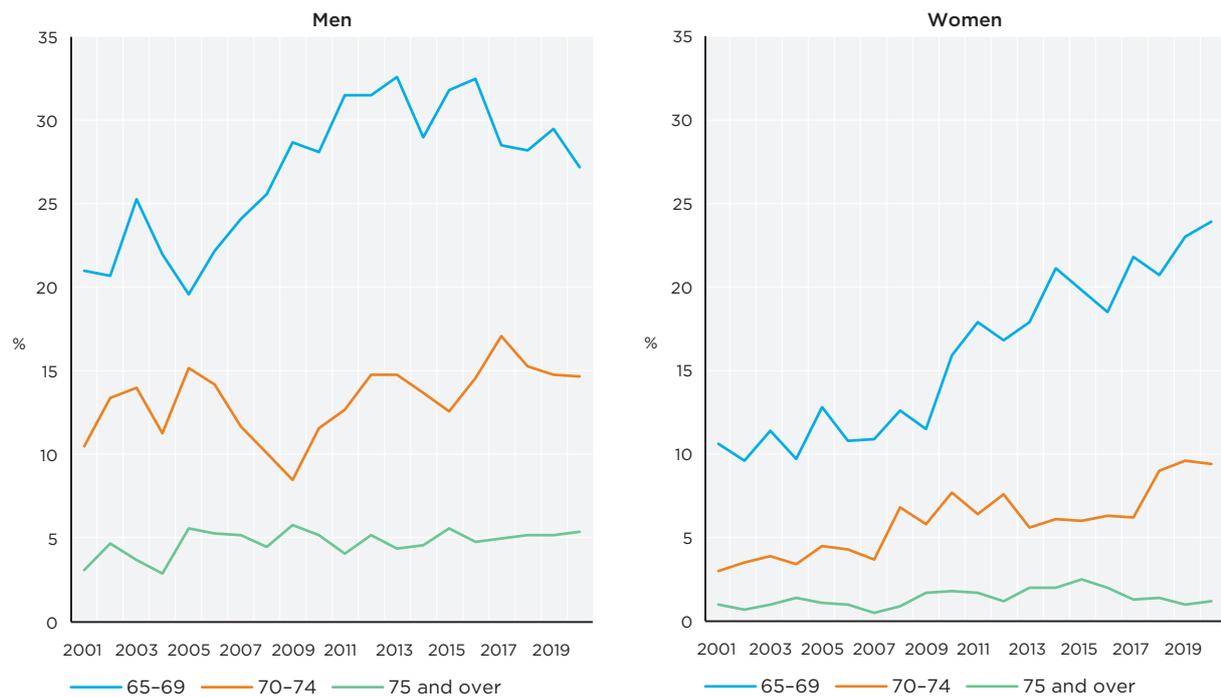
men aged 65 to 69, the increase occurred between 2005 and 2013, when the employment rate reached 32.6%. Since 2013 there has, in fact, been a slight downward trend in employment participation. For women aged 65 to 69, most of the increase in employment participation has occurred since 2009.

Employment participation of people aged 70 to 74 has also edged upwards, albeit unevenly, while employment participation of men aged 75 and over has also increased slightly. In all age categories, men continue to have considerably higher employment participation than women, but the gap has narrowed for the 65 to 69 and 70 to 74 age groups.



² Note, however, that the analysis of employee earnings in the preceding section includes all employees, regardless of age.

Figure 4.8: Proportion of people aged 65 and over employed



For the 65 to 69 age group, in 2001, the employment rate for men was 21%, compared with 10.5% for women; in 2020 the respective rates were 27.2% and 23.9%. For the 70 to 74

age group, in 2001, the employment rate for men was 10.5%, compared with 3.0% for women; in 2020 the respective rates were 14.7% and 9.4%.

Tables 4.2 and 4.3 consider how the type of work undertaken by employed people aged 65 and over has changed between 2001 and 2020. Table 4.2 considers the industry composition of



Box 4.3: Australian Bureau of Statistics' classification of occupations and industries

Occupation variables in this report are based on the first (2006) edition of the Australian Bureau of Statistics (ABS) ANZSCO classification system. ANZSCO stands for the Australian and New Zealand Standard Classification of Occupations. It is based on a conception of types of tasks and skill-level requirements. It has six 'levels', with eight occupation groups distinguished at the highest level of aggregation, known as the 1-digit level; 54 groups distinguished at the next (2-digit) level of aggregation, and so on. In this report, only the 1-digit level classification is used, which distinguishes the following categories: managers; professionals; technicians and trades workers; community and personal service workers; clerical and administrative workers; sales workers; machinery operators and drivers; and labourers. The largest occupation group is professionals, accounting for approximately 25% of employed people. See ABS (2006) for details.

Industry variables in this report are based on the Australian Bureau of Statistics (ABS) Australia and New Zealand Standard Industry Classification (ANZSIC) classification system. ANZSIC classifies the economic activity of firms and other employers, and has a structure comprising categories at four levels: 'divisions' (the broadest level); 'subdivisions'; 'groups'; and 'classes' (the finest level). These levels are commonly referred to as '1-digit', '2-digit', '3-digit' and '4-digit', reflecting the number of digits used in the code to describe each category. At the 1-digit level, which is used in this report, 19 industry categories are distinguished: agriculture, forestry and fishing; mining; manufacturing; electricity, gas, water and waste services; construction; wholesale trade; retail trade; accommodation and food services; transport, postal and warehousing; information media and telecommunications; financial and insurance services; rental, hiring and real estate services; professional, scientific and technical services; administrative and support services; public administration and safety; education and training; health care and social assistance; arts and recreation services; and other services (such as hair and beauty services, funeral services, religious services and repair and maintenance of equipment and machinery). The largest industry by employment is health care and social assistance, followed by education and training and retail trade. See ABS (2008) for details.

Table 4.2: Employment shares of top five industries of employment of people aged 65 and over, 2001–2002 and 2019–2020

2001–2002		2019–2020	
	Employment share (%)		Employment share (%)
<i>Men</i>			
1. Agriculture	25.3	1. Transport and storage	10.8
2. Professional, scientific & technical services	10.0	2. Agriculture	10.0
3. Construction	9.3	3. Construction	10.0
4. Education	8.6	4. Professional, scientific & technical services	9.5
5. Manufacturing	8.0	5. Manufacturing	8.0
All other industries combined	38.8	All other industries combined	51.7
<i>Women</i>			
1. Agriculture	20.6	1. Health	34.8
2. Health	18.8	2. Education	19.4
3. Education	11.9	3. Retail trade	6.7
4. Other services	8.6	4. Agriculture	5.7
5. Wholesale trade	7.0	5. Professional, scientific & technical services	5.1
All other industries combined	33.1	All other industries combined	28.3

employment, examining the share of employment of each 1-digit ANZSIC industry (see Box 4.3, page 76). The table presents, for men and women separately, the employment shares of the top five industries at the start of the HILDA Survey period and at the end of the period. To improve precision of the estimates, especially given the relatively low employment rates of over-65s at the start of the HILDA Survey period, estimates are presented for 2001 and 2002 pooled and for 2019 and 2020 pooled.

For men aged 65 and over, four of the top five industries at the start of this century were still the top employers at the end of the HILDA Survey period, while for women aged 65 and over, three of the top five industries remained in the top five. Nonetheless, there has been considerable change to the industry composition of employment of over-65s. For both men and women, agriculture has become a much less important industry, dropping from 25.3% to 10.0% of employment of men and from

20.6% to 5.7% of employment of women.

For men, transport and storage moved into the top five (the employment share rising from 4.5% to 10.8%), while education moved out of the top five (the employment share falling from 8.6% to 6.9%). Employment shares of the other industries in the top five remained broadly unchanged. Also notable for men is that the employment share of the top five industries fell from 61.2% to 48.3%, indicating that the industry concentration of employment reduced—that is, employment has become more evenly distributed across industries.

For employed women aged 65 and over, both the health and education industries have grown substantially, with their collective employment shares rising from 30.7% to 54.2%. Wholesale trade and other services dropped out of the top five industries, while the retail trade and professional, scientific and technical services industries entered the top five. In contrast to men, the industry concentration of employment

increased slightly for women, with the top five industries accounting for 66.9% of employment at the beginning of the century and 71.7% at the end of the HILDA Survey period.

Table 4.3 considers the occupation composition of employment of people aged 65 and over, examining the same two periods as Table 4.2. It presents the proportion employed in each 1-digit ANZSCO occupation (see Box 4.3, page 76) for men and women separately. For both men and women, employment has become less concentrated in managerial and professional occupations. For men, there has also been a decline in the employment share of technicians and trade workers, falling from 14.2% to 9.3%, while for women there has been a very large decline in the employment share of labourers, falling from 20.4% to 5.6%. All other occupation groups experienced increased employment shares. Particularly notable is the rise in the female employment share of community and personal service workers, rising from 4.4% to 21.2%.

Table 4.3: Occupation composition of employed people aged 65 and over, 2001 and 2020 (%)

	Males		Women	
	2001-2002	2019-2020	2001-2002	2019-2020
Managers	32.0	24.8	19.8	13.5
Professionals	24.0	22.0	32.9	27.0
Technicians and Trades Workers	14.2	9.3	0.0	2.4
Community and Personal Service Workers	1.8	8.3	4.4	21.2
Clerical and Administrative Workers	5.4	7.7	17.3	23.1
Sales Workers	3.1	5.0	5.1	6.4
Machinery Operators and Drivers	8.5	10.0	0.0	0.8
Labourers	11.1	12.9	20.4	5.6
Total	100.0	100.0	100.0	100.0

Job separations

Integral to understanding labour market dynamics is knowledge of the extent and nature of job separations and job changes, including how often people separate from jobs, why they leave jobs and, for those who move into another job, how their new job compares with the job they left. By its nature, the HILDA Survey is well placed to contribute useful insights into this aspect of the labour market.

Separations from jobs can occur for a wide variety of reasons, but it is useful to distinguish between those initiated by the employer and those initiated by the employee (see Box 4.4, page 78).

Figure 4.9 shows the proportion of employees separating from their job each year for each of the two reasons. In total, approximately 20% of employees experience a job separation each year. There has been some fluctuation in the rate of job separations over the period to

2020, but the composition has fluctuated considerably more. Around the time of the Global Financial Crisis (GFC), dismissals spiked from 2.9% in 2008 to 5.7% in 2009, but this was largely offset by the decline in quits from 18.2% to 15.9%. Similarly, the arrival of COVID-19 saw the rate of job dismissal rise from 3.3% in 2019 to 6.0% in 2020, while job quits declined from 17.6% to 14.7%, meaning job separations actually declined by 0.2% between 2019 and 2020.

Significantly, the rate of job quits has never returned to the levels reached in the lead up to the GFC, and the 2020 quit rate was the lowest ever observed over the 20 years spanned by the HILDA Survey. Conversely, the dismissal rate remained slightly elevated in the post-GFC period compared with the years immediately prior to the GFC and reached its highest level of the 20-year period in 2020.

Figure 4.9 examines *annual* rates of job quits and dismissal. However, most HILDA Survey respondents are interviewed in August and September each year (see Box 5.1, page 91), meaning that the impacts of the COVID-19 pandemic will mostly have occurred within the six months preceding interview (see Box 5.2, page 92, for a timeline of the pandemic over 2020). The self-completion questionnaire includes a question that not only

Box 4.4: Classification of job separations

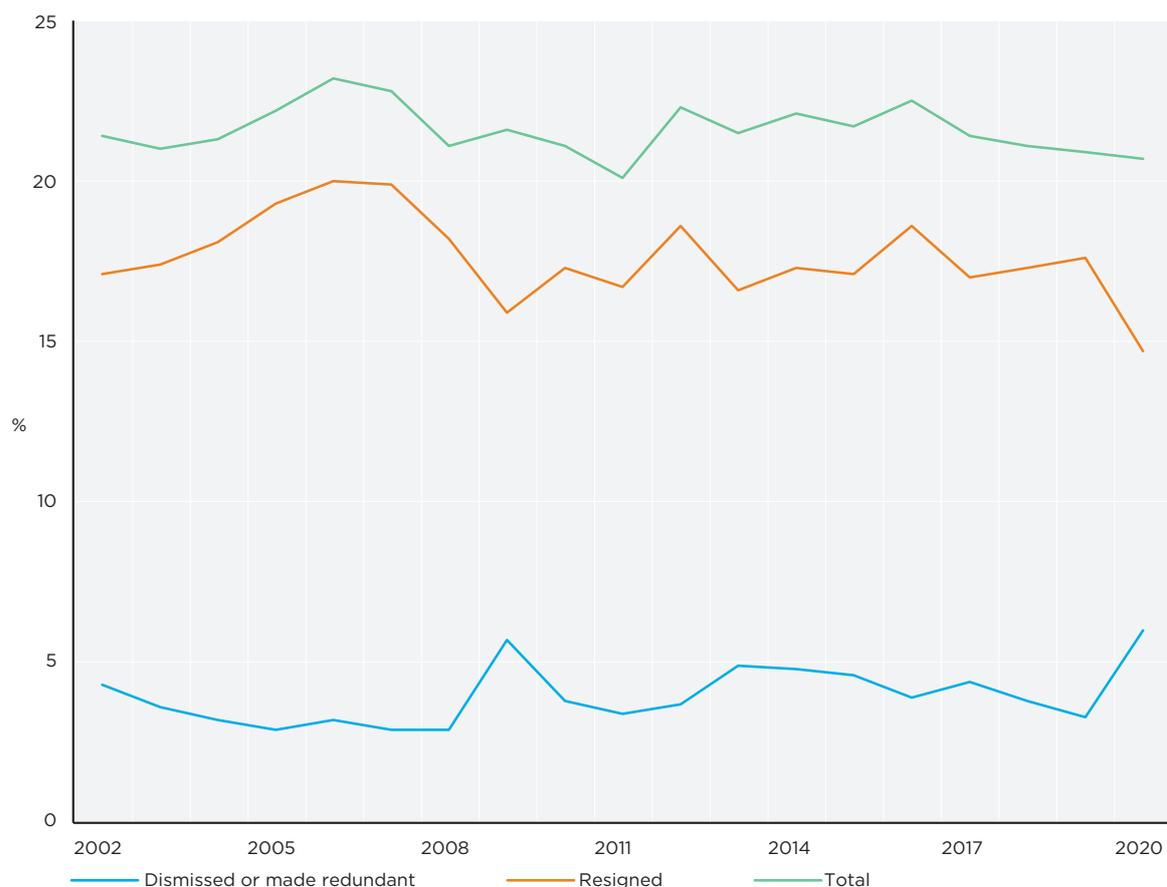
In each year, individuals who had left the job they were employed in at the time of last interview are asked the main reason for leaving the job or business. For employees, responses are assigned to one of the following categories:

1. Job was temporary or seasonal
2. Holiday job
3. Got laid off/No work available/Retrenched/Made redundant/Employer went out of business/Dismissed, etc.
4. Not satisfied with job (for example, unhappy with hours, pay, working conditions, boss, other workers)
5. To obtain a better job/Just wanted a change/To start a new business
6. Retired/Did not want to work any longer
7. Own sickness, disability or injury
8. Pregnancy/To have children
9. To stay at home to look after children, house or someone else
10. Travel/Have a holiday
11. Returned to study/Started study/Needed more time to study
12. Spouse/partner transferred
13. Too much travel time/Too far from public transport
14. Migrated to a new country
15. Change of lifestyle
16. Other reason

In this report, these reasons are classified into two categories:

1. Dismissed or made redundant (Category 3)
2. Quit (all other categories)

Figure 4.9: Annual rates of job separations—Employees



Note: Figure refers only to separation from the job held at the time of the previous-wave interview. It does not include any separations from jobs obtained after the previous-wave interview (that is, jobs obtained and left within the approximately one year between interviews).

establishes whether the respondent was fired or made redundant in the last year, but also identifies the quarter of that year in which the event occurred. This allows us to identify the proportion of employees who were dismissed or made redundant within the six months preceding interview, which approximately corresponds to the period after the onset of the pandemic.

Figure 4.10 draws on the information in the self-completion questionnaire on job dismissal to examine how dismissal rates in the six months preceding interview have evolved over time. Clearly evident is a sharp rise in 2020, providing a more direct measure of the impact of

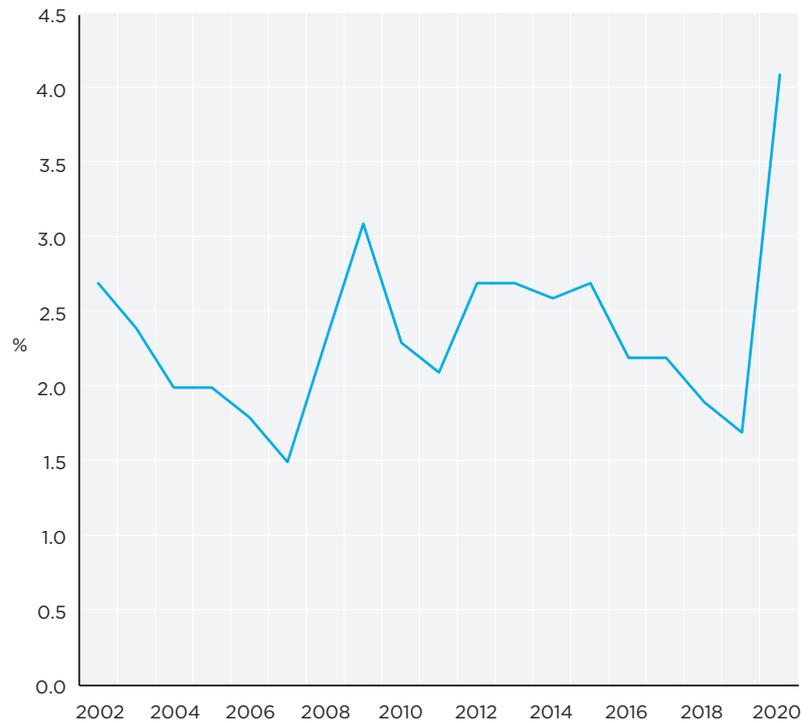
COVID-19 on job dismissal. The figure shows that in 2020 4.1% of employees were dismissed in the preceding six months, up from 1.7% in 2019. This was the highest six-monthly dismissal rate observed this century, the previous highest being in the midst of the GFC in 2009, when it reached 3.1%.

In Figure 4.11 our attention shifts to how employees fare in the aftermath of job dismissal, examining the proportion of employees dismissed within the last year who were, at the time of interview, employed, unemployed and not in the labour force. Outcomes in 2020 stand in stark contrast to previous years, with the proportion employed, at 44.7%, lower than at any other time this century.





Figure 4.10: Proportion of employees dismissed or made redundant in the last 6 months



Note: The 'last 6 months' refers to the six-month period leading up to completion of the self-completion questionnaire. For most employees, the six-month period commences in February or March of the indicated year.

Correspondingly, the proportion unemployed and not in the labour force, respectively at 28.8% and 26.5%, were at their highest levels observed over the HILDA Survey period.

Figure 4.12 compares annual dismissal rates across states and territories, with average rates over the 2015 to 2019 period serving as a benchmark within each jurisdiction. The dismissal rate in 2020 was highest, and the increase was greatest, in Victoria: in 2020 the dismissal rate was 7.5%, up from an average of 4.1% over the 2015 to 2019 period. New South Wales also had a large increase in the dismissal rate, rising from an average of 3.2% over the 2015 to 2019 period to 6.3% in 2020. South Australia and Tasmania also experienced substantial increases in the dismissal rate, while Queensland and the Northern Territory experienced little change. Western Australia and the Australian Capital Territory

actually experienced declines in the dismissal rate in 2020.

Comparing job dismissal rates by gender and age group, Figure 4.13 shows that dismissal rates in 2020 were highest for those aged 15 to 24, and males and females in this age group also experienced the largest increases in dismissal rates compared with the 2015 to 2019 period. In all age groups, males have higher rates of job dismissal than females, but females aged 15 to 24, 35 to 44 and 55 and over, while having lower dismissal rates, experienced greater increases in dismissal rates than their male counterparts.

Annual rates of job dismissal by job characteristics are examined in Table 4.4, which presents estimates separately for Victoria and the rest of Australia. As in Figures 4.12 and 4.13, average dismissal rates over the 2015 to 2019 period are compared with dismissal rates in 2020.

Comparing across industries, unsurprisingly, 2020 dismissal rates were particularly high in Victoria in accommodation and food services and arts and recreation services. In 2020, the Victorian dismissal rate in accommodation and food services was 23.6%, up from an average rate of 4.5% in the 2015 to 2019 period, while the dismissal rate in arts and recreation services rose from an average of 4.0% to 19.4%. These industries also had quite high dismissal rates in the rest of

Australia in 2020, respectively rising from 6.8% to 15.5% and from 2.2% to 8.4%.

The other services industry, which includes automotive repair and maintenance, personal care services and other personal services, also experienced a large increase in the dismissal rate in Victoria, rising from an average of 3.8% over the 2015 to 2019 period to 14.5% in 2020. Likewise, the dismissal rate in the Victorian retail industry rose substantially from an average of 3.8% to 10.9%.

Figure 4.11: Current labour force status of employees dismissed from their job in the last year

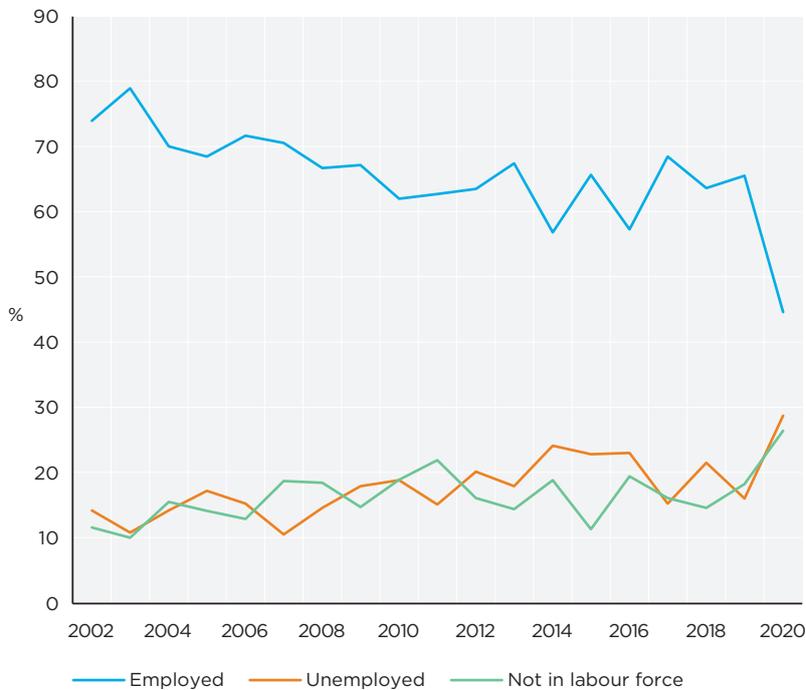


Figure 4.12: Annual rates of job dismissal by state and territory

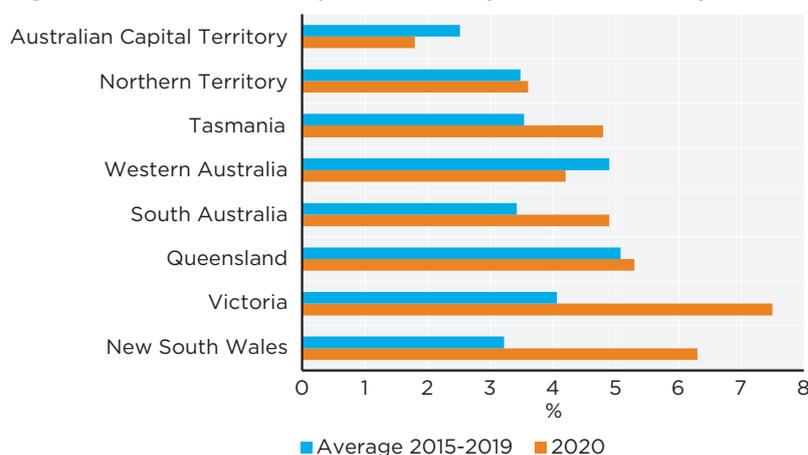
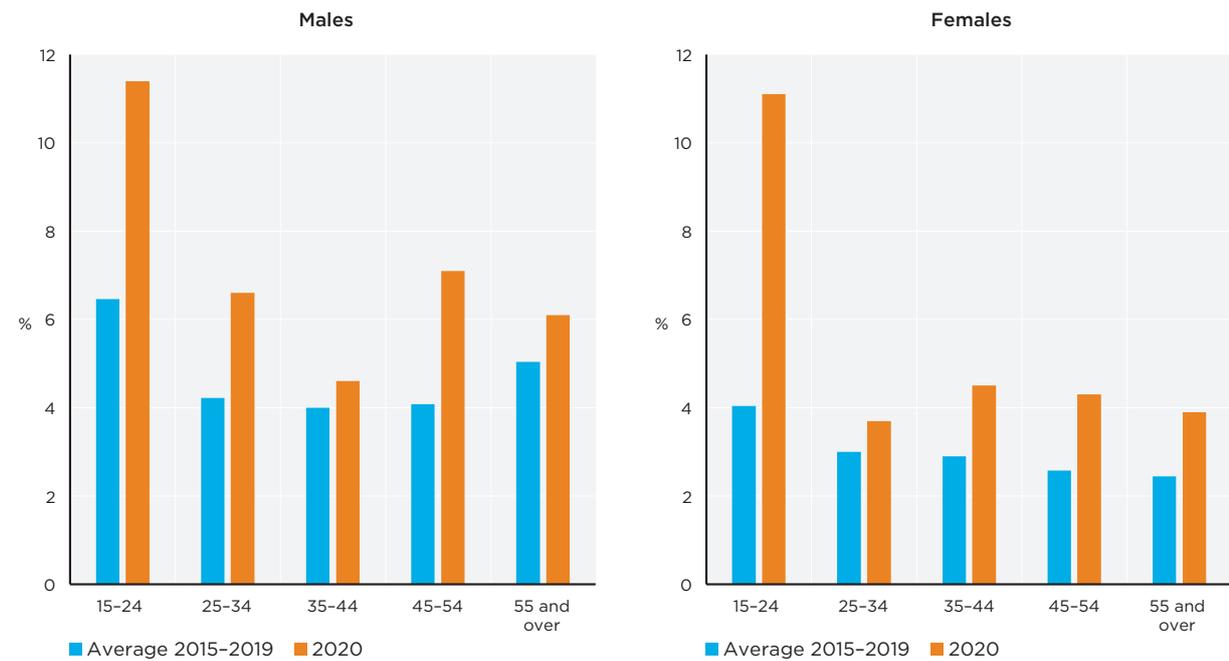


Figure 4.13: Annual rates of job dismissal by gender and age group



Nationally, the majority of industries experienced an increase in dismissal rates, indicating that the economic effects of the pandemic in 2020 were quite widespread. Nonetheless, public administration and safety stands out as an industry that experienced a slight decline in the dismissal rate, both in Victoria and the rest of Australia.



Comparing employees by whether employed on a casual basis or not (second panel of Table 4.4; see Box 4.5, page 82) shows that most of the increase in dismissal rates was confined to casual employees, both in Victoria and the rest of Australia. In Victoria the dismissal rate rose from an average of 5.2% over the 2015 to 2019 period to 16.3% in 2020, and in the rest of the country rose from an average of 6.2% to 11.2%. This is unsurprising given the nature of casual employment and the fact that casual employees employed for less than 12 months were excluded from eligibility for

Box 4.5: Classification of type of employment contract

Three types of employment contract are distinguished in this report.

- i) Fixed-term contracts, defined as employment contracts that end at a specified date or upon completion of a specific task.
- ii) Casual employment. This has long been recognised in industrial awards, despite ambiguity about the legal definition of casual employment up until 22 March 2021, when an amendment to the Fair Work Act 2009 was passed providing a statutory definition. The amendment essentially gave legal standing to what casual employment was commonly understood to be (for example, Creighton and Stewart, 2010), defining it as employment with no firm advance commitment from the employer to continuing and indefinite work according to an agreed pattern of work for the employee. However, casual employment is often identified on the basis of the absence of entitlement to paid leave and/or payment of a casual 'loading', which are common features of casual employment (for example, ABS, 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 2019, the HILDA Survey data show that 96% 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.
- iii) Permanent/ongoing employment. Permanent employees typically have leave and other entitlements, and usually have a guaranteed minimum number of hours per week.

Table 4.4: Employee dismissal rates by job characteristics (%)

	Victoria			Rest of Australia		
	Average 2015–2019	2020	Difference ^a	Average 2015–2019	2020	Difference ^a
<i>Industry</i>						
Agriculture, Forestry and Fishing	7.5	8.1	*0.6	7.9	5.6	-2.3
Mining	7.9	*9.3	*1.4	6.4	7.0	*0.6
Manufacturing	4.7	6.8	2.1	6.2	7.1	0.9
Electricity, Gas, Water and Waste Services	7.7	*0.0	-7.7	4.1	5.0	0.9
Construction	5.9	9.4	3.5	8.7	11.3	2.6
Wholesale Trade	6.7	11.0	4.3	4.0	5.9	1.9
Retail Trade	3.8	10.9	7.1	3.3	5.2	1.9
Accommodation and Food Services	4.5	23.6	19.1	6.8	15.5	8.7
Transport, Postal and Warehousing	5.0	9.4	4.4	3.5	5.7	2.2
Information Media and Telecommunications	6.7	*8.1	*1.4	6.0	9.9	3.9
Financial and Insurance Services	4.6	2.7	-1.9	2.9	4.3	1.4
Rental, Hiring and Real Estate Services	6.9	*13.9	*7.0	3.7	2.6	-1.1
Professional, Scientific and Technical Services	4.3	4.9	*0.6	3.7	4.9	1.2
Administrative and Support Services	6.8	5.5	-1.3	5.6	8.5	2.9
Public Administration and Safety	2.0	0.4	-1.6	1.4	0.8	-0.6
Education and Training	2.2	3.9	1.7	1.6	1.4	-0.2
Health Care and Social Assistance	2.0	2.6	0.6	2.2	2.1	-0.1
Arts and Recreation Services	4.0	19.4	15.4	2.2	8.4	6.2
Other Services	3.8	14.5	10.7	4.3	6.9	2.6
<i>Casual status</i>						
Casual	5.2	16.3	11.1	6.2	11.2	5.0
Not casual	3.7	5.1	1.4	3.3	3.7	0.4
<i>Quintile of the hourly wage distribution</i>						
Bottom	4.9	15.6	10.7	6.5	8.1	1.6
Second	4.0	7.7	3.7	3.6	5.7	2.1
Middle	3.3	4.7	1.4	3.0	6.2	3.2
Fourth	3.1	4.0	0.9	3.0	2.5	-0.5
Top	4.9	5.4	0.5	3.6	4.3	0.7

Notes: ^a 2020 difference from 2015–2019 average. * Estimate not reliable.

the JobKeeper Payment that was in place from late March 2020 (see Box 3.7, page 40).

The bottom panel of Table 4.4 examines dismissal rates by quintile (20%) of the hourly wage distribution in the preceding year (prior to job dismissal). It shows that the increase in the dismissal rate in Victoria was ordered by quintile in the wage distribution: it increased by 10.7 percentage points for those in the bottom quintile, 3.7 percentage points for those in the second-bottom quintile, 1.4 percentage points for

those in the middle quintile, 0.9 percentage points for those in the fourth quintile and 0.5 percentage points for those in the top quintile. By contrast, increases in job loss rates in the rest of Australia, while somewhat higher in the bottom three quintiles, were not ordered by location in the wage distribution. The increase was greatest for the middle quintile (3.2 percentage points), followed by the second quintile (2.1 percentage points) and then the bottom quintile (1.6 percentage

points). The job dismissal rate actually declined by 0.5 percentage points for non-Victorians in the fourth quintile.

Reported labour market effects of COVID-19

Wave 20 of the HILDA Survey included new questions directly asking employees about the effects of the COVID-19 pandemic on their employment. Specifically, those who were employees at

the time of the onset of the pandemic in March 2020 were asked whether, because of the pandemic: their employment had been terminated; they had been stood down; they had taken paid leave; their working hours had been cut or increased; their rate of pay had been cut; and their overall earnings had decreased or increased.

Table 4.5 summarises responses to these questions disaggregated by state or territory of residence, gender, age group and the degree of socio-economic disadvantage of their region of residence. Overall, 4.5% of employees reported their employment had been terminated because of the pandemic, while 9.6% reported being stood down, which essentially translates to being put on unpaid leave, and 10.8% reported taking paid leave. Notable, while 23.1% of employees reported their hours were cut, 24.1% reported their hours actually increased. Only 6.4% of employees reported their pay rate was cut, but overall earnings decreased for 20.6% of employees, whereas only 8.2% reported their pay rose.

Comparing across the states and territories, somewhat surprisingly given the evidence in Figure 4.12, the Northern Territory had the

highest proportion of employees reporting termination (6.6%) and it also had the highest proportion reporting being stood down (18.0%) and taking paid leave (13.7%) because of the pandemic. Among the states, Victoria had the highest reported rate of job termination, at 5.3%, and the highest proportion taking paid leave because of the pandemic (13.5%), while the proportion stood down was relatively similar across all states. The Australian Capital Territory stands out as having relatively low proportions being terminated, stood down or going on paid leave because of the pandemic.

In terms of changes to working hours, reports of both cuts and increases to hours are relatively similar across the states, albeit with South Australia having slightly lower proportions than the other states. The two territories, by contrast, have comparatively low proportions reporting their hours were cut and high proportions—nearly one third—reporting their hours increased. The proportion reporting a decrease in overall earnings was highest in Victoria, at 22.8%, and lowest in the Northern Territory (7.9%) and the Australian Capital Territory (9.3%). Overall earnings increases were most commonly reported in

the Northern Territory, Queensland, Victoria and Tasmania, although the differences across jurisdictions are not especially large.

Comparing males and females, reported labour market experiences of males and females are relatively similar. Males were slightly more likely to report being terminated—4.6% versus 4.3% for females—but a lower proportion reported being stood down—8.4% versus 10.8% for females. Females had slightly higher proportions reporting hours were cut and that hours increased, a slightly lower proportion reporting their pay rate was cut and a slightly higher proportion reporting overall earnings increased.

Comparing across age groups, employees aged 15 to 24 had the highest reported rates of job termination (7.0%) and being stood down (20.9%), while employees aged 45 and over had relatively low reported rates of job termination and being stood down compared with the younger age groups. Cuts to hours and overall earnings were also more frequently reported by employees aged 15 to 24, but they also more frequently reported increased overall earnings. Employees aged 35 to 44 were the most likely to report that the pandemic resulted in them taking paid leave (14.4%), having their pay rate cut (8.5%) and/or increasing their working hours (26.7%).

Differences by socioeconomic disadvantage of the region of residence, as measured by quintile of the Socio-Economic Index for Areas (SEIFA) Index of Relative Socio-Economic Advantage and Disadvantage (see Box 9.1, page 130), are examined in the bottom panel of Table 4.5. There are relatively few differences apparent by level of socio-economic advantage/disadvantage of region, with two



Table 4.5: Reported impacts of COVID-19 on employment, by selected characteristics—Persons who were employees at the onset of the pandemic, 2020 (%)

	<i>Terminated</i>	<i>Stood down</i>	<i>Paid leave</i>	<i>Hours cut</i>	<i>Hours increased</i>	<i>Pay rate cut</i>	<i>Earnings overall decreased</i>	<i>Overall earnings increased</i>
All	4.5	9.6	10.8	23.1	24.1	6.4	20.6	8.2
<i>State or territory</i>								
New South Wales	4.5	9.3	10.2	23.3	23.6	7.7	21.1	6.6
Victoria	5.3	9.7	13.5	25.4	27.3	5.8	22.8	9.4
Queensland	4.2	9.5	9.6	23.1	22.8	6.3	20.9	9.5
South Australia	3.0	9.7	12.3	19.3	19.4	3.6	15.3	8.5
Western Australia	3.9	10.4	7.3	20.4	21.8	7.6	20.0	7.1
Tasmania	3.2	10.9	11.9	22.4	21.8	4.6	18.2	9.2
Northern Territory	6.6	18.0	13.7	14.9	29.7	4.3	7.9	10.3
Australian Capital Territory	3.1	3.4	5.9	17.6	32.2	3.8	9.3	6.7
<i>Gender</i>								
Males	4.6	8.4	11.4	22.4	23.1	6.9	20.6	7.0
Females	4.3	10.8	10.3	23.8	25.2	6.0	20.6	9.4
<i>Age group</i>								
15–24	7.0	20.9	7.1	36.3	25.0	5.5	31.6	15.1
25–34	4.9	9.1	10.7	23.8	24.2	6.8	20.9	7.2
35–44	4.4	7.2	14.4	22.4	26.7	8.5	18.1	7.0
45–54	3.4	6.1	11.3	16.8	24.0	6.5	17.9	6.0
55 and over	2.7	6.7	9.1	17.7	20.2	4.1	16.2	7.3
<i>SEIFA quintile</i>								
Bottom	4.5	10.2	10.3	23.9	21.8	6.0	21.5	10.3
Second	4.1	11.2	11.7	24.0	22.9	5.8	19.3	8.3
Middle	4.4	10.3	10.6	24.0	22.2	6.1	22.1	8.1
Fourth	4.6	9.1	10.6	21.8	24.0	6.1	19.4	8.4
Top	4.6	8.1	10.8	22.4	27.9	7.7	20.9	6.9

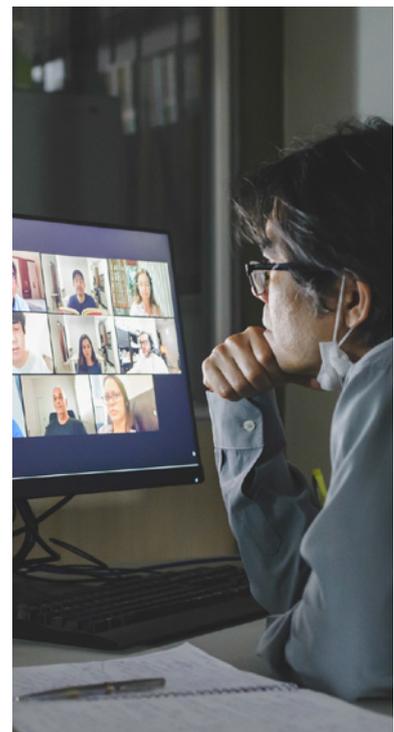
notable exceptions: the proportion reporting their hours had increased was higher in more advantaged regions (27.9% in the top quintile and 24.0% in the fourth quintile, compared with approximately 22% in the lower three quintiles); and the proportion reporting their earnings had increased overall was highest in the bottom quintile (10.3%) and lowest in the top quintile (6.9%).

For those who were self-employed at the onset of the pandemic, Wave 20 of the HILDA Survey included new questions on whether, because of the pandemic, they had ceased operating their business and, for those who had, whether operations had recommenced as of the time of interview. Table 4.6 shows that, strikingly, 38.2% of the self-employed in Victoria and 26.4% of those in the rest of Australia reported they had

Table 4.6: Impacts of COVID-19 on businesses of the self-employed, 2020 (%)

	<i>Victoria</i>	<i>Rest of Australia</i>
Ceased operating business	38.2	26.4
Of those who ceased operating: had re-commenced operations by time of interview	26.9	81.7

Note: Self-employed includes both solo-self-employed and those with employees.





ceased operations. In Victoria, only 26.9% of those who had ceased operations had recommenced operations, whereas in the rest of Australia 81.7% had recommenced.

Perceptions of job security

Each year, the HILDA Survey asks employees the percentage chance they will lose their current job (by being retrenched, fired or not having their contract renewed) over the next 12 months. Figure 4.14 shows how the average response of employees to this question has evolved between 2001 and 2020. Based on this measure, job insecurity increased in 2020, the mean perceived probability of dismissal rising from 11.1% in 2019 to 13.4% in 2020. This was still below the highest observed level over the 20-year period, which occurred in 2001. Nonetheless, it represented the sharpest one-year increase in this measure observed over the life of the study.

Figure 4.15 considers differences in average perceived probability of job loss across industries, for each industry comparing the

average of this measure between 2015 and 2019 with its level in 2020. Perceived job insecurity varies across industries even in the absence of a pandemic, being notably high in mining, information media and telecommunications, and agriculture, forestry and fishing. However, mining and agriculture, forestry and fishing were the only two industries to show a decline in perceived insecurity. In all other industries, insecurity rose. The biggest increases were in administrative and support

services and information media and telecommunications, which in 2020 stood out as having the highest perceived insecurity, with the mean perceived probability of job loss just under 25%. Manufacturing, arts and recreation services, wholesale trade, and other services also had relatively large increases in perceived job insecurity.

Figure 4.16 compares mean perceived job insecurity across occupation. Perceived insecurity of labourers and machinery

Figure 4.14: Employees' mean perceived probability of job loss over the next 12 months

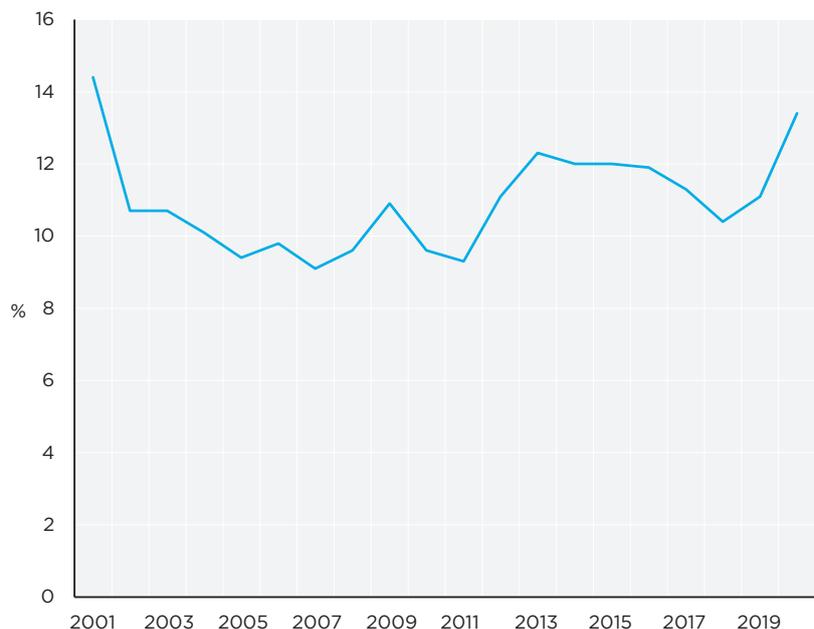


Figure 4.15: Employees' mean perceived probability of job loss over the next 12 months by industry

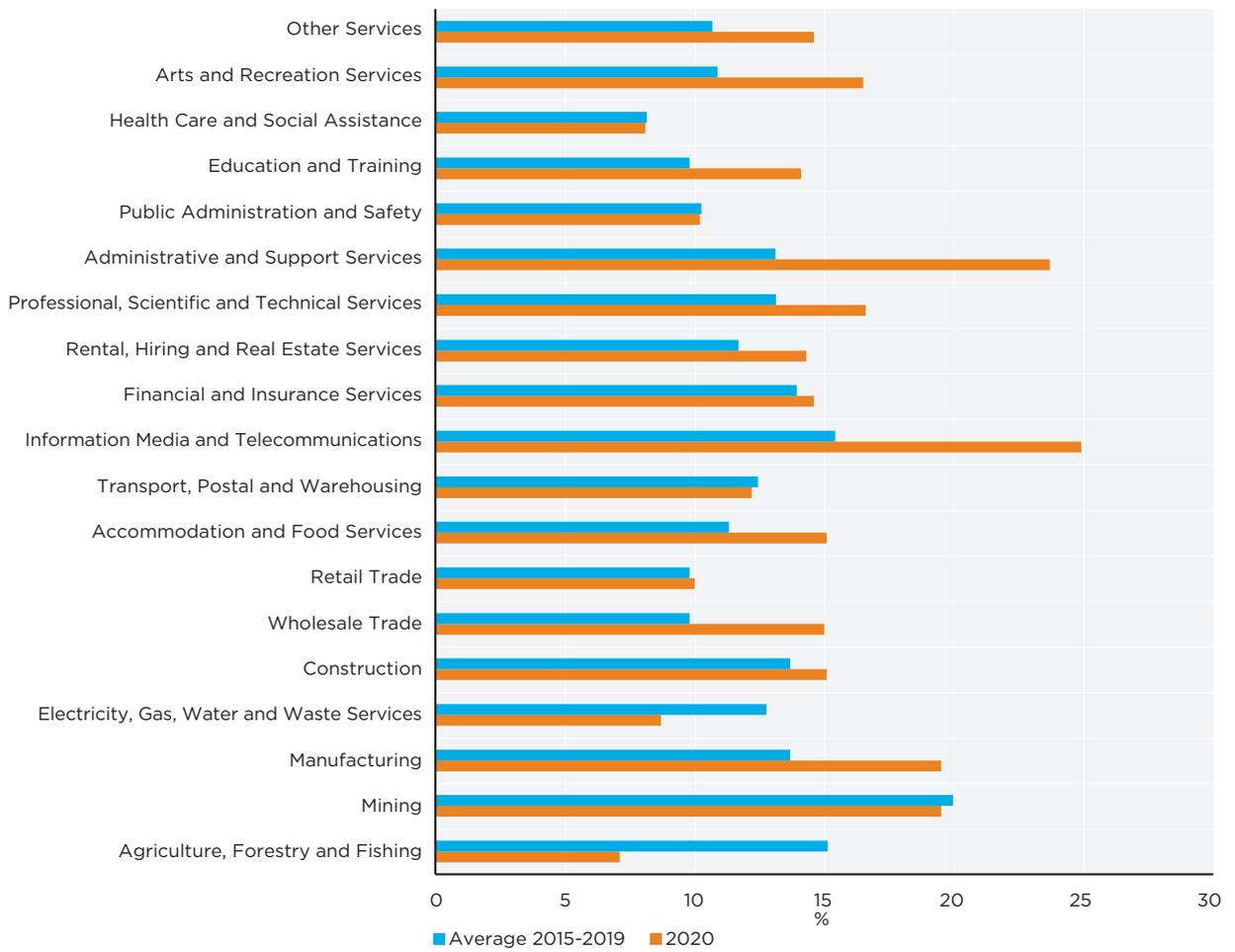
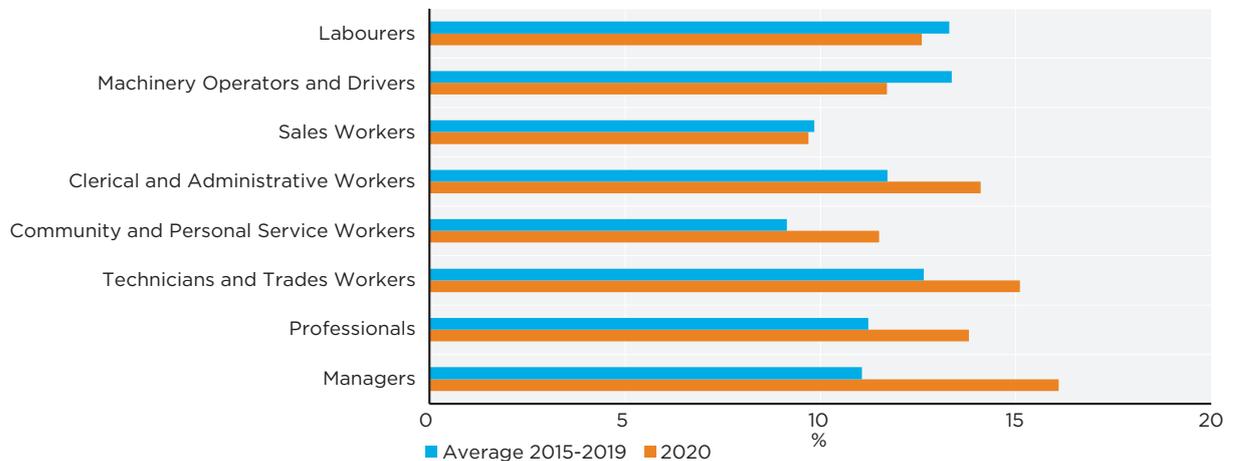


Figure 4.16: Employees' mean perceived probability of job loss over the next 12 months by occupation



operators and drivers, who normally have the highest perceived insecurity, decreased in 2020 compared with the 2015 to 2019 period, while insecurity of sales workers also declined slightly. Managers had the biggest increase in insecurity in 2020, while the remaining occupation groups also had relatively large increases.

Who received the JobKeeper Payment in 2020?

As noted in Chapter 3, the JobKeeper Payment was the largest wage subsidy and income transfer program in Australia's

history (see Box 3.7, page 40). Treasury's three-month review of the JobKeeper Payment (Treasury, 2020) reports that, as of the end of the 2019–20 financial year, 3.5 million people had received the payment. This translates to approximately 27% of people employed at the time of arrival of the pandemic. The HILDA Survey shows 23.1% of employed persons received the payment (Table 4.7), indicating under-reporting of receipt. This may be because some employed persons did not realise or failed to recall they received JobKeeper Payment. This would seem to be most likely if they remained actively working and/or continued to be paid their usual wage or salary. However, it is also

possible some of the difference between the HILDA Survey estimate and the administrative data is accounted for by fraudulent or mistaken claims by employers and by some individuals (incorrectly) receiving JobKeeper from more than one employer.

Comparing across industries (based on industry of employment in the previous year), Table 4.7 shows that 56.4% of people employed in the arts and recreation services industry received JobKeeper in 2020. The rate of receipt was also very high in other services (43.3%), accommodation and food services (39.8%), rental, hiring and real estate services (34.8%) and administrative and support

Table 4.7: Proportion of employed persons who received JobKeeper in 2020 (%)

All employed persons	23.1	<i>Gender</i>	
<i>Industry in previous year</i>		Male	22.5
Agriculture, Forestry and Fishing	15.0	Female	23.7
Mining	9.5	<i>State or territory</i>	
Manufacturing	27.5	New South Wales	24.9
Electricity, Gas, Water and Waste Services	5.8	Victoria	25.2
Construction	25.5	Queensland	20.9
Wholesale Trade	28.0	South Australia	19.2
Retail Trade	24.1	Western Australia	22.8
Accommodation and Food Services	39.8	Tasmania	20.5
Transport, Postal and Warehousing	20.5	Northern Territory	12.1
Information Media and Telecommunications	13.7	Australian Capital Territory	7.2
Financial and Insurance Services	7.7	<i>Age group</i>	
Rental, Hiring and Real Estate Services	34.8	15–24	25.7
Professional, Scientific and Technical Services	27.9	25–34	23.4
Administrative and Support Services	32.4	35–44	22.9
Public Administration and Safety	2.7	45–54	21.0
Education and Training	12.7	55 and over	23.2
Health Care and Social Assistance	21.3	<i>Occupation in the previous year</i>	
Arts and Recreation Services	56.4	Managers	28.2
Other Services	43.3	Professionals	16.8
<i>Quintile of the hourly wage distribution in previous year</i>		Technicians and Trades Workers	27.1
Bottom	28.0	Community and Personal Service Workers	30.9
Second	28.9	Clerical and Administrative Workers	21.6
Middle	19.7	Sales Workers	27.3
Fourth	14.3	Machinery Operators and Drivers	14.8
Top	12.2	Labourers	18.3

services (32.4%). Receipt was unsurprisingly very low in public administration and safety, and was also low in electricity, gas, water and waste services, financial and insurance services, and mining.

The bottom left panel of Table 4.7 shows that employees in the bottom two quintiles of the hourly wage distribution were more likely to receive JobKeeper than higher-paid employees. Those in the top quintile were the least likely to be receiving JobKeeper in 2020.

Receipt of JobKeeper was slightly higher for females—23.7% compared with 22.5% for males. Receipt was highest in Victoria, but it was almost equally high in New South Wales. Only 12.1% of employed persons received it in the Northern Territory, and 7.2% received it in the Australian Capital Territory. Rates of receipt were similar across all age groups, with the 15 to 24 age group having only a slightly higher rate of receipt than the other age groups. Comparing across occupations, receipt was highest for community and personal

service workers (30.9%), managers (28.2%), sales workers (27.3%) and technicians and trades workers (27.1%). Receipt was lowest for machinery operators and drivers (14.8%), professionals (16.8%) and labourers (18.3%).

Digital platform work

In recent years, there has been considerable public discussion of the rise of the ‘gig economy’, otherwise referred to as ‘digital platform work’ (to distinguish it from more traditional gig work, such as performed by musicians and other artists). In essence, this is work that involves providing services on a payment-for-task basis where providers and customers are ‘matched’ using an IT-based service provided by a third party. The most widely known examples include Uber (taxis), Menulog (food delivery), Airtasker (home tasks and repairs) and Freelancer (professional business services).

In 2020, the HILDA Survey for the first time included questions attempting to identify digital workers. All respondents were asked whether, during the past four weeks, did they ... *ever do any work that involved providing services on demand where you find customers and receive a payment for each task through a mobile app or website?* Those who responded in the affirmative were additionally asked about the number of hours per week they were engaged in this activity and whether it represented their main job.

Table 4.8 summarises responses to these questions. It shows that in 2020 only 0.8% of employed people engaged in digital platform work in the last four weeks, and their average weekly working hours in that work was 13.1 hours. It was the main job for just over half of them. Digital platform work is therefore not common, although the COVID-19 pandemic may have disproportionately impacted this form of work. For example, taxi services were significantly

Table 4.8: Persons employed in Digital Platform Work (DPW), by gender, age group and educational attainment, 2020

	<i>Proportion of employed persons engaged in DPW in last 4 weeks (%)</i>	<i>Persons undertaking DPW</i>	
		<i>Mean hours per week</i>	<i>DPW is main/only job (%)</i>
All	0.8	13.1	52.9
<i>Gender</i>			
Males	1.0	15.6	57.7
Females	0.6	8.0	43.2
<i>Age group</i>			
15–24	1.1	7.0	17.1
25–34	0.4	19.5	79.2
35–44	0.9	11.1	53.4
45–54	0.7	18.2	48.9
55 and over	1.0	12.3	69.4
<i>Educational attainment</i>			
University degree	0.7	10.5	39.4
Other post-school qualification	0.8	17.7	60.0
Completed high school	0.9	14.2	62.5
Less than high-school completion	0.8	6.5	55.7

Table 4.9: Employment shares of top three industries and top three occupations of those whose main job is Digital Platform Work (%)

	1. Managers	2. Clerical and Administrative Workers	3. Machinery Operators and Drivers	Other occupation	Total
1. Transport, Postal and Warehousing	0.0	4.6	33.7	0.0	38.4
2. Professional, Scientific and Technical Services	7.7	0.0	0.0	3.7	11.4
3. Health Care and Social Assistance	0.0	7.6	0.0	3.3	11.0
Other industry	9.8	3.8	4.5	21.2	39.3
Total	17.5	16.1	38.2	28.2	100.0

Box 4.6: Classification of educational attainment

The classification of educational qualifications adopted by the HILDA Survey is based on the Australian Standard Classification of Education (ASCED) (ABS, 2001), which classifies formal educational qualifications by level and by field of study.

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 five levels of attainment are distinguished: postgraduate degree (master's or PhD); bachelor's degree; Diploma or Certificate Level III or IV (other post-school qualification); Year 12 (high-school completion); and Year 11 and below (less than high-school completion), although often fewer categories are examined by combining these categories (for example, combining postgraduate degree and bachelor's degree into one 'bachelor's degree or higher' category). Note that, as explained in ABS (2014), Year 12 is defined to be a higher qualification than a Certificate Level 1 or 2, so that the category 'Less than high-school completion' includes people who hold a Certificate Level I or II.

The top three industries, comprising transport, postal and warehousing, professional, scientific and technical services, and health care and social assistance, collectively account for approximately 60% of digital platform workers (as indicated by the last column of Table 4.9). The top three occupations, comprising managers, clerical and administrative workers and machinery operators and drivers, account for approximately 70% of digital platform workers (as indicated by the bottom row of Table 4.9).

Transport, postal and warehousing alone accounts for 38.4% of digital platform workers, and most of these workers (33.7 of the 38.4) are machinery operators and drivers. It seems likely, based on these statistics, that approximately one-third of digital platform workers provide taxi or food delivery services.

negatively impacted. That said, food delivery probably received a boost.³

Males are more likely to engage in this form of work than females, while both young workers aged 15 to 24 and older workers aged 55 and over are more likely to engage in this work. Perhaps surprisingly, there is not a great deal of difference in participation in digital platform work by level of educational attainment (see Box 4.6, page 90). Employed university graduates are only

slightly less likely to engage in this work than employed persons without university qualifications, although digital platform work is much less likely to be the main job for university graduates.

Table 4.9 examines the industry and occupation composition of employment of digital platform workers. It considers the three most-common occupations and the three most-common industries and examines the percentage of workers in each occupation-industry group.



³ As noted in Chapter 1, the HILDA Survey under-represents immigrants who arrived in Australia after 2011. To the extent recent immigrants are more likely to engage in digital platform work, the HILDA Survey will underestimate its prevalence.

5

Life during the COVID-19 pandemic in 2020

Roger Wilkins



The COVID-19 pandemic and governments' public health responses to it profoundly affected the lives of Australians in 2020. All Australians were subject to severe restrictions on their travel, and at various times there were restrictions on the economic and social lives of the general population that have no precedent in Australia's history, even in war time. Residents of Victoria were subject to the most constraining and long-lasting legal restrictions, but all Australian residents experienced legal restraints on their behaviour that for most would have been unthinkable prior to the pandemic.

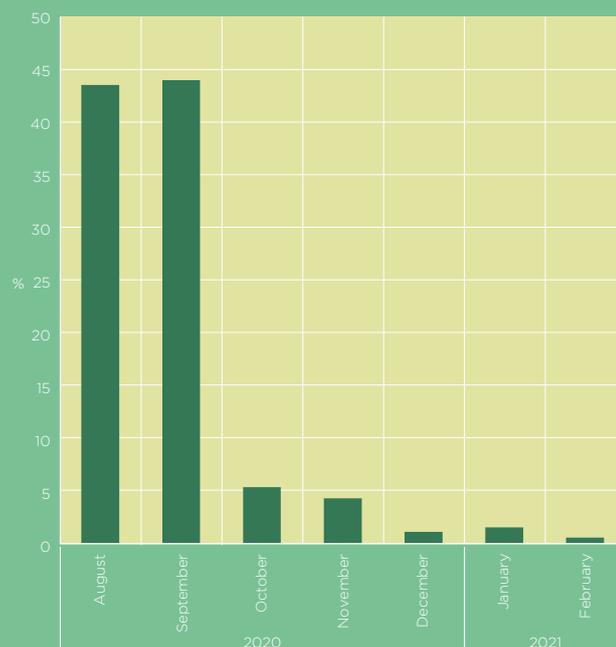
As the pandemic unfolded, the HILDA Survey had to rapidly adapt, switching from in-person interviews to telephone interviews and introducing a suite of new questions aimed at

understanding how the pandemic had impacted people's lives. That said, much of the existing survey content was well suited to ascertaining the impacts of the pandemic, and, as such, all of the

Box 5.1: When were the HILDA Survey interviews conducted in Wave 20?

The timing of HILDA Survey interviews of respondents has never been more important to interpretation of the findings of the survey than in Wave 20. Figure B5.1 shows the distribution of the timing of interviews. The vast majority (over 85%) were conducted in August and September of 2020. This was a period in which Victoria was in 'lockdown', while other jurisdictions were not, although some restrictions still applied in all states and territories in this period.

Figure B5.1: Distribution of month of personal interview in Wave 20



Box 5.2: The timeline of the pandemic and the public health measures over 2020

The first documented cases of COVID-19 were in Wuhan, China in December 2019, and by March 2020 the World Health Organisation had declared COVID-19 a pandemic. The first reported case in Australia was in late January 2020, while public health measures to reduce the spread of the virus in Australia were initiated in March 2020, beginning with the closure of the Australian border to non-residents from 20 March. Subsequent measures were largely introduced by individual state and territory governments and included restrictions on movements across state and territory borders, as well as social distancing requirements and restrictions on social and economic activity. All jurisdictions maintained at least some restrictions throughout 2020, but there was considerable variation, with Victoria experiencing the most severe and long-running restrictions.

There were broadly two waves of virus spread in 2020, the first in March and April directly affecting the entire country and the second running from June to October and only directly affecting Victoria. It was during the second wave that Victoria experienced severe restrictions and this corresponded to the period in which most people were interviewed (Box 5.1, page 91).

chapters in this year's report have something to say about the impact. Moreover, several chapters include analysis of the new pandemic-related questions included in Wave 20 that are

related to the chapter's topic, such as the questions on the labour market impacts of the pandemic, which are examined in Chapter 4. This chapter therefore seeks to supplement the other

chapters, covering aspects not covered elsewhere in the report. In particular, it examines the new Wave 20 content on the social, health and financial impacts of the pandemic, as well as considering how time use and experiences of various major life events were impacted.

COVID-19 exposure and perceived risks in 2020

Table 5.1 presents statistics on COVID-19 exposure and perceptions of risks of infection and adverse outcomes likely to be experienced in the event of

Table 5.1: Reported rates of infection with COVID-19 and perceptions of future risks of infection and hospitalisation—Persons aged 15 and over, 2020 (%)

	Diagnosed with COVID-19	Those not yet diagnosed with COVID-19		
		Mean probability have or will get infected in next 12 months	Mean probability will need to be hospitalised if infected	Percentage reporting the probability of hospitalisation if infected is 50% or greater
All persons aged 15 and over	0.5	20.7	38.7	45.9
<i>Gender</i>				
Males	0.6	19.7	36.2	42.2
Females	0.5	21.7	41.1	49.4
<i>Age group</i>				
15–24	0.5	20.4	28.7	28.0
25–34	0.3	23.8	29.8	32.5
35–44	0.7	22.9	32.1	36.9
45–54	0.4	22.0	37.1	46.5
55–64	0.9	19.4	44.7	56.5
65–74	0.4	16.8	53.2	67.9
75 and over	0.2	14.3	65.4	80.6
<i>State or territory</i>				
New South Wales	1.2	21.6	39.1	47.1
Victoria	0.3	24.1	35.9	42.0
Queensland	0.2	19.5	40.1	47.3
South Australia	*0.1	16.5	41.0	49.9
Western Australia	*0.0	16.5	39.9	46.5
Tasmania	*0.0	14.8	43.1	51.0
Northern Territory	*0.0	11.1	41.7	51.5
Australian Capital Territory	1.4	19.3	34.0	38.8

Note: * Estimate not reliable.

infection. Consistent with what is known from other sources about the spread of the virus in 2020, very few people reported infection in 2020. Nationwide, 0.5% reported being diagnosed with COVID-19, with no respondents in South Australia, Western Australia or Tasmania reporting a positive diagnosis. Fears of the virus were much higher. On average, the expected probability of infection over the 12 months subsequent to interview was 20.7%, and the average perceived probability of needing to be hospitalised in the event of infection was 38.7%.

Actual reported infection rates were highest for those aged 55 to 64, followed by those aged 35 to 44, while those aged 25 to 34 had the highest expected probability of infection over the next 12 months. Consistent with

actual hospitalisation rates, the self-assessed probability of requiring hospitalisation if infected is strongly ordered by age group, rising from an average of 28.7% for the 15 to 24 age group to 65.4% for those aged 75 and over. Perceived likelihood of infection was highest in Victoria, followed by New South Wales, and lowest in the Northern Territory.

Reported effects of the pandemic on people’s lives

Respondents were asked in 2020 how much their life had changed because of the ‘coronavirus crisis’. The last column of Table 5.2 shows that 24.3% reported it had changed to a great extent, 37.1% reported it had changed to

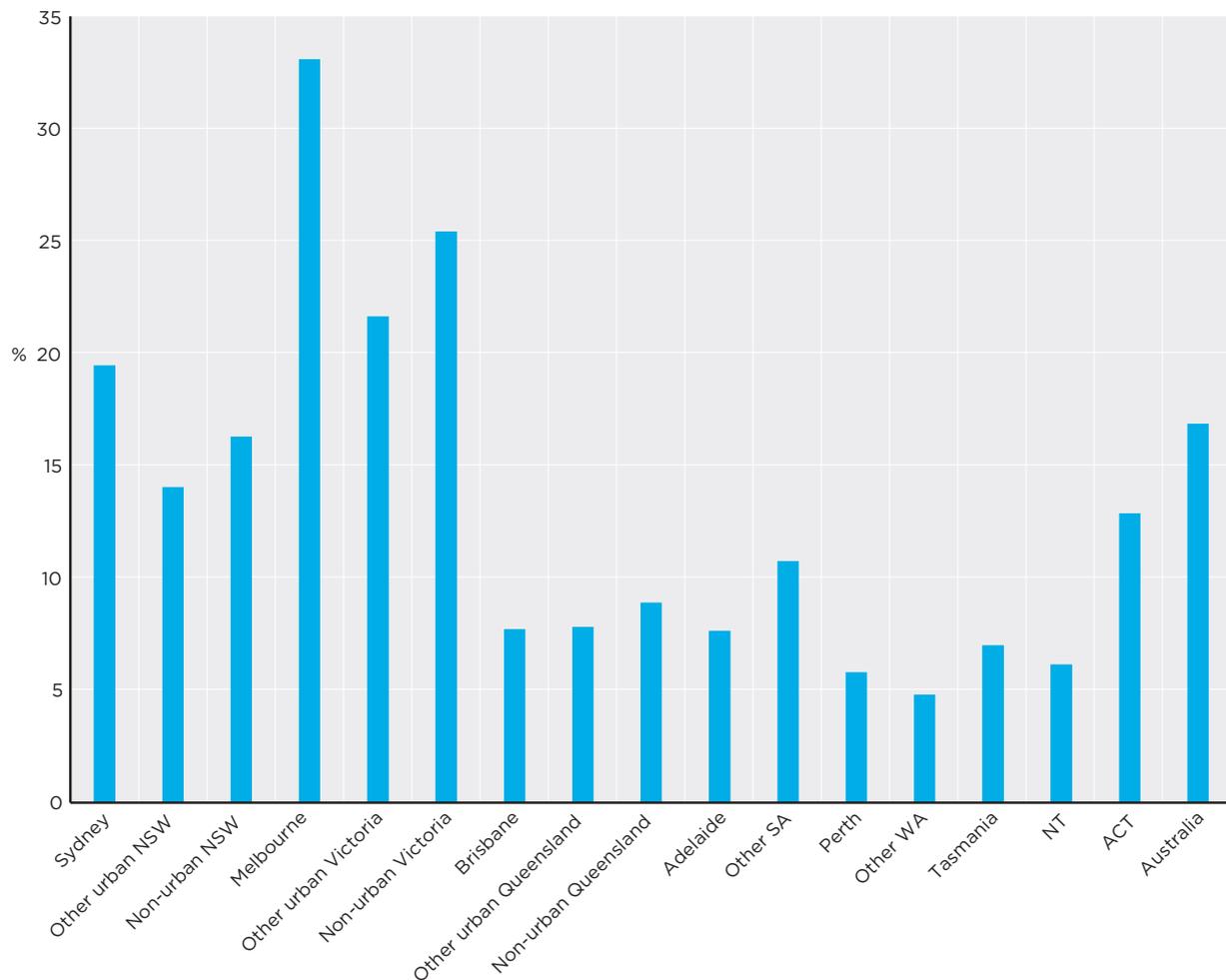
a moderate extent, 30.2% reported it had changed a little and 8.4% reported it had not changed at all. Those who reported at least some change in their life were also asked whether the change was for the better or the worse. In total (bottom row of Table 5.2), 9.7% of people aged 15 and over thought their life had changed for the better, 45.0% though it had changed for the worse and 36.8% thought that, while their life had changed, it was neither for the better nor the worse. The remaining 8.4% of people did not think their life had changed at all. Combining responses to the two questions, we can see that 18.5% of people thought their life was moderately worse due to the pandemic, and 16.9% thought it was much worse. While 9.7% of people thought the pandemic had changed their life for the better, only 2.1% of people

Table 5.2: Effect of the coronavirus crisis on people’s lives—Persons aged 15 and over, 2020

	Whether the change was for the better or worse			Total
	Better	Worse	Neither better nor worse	
<i>How much life has changed because of the coronavirus crisis</i>				
To a great extent	2.1	16.9	5.2	24.3
To a moderate extent	3.8	18.5	14.9	37.1
A little	3.8	9.7	16.7	30.2
Not at all	–	–	–	8.4
Total	9.7	45.0	36.8	100.0



Figure 5.1: Proportion of people aged 15 and over reporting in 2020 that their life was much worse because of the COVID-19 crisis, by region



thought life had improved to a great extent.

Figure 5.1 considers regional variation in the perceived extent of the impact of COVID-19, presenting the proportion reporting their life had been made much worse (that is, reporting that their life has changed to a great extent because of the coronavirus crisis and that this change has been for the worse). There are 16 regions distinguished: three regions in each of the three eastern mainland states (capital city, other urban areas and non-urban areas), two regions in the other two mainland states (capital city and rest of state) and one region for Tasmania and each of the two territories.

Considerable regional variation is evident. Consistent with the lockdowns operating in Victoria during the period interviews were conducted, the three Victorian regions had the highest proportions reporting life was much worse because of the coronavirus crisis. Moreover, Melbourne had the most severe restrictions within Victoria and correspondingly had the highest proportion reporting life was much worse—33.1% of people aged 15 and over, compared with 25.4% in non-urban Victoria, 21.7% in urban areas of Victoria other than Melbourne, and 16.9% for the country as a whole. Sydney also had a relatively high proportion (19.5%) reporting that life was much worse because of the coronavirus crisis. Residents of

Western Australia were the least likely to report life was much worse due to the pandemic, and Tasmania also had a low proportion reporting life was much worse.

Table 5.3 examines how perceived major worsening of one's life is associated with the characteristics of individuals. It presents, for Victoria and the rest of Australia separately, the proportion reporting 'life changed for the worse to a great extent', disaggregated by demographic and other characteristics.

Comparing across gender and age groups, in both Victoria and the rest of Australia, differences across groups are relatively small and show no clear patterns. Perhaps surprising, however, is

Box 5.3: Relationship in family

Relationship in the family is based on an individual's family type and their position in that family. In this report, we distinguish 10 categories for an individual's relationship in their co-resident family: (1) member of a non-elderly couple (defined as where at least one member is aged under 65) without dependent children; (2) member of a couple that has dependent children; (3) parent in a single-parent family with dependent children; (4) single non-elderly male (aged under 65); (5) single non-elderly female; (6) member of an older couple (both aged 65 or over) without dependent children; (7) single older male (aged 65 or over); (8) single older female; (9) dependent child in a couple-parent family; and (10) dependent child in a single-parent family.

that people aged 15 to 24 were among the least likely to report that their life was much worse because of the crisis. The unemployed were somewhat more likely to report life was much worse than the employed and those not in the labour force, which is unsurprising given that the crisis caused many people to become unemployed (see Table 4.1, page 67).

Differences in rates of life becoming much worse are evident according to an individual's relationship in the family (see Box 5.3, page 95), particularly in Victoria. Nearly 40% of single parents and single older people reported their life had become much worse because of the coronavirus crisis. Dependent children in Victoria had a relatively low proportion reporting life had become much worse (although they nonetheless had a much higher proportion

reporting this than people in the rest of the country).

Approximately 30% of Victorians whose relationship in the family was a couple or non-elderly single person reported life was much worse because of the crisis.

In Victoria, people living in houses, whether separate or semi-detached, had lower proportions reporting life had become much worse than people living in flats or other dwelling types, which include nursing homes, boarding houses and caravan parks. This is consistent with confinement to one's home being less of an imposition if one has a larger, more private and/or otherwise better home.

People in poor general health and people in poor mental health (see Box 2.4, page 19) had higher rates of reporting life had become much worse, as did people with disability (see Box 2.9, page 30). The bottom panel of Table 5.4

considers whether there was an association between whether life had become much worse and introversion/extroversion as measured by the HILDA Survey (see Box 2.5, page 20). Reduced social interaction associated with public health measures might be thought to be more detrimental to extroverted people, and there is some limited support for this in the estimates presented in the table. Classifying people as introverted (approximately bottom 20% on the introversion/extroversion scale), extroverted (top 20%) and neither (middle 60%), we see that in Victoria 32.1% of those classified as extroverted reported life had become much worse, compared with approximately 30% for other people. In the rest of Australia, 13.9% of those classified as extroverted said life had become much worse, compared with 12.1% of those neither extroverted or introverted and 10.6% of those classified as introverted.

In addition to being asked about the impact of the coronavirus crisis on their lives, partnered people were asked whether, compared with their life before the coronavirus crisis, their relationship with their partner 'improved a lot', 'improved a little', 'stayed about the same',



Table 5.3: Proportion for whom life was much worse because of the coronavirus crisis, by characteristics—
Persons aged 15 and over, 2020 (%)

	<i>Victoria</i>		<i>Rest of Australia</i>	
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>
<i>Age group</i>				
15-24	26.6	21.3	8.0	10.2
25-34	27.8	33.3	10.9	10.2
35-44	30.1	30.6	10.3	11.1
45-54	31.5	27.9	12.8	11.6
55-64	36.2	35.1	14.2	14.0
65-74	30.5	33.6	11.1	18.8
75 and over	31.9	37.4	12.7	15.7
<i>Labour force status</i>				
Employed	29.7	29.9	9.9	10.6
Unemployed	33.8	39.5	19.9	20.8
Not in the labour force	31.2	30.9	12.7	15.1
<i>Relationship in family</i>				
	<i>Persons</i>		<i>Persons</i>	
Non-elderly couple	30.3		11.4	
Couple with dependent children	30.0		12.1	
Single parent	39.0		11.2	
Single non-elderly male	29.4		11.3	
Single non-elderly female	29.7		11.3	
Older couple	32.7		14.5	
Single older male	38.4		9.5	
Single older female	39.2		17.7	
Dependent child in couple-parent family	25.7		8.1	
Dependent child in single-parent family	21.0		11.5	
<i>Dwelling type</i>				
Separate house	29.4		11.5	
Semi-detached house	31.0		15.9	
Flat	37.0		12.4	
Other	39.9		15.7	
<i>General health</i>				
Not in poor general health	29.4		11.3	
In poor general health	35.5		14.7	
<i>Mental health</i>				
Not in poor mental health	27.8		10.7	
In poor mental health	37.3		15.5	
<i>Disability</i>				
No moderate or severe disability	29.7		11.2	
Moderate or severe disability	33.9		15.0	
<i>Personality introversion/extroversion</i>				
Introverted	30.1		10.6	
Neither	30.3		12.1	
Extroverted	32.1		13.9	

Table 5.4: Change in relationship with partner compared with before the coronavirus crisis—Partnered persons, 2020 (%)

	<i>Improved</i>	<i>Worsened</i>
New South Wales	19.2	6.3
Victoria	22.4	8.2
Queensland	16.9	6.1
South Australia	15.5	7.1
Western Australia	17.3	4.7
Tasmania	20.0	2.1
Northern Territory	20.3	11.2
Australian Capital Territory	15.9	6.0
Australia	19.1	6.6

Notes: Improved—Relationship ‘improved a little’ or ‘improved a lot’; Worsened—Relationship ‘worsened a little’ or ‘worsened a lot’.

‘worsened a little’ or ‘worsened a lot’. Table 5.4 shows that, nationwide, nearly three-quarters of people reported their relationship had ‘stayed about the same’, while 19.1% reported it had improved (either a little or a lot) and only 6.6% reported it had worsened (again, either a little or a lot). Residents of the Northern Territory were most likely to report their relationship had worsened (11.2%), followed by residents of Victoria (8.2%), while residents of Tasmania were the least likely to report their relationship had worsened (2.1%).¹

Reported behavioural changes in response to the pandemic

A lengthy sequence of questions was included in Wave 20 on changes in people’s behaviours as a result of the pandemic and government-imposed restrictions. Table 5.5 examines responses to questions about health and social behaviours, which asked about

behaviours in April 2020 (in the immediate aftermath of the onset of the pandemic when restrictions were first introduced nationwide) and in the four weeks leading up to interview. For each of the activities listed in Table 5.5 (for example, eating fresh fruit and vegetables), respondents were asked whether, compared with before the coronavirus crisis, they engaged in the activity ‘much more’, ‘a little more’, ‘a little less’, ‘much less’ or ‘about the same’. The table presents the proportion reporting doing each activity more (combining the responses ‘much more’ and ‘a little more’) and the proportion reporting doing each activity less (combining the responses ‘much less’ and ‘a little less’).

When it comes to diet, respondents indicated the pandemic had led them to eat more fruit and vegetables, but also more food high in sugar. A significant proportion of respondents reported increasing physical activity, but a large proportion indicated they had decreased the amount of exercise they were getting, especially in Victoria. Alcohol and tobacco consumption did not increase



according to respondents. Volunteering declined precipitously, which may at least in part be due to the suspension/interruption of junior sport and other opportunities for volunteering rather than deliberate reductions in volunteer activity. Television viewing unsurprisingly surged, while contact with family friends

¹ Note, however, that this measure may underestimate the proportion of relationships that worsened. This is because it does not capture relationships that ended, since only those who were partnered and were with the same partner as before the pandemic arrived were asked this question. Indeed, Table 5.5 indicates there was a slight increase in separations after the onset of the pandemic.

tended to decline.

Social distancing behaviour is examined in Table 5.6. In Victoria, there were legal requirements at the time of survey that made observation of these behaviours very likely. Correspondingly, we see that 84.6% of Victorians reported it was nearly always true that they stayed at home and only went out for the essentials, and 84.5% reported nearly always trying to keep a distance of at least 1.5 metres from people not in their household. Across the country as a whole, 51.0% reported nearly always only leaving the home for essentials, and 66.5% reported nearly always trying to keep 1.5 metres away from people not in their household. These are quite high proportions in the absence of

legal requirements in most of the country. That said, considerable variation across the states and territories is evident, with residents outside of Victoria, New South Wales and the Australian Capital Territory relatively unlikely to be restricting outings to purchasing the essentials.

Concerns arose during 2020 (and 2021) of diminished access to or use of non-emergency health care due to government restrictions and/or fears of the virus. Table 5.7 summarises responses to questions included in Wave 20 on whether health care providers had cancelled or deferred appointments, and similarly whether individuals had cancelled or deferred medical appointments because of the coronavirus crisis.

Across the country as a whole, 8.9% of people aged 15 and over reported they had a doctor, clinic or hospital cancel or defer an appointment, 9.8% had a dentist cancel or defer, 1.4% had a mental health professional (such as a psychologist or psychiatrist) cancel or defer and 4.4% had an allied health provider (such as a physiotherapist, podiatrist or optometrist) cancel or defer. Conversely, 5.8% of people aged 15 and over had themselves cancelled or deferred an appointment with a doctor, clinic or hospital, while 5.5% had cancelled or deferred a dental appointment, 1.0% had cancelled or deferred an appointment with a mental health professional and 4.4% had cancelled or deferred

Table 5.5: Reported changes in reported health and social behaviours compared with pre-COVID –Persons aged 15 and over, 2020 (%)

	April 2020		Last 4 weeks	
	More	Less	More	Less
<i>Ate fresh fruit and vegetables</i>				
Victoria	9.2	5.7	13.5	8.5
Australia	8.2	5.4	11.4	4.8
<i>Ate food high in sugar</i>				
Victoria	17.3	12.4	18.5	17.1
Australia	14.7	11.2	10.1	16.2
<i>Participated in moderate or vigorous physical activity</i>				
Victoria	20.1	31.5	20.1	36.3
Australia	15.9	30	19.9	22.5
<i>Consumed alcohol</i>				
Victoria	16.4	13.2	13.9	18.2
Australia	15.1	11.3	9.0	14.4
<i>Smoked tobacco</i>				
Victoria	3.5	2.6	3.3	2.6
Australia	3.3	2.4	2.3	2.9
<i>Volunteered or undertook charity work</i>				
Victoria	2.4	8.3	1.5	10.6
Australia	1.7	8.8	2.3	7.7
<i>Watched TV, movies or video streaming services (such as Netflix, Stan, and ABC iView)</i>				
Victoria	45.1	9.2	46.2	7.4
Australia	45.2	5.2	27.4	12.1
<i>Stayed in contact with friends and family living outside of your household</i>				
Victoria	24.4	33.7	21.4	37.9
Australia	23.4	29.8	22.7	21.3

an appointment with an allied health provider.

In 2020, the HILDA Survey identified whether people had each of 12 diagnosed serious illness conditions: arthritis or osteoporosis; asthma; chronic bronchitis or emphysema; cancer; type-1 diabetes; type-2 diabetes;

depression or anxiety; other mental illness; heart disease; high blood pressure or hypertension; any other serious circulatory condition; and chronic kidney disease. Table 5.7 shows that medical cancellations and deferrals were more common for people with one or more of these

conditions, which is likely to simply reflect the fact that they were more likely to have an appointment that could be cancelled or deferred. This is supported by the finding that dental appointments, which would be more similarly likely for people regardless of the presence

Table 5.6: Social distancing behaviour during the last four weeks—Persons aged 15 and over, 2020 (%)

	<i>Not true at all</i>	<i>Rarely true</i>	<i>Sometimes true</i>	<i>Often true</i>	<i>True nearly all the time</i>	<i>Total</i>
<i>Stayed at home and only went out for the essentials</i>						
New South Wales	8.3	5.6	15.9	24.0	46.2	100.0
Victoria	1.6	0.7	4.5	8.5	84.6	100.0
Queensland	18.5	9.8	14.5	22.1	35.1	100.0
South Australia	23.2	6.3	17.8	17.1	35.7	100.0
Western Australia	33.6	7.8	17.1	14.4	27.1	100.0
Tasmania	19.9	5.6	14.9	22.6	37.0	100.0
Northern Territory	32.5	14.7	17.5	13.3	22.0	100.0
Australian Capital Territory	12.6	7.1	13.1	26.0	41.2	100.0
Australia	12.7	5.5	12.8	18.0	51.0	100.0
<i>When not at home, tried to keep a distance of at least 1.5 metres from people not in your household</i>						
New South Wales	1.6	1.6	9.4	20.3	67.2	100.0
Victoria	0.6	0.5	3.7	10.7	84.5	100.0
Queensland	2.9	4.0	10.8	24.4	57.9	100.0
South Australia	2.9	3.5	9.4	19.7	64.4	100.0
Western Australia	10.3	3.9	18.5	25.1	42.3	100.0
Tasmania	4.6	4.1	12.1	29.5	49.8	100.0
Northern Territory	16.2	5.1	20.5	19.5	38.7	100.0
Australian Capital Territory	1.8	2.3	10.5	22.9	62.4	100.0
Australia	2.7	2.3	9.3	19.3	66.5	100.0

Table 5.7: Cancellation or deferral of medical appointments because of the coronavirus crisis—Persons aged 15 and over, 2020 (%)

	<i>Provider cancelled or deferred</i>				<i>Individual cancelled or deferred</i>			
	<i>Doctor, clinic or hospital</i>	<i>Dentist</i>	<i>Mental health professional</i>	<i>Other allied health provider</i>	<i>Doctor, clinic or hospital</i>	<i>Dentist</i>	<i>Mental health professional</i>	<i>Other allied health provider</i>
All persons	8.9	9.8	1.4	4.4	5.8	5.5	1.0	4.4
Persons with a serious illness condition	13.1	10.5	2.7	6.0	8.1	5.3	1.8	5.5
<i>State or territory</i>								
New South Wales	8.6	7.6	1.1	3.2	6.1	5.9	0.8	3.9
Victoria	8.9	12.4	1.6	7.1	6.5	6.7	1.5	6.2
Queensland	9.3	8.6	1.3	3.0	5.9	4.0	0.8	3.5
South Australia	10.2	12.7	3.1	5.5	5.2	5.7	0.9	4.1
Western Australia	8.8	10.0	1.2	3.8	3.8	4.0	1.0	3.6
Tasmania	9.7	8.3	1.0	2.7	6.8	3.8	0.8	2.3
Northern Territory	3.9	8.1	1.1	2.7	1.9	3.8	1.4	2.3
Australian Capital Territory	8.5	11.8	1.8	2.6	5.4	5.9	2.0	5.2



of a serious illness condition, had similar rates of cancellations and deferrals for those with serious illness conditions and the general population.

Rates of cancellation or deferral of medical appointments are relatively similar across most of the states and territories. It is only in respect of allied health providers that Victoria stands out as having a higher rate of cancellations or deferrals, both by providers and by individuals themselves. Cancellations or deferrals of doctor, clinic and hospital appointments due to the pandemic were quite low in the Northern Territory, while South Australia had the highest rates of provider-initiated cancellations or deferrals for all four types of provider.

Financial measures taken in response to the crisis

Public health measures introduced in 2020 resulted in large amounts of economic activity being forced to cease, raising concerns about the financial impacts on households. As a result of these concerns, the Australian Government introduced a number of income supports over the course of the year. It also introduced a ‘COVID-19 early release of super’ scheme, whereby people not yet retired were able to access up to \$20,000 of their superannuation in 2020 (up to \$10,000 in the 2019–20 financial year and up to \$10,000 in the 2020–21 financial year) tax free and without penalty.

Table 5.8 examines the extent of use of this scheme, as well as other financial measures people reported taking due to the pandemic. It shows that 8.2% of the population aged 18 and over

took advantage of the early release of super scheme, on average withdrawing \$8,554 in the 2019–20 financial year. Queensland had the highest take-up of the scheme, at 10.5%, while the Australian Capital Territory had the lowest take-up, at 1.6%. The second panel considers all superannuation withdrawals due to the pandemic, irrespective of whether through the early release scheme or not. It shows that 9.0% of Australian residents aged 18 and over made superannuation withdrawals because of the pandemic, withdrawing an average of \$11,908.

Few people sold assets or went into debt as a result of the crisis, but 11.7% of the adult population reported dipping into their savings, on average withdrawing \$4,997. Dipping into savings was most prevalent in Victoria (13.0%) and least prevalent in the two territories (6.9%).

Table 5.8 also shows the proportion of renters who reported suspending their rental payments for at least some period of time, and the proportion who unsuccessfully attempted to do so. Similarly, the table presents the proportion of home-owners with a mortgage who reported suspending their mortgage repayments and the proportion who unsuccessfully attempted to do so. Nationally, 5.8% of renters reported suspending their rent for at least some period of time, but strikingly a further 5.4% attempted to do so but were unsuccessful, presumably because the landlord refused to agree. Almost exactly the same proportion of home-owners with a mortgage attempted to suspend their mortgage repayments—10.3% compared with the 11.2% of renters who attempted to suspend their rent—but they were much more likely to be successful, with only 1.0%

Table 5.8: Financial measures taken as a result of the coronavirus crisis, by state or territory of residence —Persons aged 18 and over, 2020

	Australia	NSW	Vic	Qld	SA	WA	Tas	NT	ACT
<i>COVID-19 early release of super scheme</i>									
Took advantage of the scheme(%)	8.2	8.3	7.1	10.5	6.8	7.9	8.7	6.3	1.6
Mean amount withdrawn (\$, December 2020 prices)	8,554	8,330	8,862	8,711	7,446	8,662	8,851	9,665	10,000
<i>Any superannuation withdrawal because of the coronavirus</i>									
Withdrew superannuation (%)	9.0	9.3	7.9	11.2	7.2	8.6	9.2	7.8	1.9
Mean amount withdrawn (\$, December 2020 prices)	11,908	11,421	11,794	11,478	10,708	11,188	30,819	15,204	9,118
<i>Sold assets</i>									
Proportion who sold assets (%)	1.1	1.2	1.0	1.0	0.8	1.8	0.5	0.0	1.0
Mean value of assets sold (\$, December 2020 prices)	31,746	27,151	65,742	15,263	21,973	223,84	1,719	–	11,313
<i>Dipped into savings</i>									
Proportion who dipped into savings (%)	11.7	12.2	13.0	10.6	9.1	12.4	8.7	6.9	6.9
Mean value of savings withdrawn (\$, December 2020 prices)	4,997	5,127	5,218	4,479	3,613	5,567	1,909	17,473	4,554
<i>Went into debt</i>									
Proportion who took on debt (%)	1.5	1.4	1.7	1.5	1.5	1.6	1.4	3.5	1.1
Mean value of debt (\$, December 2020 prices)	13,483	16,028	6,089	16,999	4,352	28,367	6,160	18,044	4,331
<i>Rent suspension by private renters</i>									
Suspended rent (%)	5.8	8.1	5.3	3.5	3.0	5.2	6.2	4.2	9.7
Unsuccessfully attempted to suspend rent (%)	5.4	8.1	5.8	3.1	2.3	4.3	1.5	0.0	1.4
<i>Mortgage suspension by home-owners with a mortgage</i>									
Suspended mortgage (%)	10.3	11.2	12.8	9.3	8.3	8.2	4.4	11.3	2.2
Unsuccessfully attempted to suspend mortgage (%)	1.0	0.9	2.0	0.4	0.7	0.6	1.1	0.0	0.0

unsuccessfully attempting to suspend mortgage repayments.

New South Wales had the highest proportion of renters seeking to suspend their rent, with half of the 16.2% who sought to suspend their rent successful. The Australian Capital Territory had the highest proportion of renters successfully suspending their rent, at 9.7%. South Australia had the lowest proportion of renters suspending their rent (3.0%), while Victoria had the lowest success rate, with less than half of those seeking to suspend their rent successfully doing so. The rate of mortgage suspensions was highest in Victoria, but the state also had the lowest success

rate, with 2.0% of home-owners with a mortgage unsuccessfully attempting to suspend repayments. The Australian Capital Territory had the lowest proportion of home-owners with a mortgage who had suspended repayments.

Table 5.9 investigates who accessed the early release of super scheme in the first half of 2020, restricting to people aged 18 to 64. It shows that 11.4% of men and 9.0% of women in this age range accessed the scheme. Single-parent families, followed by single people and couples with dependent children, had the highest take-up rates, while couples without children and with

non-dependent children had the lowest rates. The proportion accessing the scheme was 13.3% for those aged 25 to 44, compared with 10.3% of those aged 45 to 54, 5.7% of those aged 55 to 64 and only 5.6% of those aged 18 to 24. Nearly one-in-five of the unemployed accessed the scheme, while 10.9% of the part-time employed, 9.3% of the full-time employed and 9.2% of those not in the labour force accessed the scheme.

Renters of private housing were considerably more likely to access the scheme than home-owners—especially home-owners without a mortgage—and also

more likely to do so than renters of social housing. Comparing across quintiles of the distribution of household income (see Box 3.2, page 34), there is a pattern of a decreasing proportion

accessing the scheme as we move up the income distribution, have little or no superannuation. The relationship between wealth (see Box 3.14, page 64) and accessing the scheme is

stronger, with those in the bottom quintile the most likely to access the scheme and those in the top quintile the least likely. Among those accessing the scheme, the last two columns,

Table 5.9: Access to superannuation as part of the early release scheme, first round in 2020, by characteristics —Persons aged 18 to 64

	Accessed (%)	Those who accessed the scheme	
		Mean amount accessed (\$)	Withdrew maximum amount of \$10,000 (%)
<i>Gender</i>			
Male	11.4	8,716	76.0
Female	9.0	8,327	68.2
<i>Family type</i>			
Couple	8.5	8,756	76.6
Couple with dep children	11.5	8,970	78.1
Single parent	14.8	7,500	53.5
Single	11.6	8,373	73.2
Non-dependent child	5.9	6,907	44.6
<i>Age group</i>			
18–24	5.6	5,349	23.4
25–34	13.3	8,246	68.6
35–44	13.3	9,007	79.2
45–54	10.3	9,144	79.8
55–64	5.7	9,287	86.7
<i>Labour force status</i>			
Employed full-time	9.3	9,094	81.8
Employed part-time	10.9	8,065	63.9
Unemployed	19.3	7,808	63.9
Not in the labour force	9.2	8,215	65.9
<i>Housing tenure type</i>			
Social housing	11.6	6,192	41.1
Private rental	15.8	8,452	72.2
Owner with mortgage	8.7	9,032	78.7
Owner outright	5.3	8,055	64.2
<i>Income quintile</i>			
Bottom	10.2	7,676	58.5
Second	16.0	8,372	68.4
Middle	12.5	8,928	79.7
Fourth	7.8	8,900	79.5
Top	6.2	8,632	73.3
<i>Wealth quintile in 2018</i>			
Bottom	15.6	7,838	61.7
Second	15.2	8,803	79.7
Middle	9.7	9,185	78.2
Fourth	5.8	8,933	74.1
Top	4.0	8,039	67.1

presenting the mean amount accessed and the proportion withdrawing the full \$10,000 permitted, both show a pattern of those likely to have lower superannuation balances tending to withdraw less. This includes young people (aged 18 to 24), single parents, those not employed full-time, those living in social housing and those with low income or wealth.

The early release of superannuation scheme was intended to be accessed by those who were in financial need, for

example because they had a reduction in working hours, became unemployed or were reliant on government benefits. However, there was little verification of economic circumstances possible in the context of the need to urgently allow people access to financial resources. It was therefore not certain at the time of implementation the extent to which the scheme was accessed by those who needed access.

Table 5.10 considers this question by examining economic

experiences as a result of the pandemic. The table shows that those who accessed the scheme were much more likely to have experienced financial stress (see Box 3.9, page 51) since January 2020 (25.5% versus 10.4% for those who did not access the scheme) and were also much more likely to have had adverse labour market events happen to them or have had to cease their business. In total, 57.8% of those who accessed the scheme had one or more of the following occur to them as a result of the pandemic: dismissal; being stood

Table 5.10: Superannuation balances and economic experiences of those who accessed superannuation as part of the early release scheme, first round in 2020—Persons aged 18 to 64

	Accessed scheme	Did not access scheme
Mean superannuation balance in 2018 (\$, December 2020 prices)	65,103	109,308
Median superannuation balance in 2018 (\$, December 2020 prices)	33,692	32,137
Experienced two or more indicators of financial stress (%)	25.5	10.4
<i>Reported the following happened because of the coronavirus crisis (%)</i>		
Fired or made redundant	8.8	2.4
Stood down	14.7	5.3
Working hours cut	39.0	17.1
Hourly rate of pay cut	10.9	3.8
Total earnings decreased	43.7	15.0
Ceased own business	5.7	3.0
Any of the above	57.8	24.5



down; working hours cut; pay rate cut; total earnings decreased; and cessation of own business. By comparison, 24.5% of those who did not access the scheme had one or more of these events occur to them. That said, it is also true that 42.2% of those who accessed the scheme did not report adverse economic effects of the pandemic, suggesting a significant proportion of those using the scheme were not its intended targets.

Impacts on time spent on components of paid and unpaid work

Time use was undoubtedly impacted by the pandemic in 2020, and this included the

Box 5.4: Classification of paid and unpaid work

In the self-completion questionnaire 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 the 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 your 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 (for example, 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.

amount and composition of time spent on paid and unpaid work. Table 5.11 examines how time spent on paid and various components of unpaid work changed between 2019 and 2020

for males and females aged 15 and over (see Box 5.4, page 104). As in earlier analysis, Victoria is examined separately from the rest of Australia on the basis that the lockdowns in place at the

Table 5.11: Mean time spent on components of paid and unpaid work—Persons aged 15 and over, 2019 and 2020 (hours per week)

	Males			Females		
	2019	2020	Change (%)	2019	2020	Change (%)
<i>Victoria</i>						
Paid employment	27.4	24.6	-10.2	19.7	18.1	-8.1
Travelling to and from place of paid employment	3.8	2.9	-23.7	2.5	1.8	-28.0
Household errands	3.6	3.5	-2.8	4.8	4.2	-12.5
Housework	5.9	5.9	0.0	12.5	12.7	1.6
Outdoor tasks	4.1	4.6	12.2	2.5	2.9	16.0
Playing with and caring for your children	3.7	3.6	-2.7	7.6	7.8	2.6
Looking after other people's children	0.5	0.6	20.0	1.2	1.2	0.0
Volunteer or charity work	0.9	0.7	-22.2	0.9	0.6	-33.3
Caring for disabled spouse or relative or elderly parent	1.2	1.5	25.0	1.8	1.8	0.0
<i>Rest of Australia</i>						
Paid employment	27.7	25.6	-7.6	19.7	19.5	-1.0
Travelling to and from place of paid employment	3.4	2.7	-20.6	2.5	2.1	-16.0
Household errands	3.8	3.6	-5.3	4.8	4.6	-4.2
Housework	6.3	6.3	0.0	12.8	12.8	0.0
Outdoor tasks	4.3	4.5	4.7	2.7	2.9	7.4
Playing with and caring for your children	3.6	3.4	-5.6	7.7	7.2	-6.5
Looking after other people's children	0.7	0.6	-14.3	1.4	1.2	-14.3
Volunteer or charity work	0.9	0.8	-11.1	0.9	0.7	-22.2
Caring for disabled spouse or relative or elderly parent	1.0	1.0	0.0	1.9	2.1	10.5

time of survey fieldwork would be expected to have profound impacts.

While changes tend to be larger in Victoria, patterns are nonetheless somewhat similar in the rest of Australia. Time spent in paid employment decreased, more so for males than females, and time spent commuting declined substantially—by around one quarter in Victoria and only slightly less in the rest of Australia. Time spent on household errands decreased, but time spent on outdoor tasks (such as gardening) increased considerably. For reasons that are not clear, time spent playing with and caring for one’s own children declined for men in Victoria and both men and women in the rest of Australia. Strikingly, time spent on volunteer or charity work declined across the country, but especially in Victoria.

Life events after the onset of the pandemic

Every year, the HILDA Survey asks respondents whether each of a number of typically uncommon but significant life events has occurred in the past year. Respondents are also asked which quarter of that year the event occurred, allowing us to identify those who experienced each event in the approximately six months between the onset of the pandemic and the time of survey completion.

Table 5.12 compares the six-month reports of each of a number of life events in 2020 with the average of six-month reports of these events over the 2015 to 2019 period. A slight decrease in the proportion getting married is evident outside of Victoria, but not in



Table 5.12: Major life events occurring in the last six months — Persons aged 15 and over, 2015–2019 and 2020 (%)

	<i>Victoria</i>		<i>Rest of Australia</i>	
	<i>2015–2019</i>	<i>2020</i>	<i>2015–2019</i>	<i>2020</i>
Got married	0.5	0.5	0.7	0.4
Separated from spouse or long-term partner	1.5	1.7	1.4	1.5
Got back together with spouse or long-term partner after a separation	0.6	0.6	0.4	0.5
Pregnancy/pregnancy of partner	1.7	2.1	1.8	2.0
Serious personal injury or illness to self	4.7	3.8	4.6	4.0
Serious personal injury or illness to a close relative/family member	7.7	6.2	7.5	7.2
Death of spouse or child	0.3	0.2	0.4	0.3
Death of other close relative/family member (e.g., parent or sibling)	5.9	6.0	6.4	5.8
Victim of physical violence (e.g., assault)	0.9	0.9	0.7	0.9
Victim of a property crime (e.g., theft, housebreaking)	1.9	1.7	1.6	1.2
Major improvement in financial situation (e.g., won lottery, received an inheritance)	1.5	1.7	1.4	1.8
Major worsening in financial situation (e.g., went bankrupt)	1.1	2.7	1.0	1.9
Change residence	7.0	6.6	7.7	7.2
Retired from the workforce	0.6	0.7	0.6	0.8
Changed jobs (i.e., employers)	7.1	5.7	6.6	6.4
Promoted at work	3.8	2.9	3.2	3.3

Note: The ‘last six months’ refers to the six-month period leading up to completion of the self-completion questionnaire. In most cases, the six-month period began in February or March of the survey year (see Box 5.1, page 91).



Victoria itself, which is somewhat surprising. In both Victoria and the rest of Australia, there was a slight increase in separation in 2020. The proportion reporting pregnancy (their own or their partner's) rose markedly, from 1.7% to 2.1% in Victoria, and from 1.8% to 2.0% in the rest of Australia.

Reported serious injuries and illnesses declined in 2020, and there was a slight decline in reported deaths of a spouse or child. Reports of experiencing physical violence did not change in Victoria but increased from 0.7% to 0.9% in the rest of Australia. Property crimes decreased, applying to 1.7% of Victorians in 2020, down from an average of 1.9% over the 2015 to 2019 period, and applying to 1.2% of people in the rest of Australia in 2020, down from 1.6%.

Perhaps surprising is that the proportion reporting a major improvement in financial situation in the last six months increased in 2020 in both Victoria and the rest of Australia. However, the proportion reporting a major worsening in financial situation rose from 1.1% to 2.7% in Victoria and from 1.0% to 1.9% in the rest of Australia. The proportion moving house in the last six months declined in 2020 in both Victoria and the rest of Australia, from 7.0% to 6.6% in Victoria and from 7.7% to 7.2% in the rest of Australia.

There was a slight uptick in retirement in 2020 in Victoria and the rest of Australia, while the proportion changing jobs declined markedly in Victoria and

marginally in the rest of Australia. Promotions also decreased in Victoria, but not in the rest of Australia.

Impacts on measures of subjective wellbeing and health

In every wave of the HILDA Survey respondents have been asked how satisfied they are with various aspects of their life and with their life overall (see Box 2.10, page 30). The upper panel of Table 5.13 presents the mean values of responses to these questions in 2019 and in 2020 for Victoria and for the rest of Australia. (Note that higher values correspond to higher satisfaction.) Strikingly, in Victoria, mean satisfaction increased between 2019 and 2020 for all life aspects other than 'employment opportunities' and 'feeling part of the local community'. In the rest of Australia, mean satisfaction remained unchanged for employment opportunities and increased for all other life aspects. However, despite this, in both Victoria and the rest of Australia, mean overall life satisfaction did not change, remaining at 7.9 on the 0-10 scale.

Unsurprising is that average satisfaction with the amount of free time one has increased the most, rising from 6.9 to 7.4 in Victoria, and from 6.9 to 7.1 in the

Box 5.5: Body Mass Index (BMI)

BMI is a crude measure of body fat. It is calculated by dividing weight (in kilograms) by height (in metres) squared. Height and weight have been collected by the HILDA Survey every wave since Wave 6. A person is classified as 'underweight' if BMI is less than 18.5, 'normal weight' if BMI is at least 18.5 but less than 25, 'overweight' if BMI is at least 25 but less than 30 and 'obese' if BMI is 30 or higher. BMI takes no account of body composition (for example, muscle mass), and is therefore not regarded as a reliable measure of body fat for individuals, but it is regarded as a useful measure for population groups.

rest of Australia. Perhaps less anticipated is the rise in satisfaction with one's financial situation, which rose from an average of 6.9 to 7.2 in Victoria and from 6.7 to 7.0 in the rest of Australia. It would seem the government income supports introduced in 2020 in response to the pandemic were quite effective at alleviating financial anxieties, and indeed reduced these anxieties to below pre-COVID levels.

The lower panel of Table 5.13 provides summary statistics for a small number of health measures, presenting the means of SF-36 general health and mental health measures (see Box 2.4, page 19), as well as the proportion of people in each of four categories for body mass index (see Box 5.5, page 106).

The mean of the general health measure actually increased in both Victoria and the rest of Australia, but the mean of the

mental health measure declined, more so in Victoria than in the rest of Australia. See Chapter 8 for a deeper probe into the changes in mental health associated with the onset of the pandemic. There is also some evidence of deterioration in health as captured by body weight, especially in Victoria, where the proportion classified as normal weight declined from 41.1% to 39.1%, largely via a rise in the proportion classified as obese, which rose from 23.8% to 25.4%.

Table 5.13: Measures of subjective wellbeing and health—Persons aged 15 and over, 2019 and 2020

	Victoria		Rest of Australia	
	2019	2020	2019	2020
<i>Mean satisfaction (0–10 scale)</i>				
Home	8.1	8.3	8.1	8.2
Employment opportunities	7.4	7.1	7.1	7.1
Financial situation	6.9	7.2	6.7	7.0
How safe feel	8.3	8.4	8.3	8.4
Feeling part of local community	6.8	6.7	6.8	6.9
Health	7.3	7.5	7.2	7.3
Neighbourhood	7.9	8.1	7.9	8.0
Amount of free time	6.9	7.4	6.9	7.1
Life overall	7.9	7.9	7.9	7.9
<i>Health measures (means)</i>				
General health (SF-36 measure, 0–100 scale)	66.4	66.2	64.8	65.4
Mental health (SF-36 measure, 0–100 scale)	71.1	68.3	71.6	70.5
<i>Body mass index (%)</i>				
Underweight	1.8	1.9	2.8	2.3
Normal weight	41.1	39.1	37.5	37.3
Overweight	33.3	33.6	33.7	33.0
Obese	23.8	25.4	26.0	27.4
Total	100.0	100.0	100.0	100.0



6

Financial wellbeing

Ferdi Botha

The concept of 'financial wellbeing' can be 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 6.1, page 108) was administered for the first time in Wave 20 of the HILDA Survey and provides an opportunity to understand Australians' levels of self-reported or perceived financial wellbeing.

This chapter first considers how financial wellbeing varies by different characteristics among the Australian population. It also investigates how these characteristics jointly predict financial wellbeing.

Table 6.1 reports the responses for each of the five financial wellbeing items, by gender and age. Females and males tend to respond in relatively similar proportions to the response options for each item, although on average males report slightly more positive options. For example, 10.5% of females said they would 'not at all' be able to

handle a major unexpected expense, compared to 8.7% of males. About 48.0% of males and 47.2% of females 'agree' that they are on track to have enough money to provide for their future financial needs.

Responses to each item differ much more across age groups, with older age groups more likely to select responses consistent with higher financial wellbeing. Among people aged 65 and over, 17.7% say they can 'completely' enjoy life because of the way they manage their money, whereas this is 8.0% and 8.2% for those in ages groups 35–44 and

Box 6.1: Financial Wellbeing Scale

To measure financial wellbeing, 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'):

- I can enjoy life because of the way I'm managing my money*
- 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'):

- I feel on top of my day-to-day finances*
- I am comfortable with my current levels of spending relative to the funds I have coming in*
- 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 5 items and multiplying the sum by 5, as follows: $[(a - 1) + (b - 1) + (c - 1) + (d - 1) + (e - 1)] \times 5$. The score ranges from 0 (low financial wellbeing) to 100 (high financial wellbeing).

45-54. While between 49.5% and 54.2% of those aged 45 or over 'agree' they feel on top of their day-to-day finances, 37.3% of the 15-24 age group feel this way.

Finally, 14.8% and 20.1% of people aged 55-64 and 65 and over, respectively, 'agree strongly' that they are comfortable with current spending levels relative to the

funds they have coming in. For each age group younger than 55, less than 10% 'agree strongly' with this same statement.

Table 6.1: Responses to financial wellbeing items by age and gender (%)

	Female	Male	15-24	25-34	35-44	45-54	55-64	65+
<i>I can enjoy life because of the way I'm managing my money</i>								
Not at all	3.7	3.9	5.4	4.4	3.6	3.5	4.2	2.1
Very little	7.2	7.7	7.1	7.2	8.4	10.1	6.72	5.5
Somewhat	41.6	41.7	41.8	43.9	46.9	44.6	41.6	32.5
Very well	36.3	35.6	35.5	34.6	33.0	33.5	36.0	42.2
Completely	11.2	11.0	10.2	10.0	8.0	8.2	11.5	17.7
<i>I could handle a major unexpected expense</i>								
Not at all	10.5	8.7	15.0	8.7	9.5	10.4	8.6	6.4
Very little	12.7	11.9	18.2	14.6	12.8	11.6	9.9	7.3
Somewhat	40.7	39.9	42.0	43.1	42.1	41.9	38.2	35.0
Very well	25.6	28.0	17.8	23.4	26.1	26.2	31.2	34.6
Completely	10.6	11.6	7.0	10.1	9.5	9.9	12.2	16.8
<i>I feel on top of my day-to-day finances</i>								
Disagree strongly	3.3	3.0	4.5	3.3	2.8	3.6	3.5	1.7
Disagree	8.2	7.5	8.9	9.1	8.8	8.3	7.5	5.1
Neither agree nor disagree	27.3	26.7	39.2	28.9	29.5	25.5	23.0	18.0
Agree	47.2	48.0	37.3	45.3	47.2	50.4	49.5	54.2
Agree strongly	14.0	14.8	10.1	13.5	11.7	12.2	16.6	21.0
<i>I am comfortable with my current levels of spending relative to the funds I have coming in</i>								
Disagree strongly	3.5	3.1	5.2	4.1	3.5	3.6	2.9	1.2
Disagree	13.5	10.9	14.0	17.7	13.6	12.8	10.1	5.5
Neither agree nor disagree	24.1	24.8	33.1	26.6	27.2	24.3	21.6	15.4
Agree	47.0	48.8	37.9	41.9	46.4	50.0	50.6	57.8
Agree strongly	12.0	12.8	9.8	9.7	9.3	9.4	14.8	20.1
<i>I am on track to have enough money to provide for my financial needs in the future</i>								
Disagree strongly	3.3	3.0	6.8	5.9	4.7	7.9	7.1	3.6
Disagree	8.2	7.5	13.4	13.0	16.1	14.9	14.0	7.5
Neither agree nor disagree	27.3	26.7	38.8	30.4	31.5	30.3	29.4	25.9
Agree	47.2	48.0	32.7	40.7	39.0	38.5	37.6	46.4
Agree strongly	14.0	14.8	8.4	10.0	8.7	8.3	11.8	16.7





Who has higher and lower financial wellbeing?

Figure 6.1 shows the distribution of financial wellbeing. The average financial wellbeing score for Australians is 60.6 on the 0–100 scale, and the median is 65. In general, most Australians report relatively high levels of financial wellbeing. While about 11% report a score of 50, roughly 34% of Australians report a financial wellbeing score between 65 and 75. Almost 5% of respondents report very high financial wellbeing, with a score of 100.

Table 6.2 presents average levels of financial wellbeing by selected respondent characteristics. Males (61.3) have slightly higher

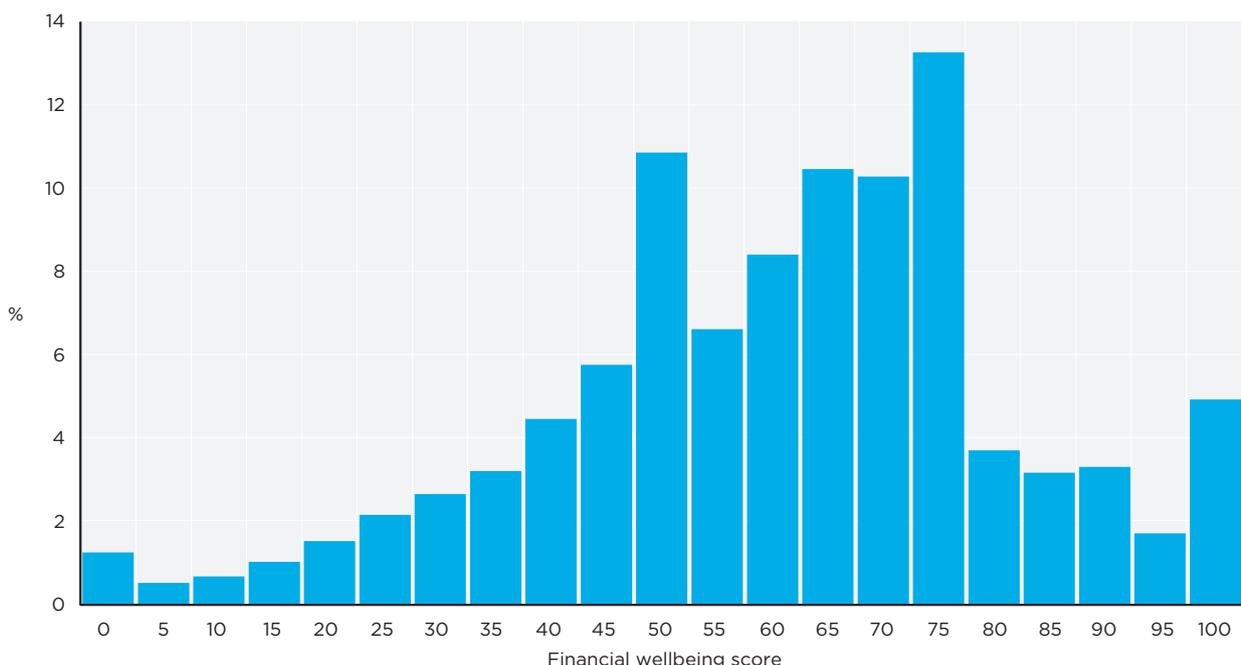
financial wellbeing than females (60.0). Mean financial wellbeing is higher among older age groups; people aged 55 and over have a score of 65.3 compared to 57.5 for the 15 to 34 age group. There is a positive relationship between education and financial wellbeing, as people with higher education report on average higher financial wellbeing. The unemployed have much lower average financial wellbeing compared to the employed and those not in the labour force. A higher level of household equivalised annual income is related to greater average financial wellbeing.

There are relatively large differences in mean financial wellbeing scores across individuals with different savings behaviours (see Box 6.2, page 110). For instance, the financial wellbeing score is 39.6 for people who do not save, compared to

Box 6.2: 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.

Figure 6.1: Distribution of financial wellbeing—Persons aged 15 and over, 2020



68.7 for those who save residual income or save regularly. Mean financial wellbeing is higher among people with higher levels of financial literacy (see Box 3.13, page 63), whereas longer savings and investment horizons (see Box 6.3, page 111) are associated with higher mean financial wellbeing. Individuals who report no experience of adverse economic shock due to COVID-19 (see Box 6.4, page 111) have an average financial wellbeing score of 63.5 as compared to a score of 56.9 among those who did experience such a shock. Those who received COVID-19 income support payments (see Box 3.6, page 38) report a mean financial wellbeing score of 58.1 relative to a score of 62.7 for those who did not receive such payments.

The relationship of financial wellbeing with health is quite strong, as persons not in poor physical- and mental health report much higher mean financial wellbeing scores than persons who are in poor physical- and mental health. Average financial wellbeing is higher among the partnered (63.8) than among the non-partnered (55.8). People in single-parent households (51.4) have substantially lower average financial wellbeing than people who do not reside in single-parent households (61.8).

Box 6.3: 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 2 to 4 years, (v) the next 5 to 10 years, (vi) more than 10 years ahead.

People with resident children report slightly lower financial wellbeing than people without resident children.

There is a strong association between mean financial wellbeing and housing tenure type. For example, outright home-owners have an average financial wellbeing score of 67.0, whereas those in social housing and private renters have financial wellbeing scores of 48.9 and 53.4, respectively. Levels of financial wellbeing do not differ much according to region of residence or immigrant status, but average financial wellbeing of Indigenous Australians (49.4) is much lower than that of non-Indigenous Australians (61.3).

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 6.3.

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 only exceptions are household equivalised disposable income, financial literacy and the SF-36

Box 6.4: Measuring an adverse economic shock due to COVID-19

For the purposes of this chapter, an indicator for whether a respondent experienced a negative economic shock due to the COVID-19 pandemic is constructed from the following questions that were included in Wave 20 of the HILDA Survey:

As a result of the coronavirus ...

Did you keep working, but with reduced hours?

Did you take a cut in your rate of pay?

Were you temporarily stood down without pay or required to take unpaid leave?

Was your employment terminated or were you made redundant (that is, lost your job entirely)?

A respondent experienced an adverse economic shock, directly due to COVID-19, if they answered 'yes' to at least one of the above four questions.



Table 6.2: Mean financial wellbeing by individual characteristics, 2020 (0-100 scale)

<i>Gender</i>	Male	61.3
	Female	60.0
<i>Age group</i>	15-34	57.5
	35-54	58.9
	55 and over	65.3
<i>Educational attainment</i>	Year 11 and below	56.8
	Year 12	59.4
	Certificate III or IV, or Diploma	58.9
	Bachelor's degree or higher	66.1
<i>Labour force status</i>	Employed	62.1
	Unemployed	45.9
	Not in the labour force	59.9
<i>Household equivalised income</i>	Bottom quintile	55.2
	Second quintile	56.2
	Third quintile	59.8
	Fourth quintile	62.8
	Top quintile	69.1
<i>Savings habits</i>	Don't save: Spend more or as much as income	39.6
	Save whatever is left: No regular plan	59.1
	Spend regular income and save what is left, or save regularly	68.7
<i>Financial literacy</i>	Correct answers: 4 or fewer	59.9
	Correct answers: All 5	65.8
<i>Most important time for savings and spending</i>	Next week or next few months	53.5
	Next 1 to 4 years	63.1
	Next 5 or more years	68.5
<i>Experienced negative economic shock due to COVID-19</i>	No	63.5
	Yes	56.9
<i>Received COVID-19 income support payments</i>	No	62.7
	Yes	58.1
<i>SF-36 general health measure</i>	Not in poor general health	62.0
	In poor general health	49.8
<i>SF-36 mental health measure</i>	Not in poor mental health	63.7
	In poor mental health	47.6
<i>Partnered</i>	No	55.8
	Yes	63.8
<i>Single-parent household</i>	No	61.8
	Yes	51.4
<i>Have dependent children</i>	No	61.3
	Yes	57.3
<i>Housing tenure type</i>	Social housing	48.9
	Private rental	53.4
	Owner with mortgage	59.2
	Owner outright	67.0
<i>Region of residence</i>	Major urban	60.8
	Other urban	60.6
	Non-urban	60.1
<i>Country of birth and Indigenous status</i>	Immigrant from main English-speaking country	61.9
	Immigrant from country other than main English-speaking countries	59.0
	Indigenous	49.4
	Non-indigenous Australian-born	61.3

general and mental health measures, which are all treated as continuous variables. The income coefficient is interpreted as the change in financial wellbeing for a \$10,000 increase in annual income, whereas 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 more financial literacy question correctly). For both general and mental health, the coefficients reflect the change in financial wellbeing for every one-point increase or improvement in health on the 0 to 100 scales.

Men report a financial wellbeing score of just over 0.4 points higher than women. People aged 25 to 34 and 65 and older have financial wellbeing scores that are roughly 1.7 and 8.3 points higher, respectively, than for people aged 15 to 24. Financial wellbeing increases with the level of education attained. Compared to the unemployed, the employed and those not in the labour force have financial wellbeing scores of 4.9 and 5.9 points higher, respectively. The relationship with income is relatively modest, as each additional \$10,000 in equivalised annual disposable income increases financial wellbeing on average by about 0.5 points on the 0-100 scale.

Financial behaviour in terms of savings habits are very important predictors of financial wellbeing. For example, financial wellbeing for persons who spend their regular income but save any remaining income is roughly 17.8 points higher relative to persons who do not save. Also, compared to people who do not save, those who save regularly with a clear savings plan report a financial wellbeing score of about 21.5 points higher.

Better financial literacy is associated with better financial wellbeing. Having longer savings and spending horizons are related to higher financial wellbeing. For example, those who view the next 5 or more years as most important in making decisions about savings and investment have a financial wellbeing score of about 8.4 points higher than people who view the next week as most important for savings and investment purposes. Australians who reported experiencing an adverse economic shock due to COVID-19 reported a financial wellbeing score of 0.6 points lower as compared to those who reported not experiencing such an event. There is no significant relationship between financial wellbeing and receipt of COVID-19 income support payments.

Better physical health and mental health are both associated with

higher financial wellbeing. For instance, each additional one-point increase (improvement) in mental health is related to 0.2-points higher financial wellbeing. Partnered individuals have a financial wellbeing score of about 1.2 points higher than individuals who are not partnered. Compared to persons not residing in single-parent households, those living in single-parent households have on average 2.3 points lower financial wellbeing. People with resident children report on average about 1.1 points lower financial wellbeing than people without children.

The financial wellbeing of homeowners, especially owners without a mortgage (5.1 points), is significantly higher than people in private rentals. There are no statistically significant differences in financial wellbeing across regions of residence.

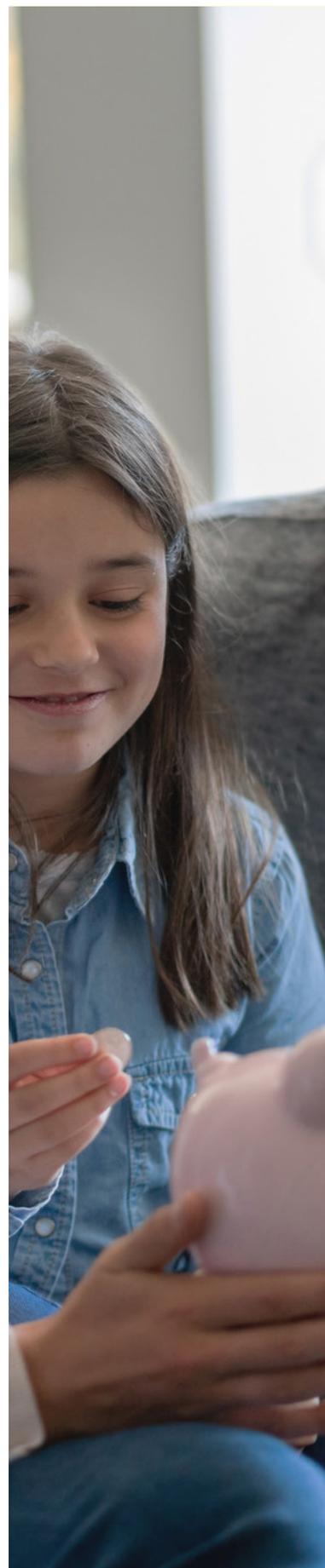
Immigrants from countries other than the main English-speaking countries report on average 2.6 points lower financial wellbeing than non-Indigenous Australian-born persons. In contrast to the descriptive results in Table 6.2 that suggested substantially lower mean financial wellbeing among Indigenous Australians compared to non-Indigenous Australians, there is no longer a significant difference in financial wellbeing when conditioning on other characteristics.



Table 6.3: Predictors of financial wellbeing, 2020

Male	0.441
<i>Age group (Reference category: 15–24)</i>	
25–34	1.742
35–44	1.425
45–54	<i>ns</i>
55–64	1.928
65 and over	8.330
<i>Educational attainment (Reference category: Year 11 and below)</i>	
Year 12	1.420
Certificate III or IV, or Diploma	<i>ns</i>
Bachelor's degree or higher	3.088
<i>Labour force status (Reference category: Unemployed)</i>	
Employed	4.913
Not in the labour force	5.893
Household equivalised annual disposable income (\$'0,000, December 2020 prices)	0.532
<i>Savings habits (Reference category: Don't save: Spend more or as much as income)</i>	
Save whatever is left over: No regular plan	13.634
Spend regular income, save other income	17.758
Save regularly by putting money aside each month	21.476
Financial literacy (1–5 scale)	0.820
<i>Most important time for savings and spending (Reference category: The next week)</i>	
Next few months	3.162
Next year	5.443
Next 2–4 years	6.536
Next 5 or more years	8.360
Experienced negative economic shock due to COVID-19	–0.641
Received COVID-19 income support payments	<i>ns</i>
SF–36 general health measure (0–100 scale)	0.115
SF–36 mental health measure (0–100 scale)	0.210
Partnered	1.182
Single-parent household	–2.264
Have dependent children	–1.090
<i>Housing tenure type (Reference category: Private rental)</i>	
Social housing	<i>ns</i>
Owner with mortgage	0.961
Owner outright	5.142
<i>Region of residence (Reference category: non-urban)</i>	
Major urban	<i>ns</i>
Other urban	<i>ns</i>
<i>Country of birth and Indigenous status (Reference category: non-Indigenous Australian-born)</i>	
Immigrant from main English-speaking country	<i>ns</i>
Immigrant from country other than main English-speaking countries	–2.608
Indigenous	<i>ns</i>
Number of observations	15,169

Notes: The table presents ordinary least squares estimates from a regression model of the predictors of financial wellbeing on the 0–100 scale, controlling for a constant (not displayed). See the Technical Appendix for an explanation of these models. *ns* indicates the estimate is not significantly different from 0 at the 10% level.



7

Working from home

Mark Wooden and Trong-Anh Trinh



One of the most immediate impacts of the COVID-19 pandemic was a marked shift in where paid work was undertaken. More specifically, spurred by government advice and/or orders to work from home where possible, 2020 saw a marked surge in the number of persons who worked mainly from home.

Trends

As shown in Figure 7.1, while a sizeable proportion of the Australian workforce (around one quarter) has always undertaken some work from home, prior to the pandemic relatively few—about 6% of employed persons—worked mostly from home (also see Wooden and Fok, 2013). And further analysis (not presented) shows that the large majority of the latter (around 80%) were self-employed. Moreover, the levels of working from home in Australia have been very stable, varying little over the period 2002 to 2019.

In 2020, however, there was a marked increase in the proportion of employed persons working from home. The proportion working any hours at home in a usual week rose to 35%, while the proportion who worked most hours at home—that is, 50% or more of their usual weekly work hours—rose to just over 21%. And a sizeable fraction of this latter group (a little more than two-thirds, or almost 15% of all

employed persons) worked entirely from home.

Such increases, while impressive, are associated with estimated levels of home working in 2020 that are actually far below that derived from other sources, including most notably the Household Impacts of COVID-19 Survey conducted by the Australian Bureau of Statistics (ABS). According to this survey, the proportions of employed persons working ‘mostly from home’ in September 2020 and December 2020 (which spans the period when most HILDA Survey interviews were conducted) were 30.6% and 27.4% (ABS, 2021).

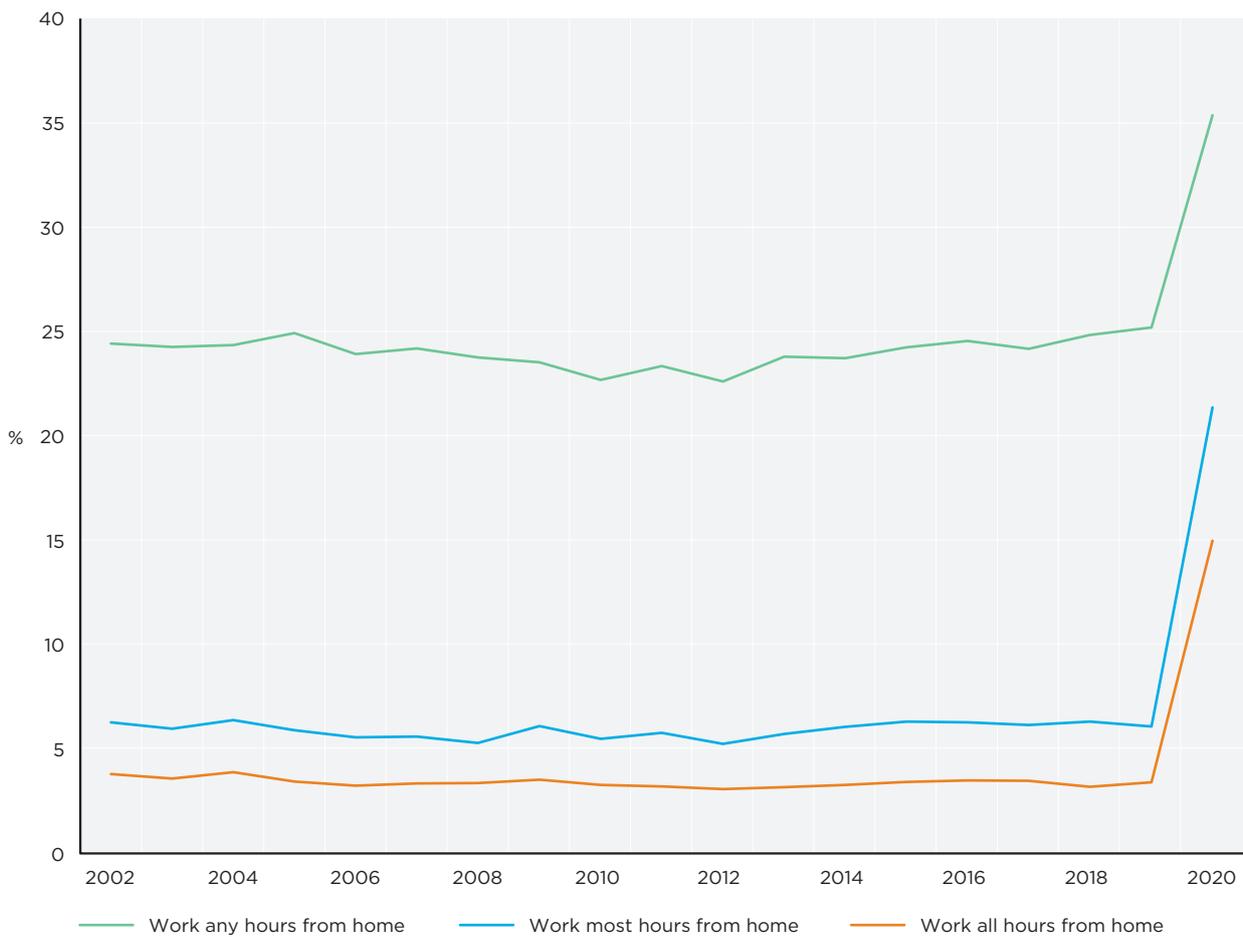
These figures are considerably higher than the most comparable HILDA Survey estimate (21%). While the way home working is defined and measured in the two surveys is not the same, there are good reasons to expect the extent of working from home to have been understated in the HILDA Survey in Wave 20 (see Box 7.1). Essentially, this is because the HILDA Survey asks respondents about their ‘usual’

Box 7.1: Measuring working from home in the HILDA Survey

In the HILDA Survey all employed persons are asked how many hours they *usually* work in a week, both in their main job and in all jobs. This same group is subsequently asked whether, in their main job, any of their *usual hours* are worked at home, and if yes, how many.

From this we constructed measures of the proportions of employed persons that, in their main job, worked any hours at home, most hours at home (defined as 50% or more of their usual weekly work hours) and all hours at home. Persons reporting working from home but who then do not provide the number of hours worked from home are treated as missing.

Figure 7.1: Proportion of employed people working from home



working arrangements, whereas the ABS survey asked respondents about their ‘current’ arrangements. Nevertheless, we still believe the HILDA Survey can provide useful insights about both the characteristics of persons who have been increasing the amount of work time spent in the home, and the impacts of this change in working arrangements.

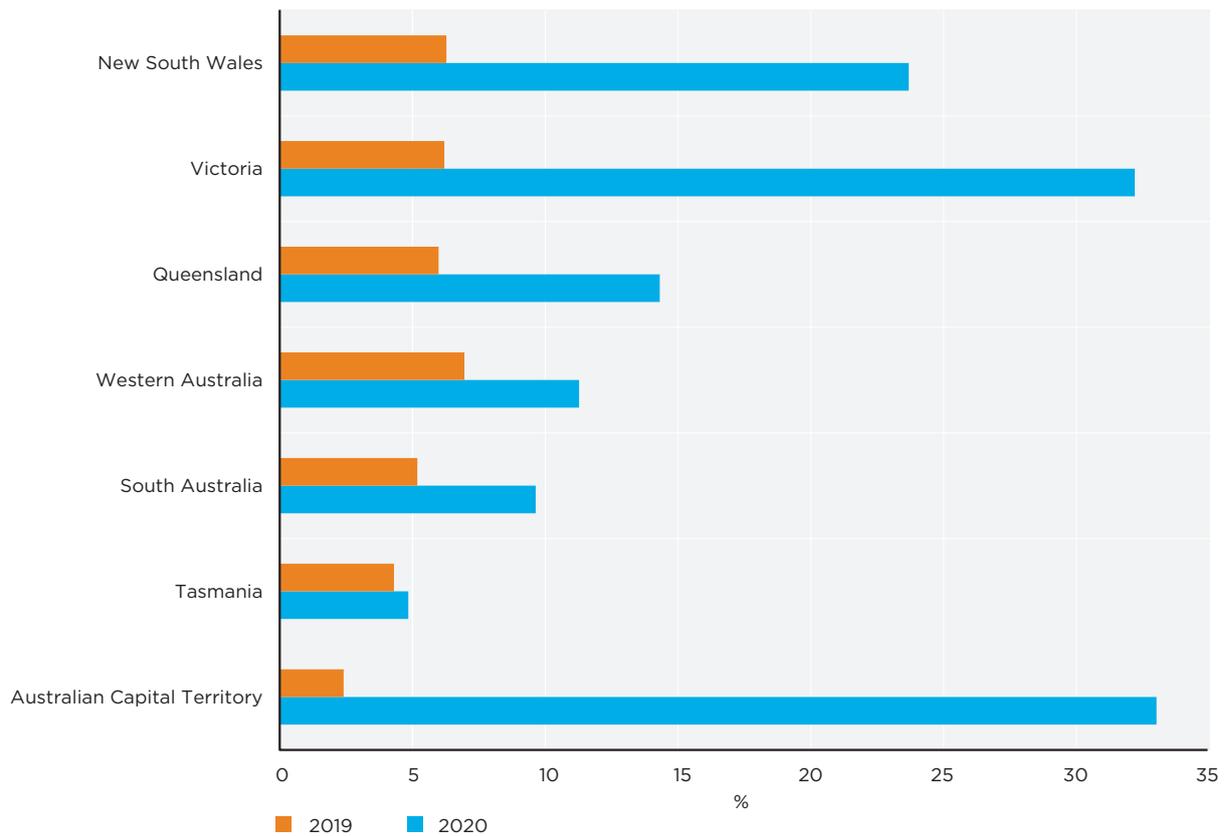
The focus on usual work hours was a deliberate design decision made when the survey commenced in 2001 and reflects the desire for a measure of change in working hours that is not affected by short-term absences and leave taking. The pandemic, however, likely affected how some respondents interpreted and answered these working hours questions in 2020. Specifically, some respondents

might have interpreted ‘usual’ as referring to life prior to the pandemic. If so, the HILDA Survey data collected in 2020 will understate both the number of persons working any hours from home and the number of hours per week that were being worked from home.

Differences across states

At the time Wave 20 of the HILDA Survey was being administered, one state—Victoria—was in the middle of a prolonged lockdown, with all workers in non-essential services required to work from home if possible. We thus expect the rise in the incidence of working from home to be most pronounced in Victoria, and indeed, as shown in

Figure 7.2: Proportion of employed persons working mostly from home, by state and territory



Notes: Estimates for the Northern Territory are not reported due to very high relative standard errors. For the same reason, the 2019 estimate for the Australian Capital Territory should also be treated with caution.

Figure 7.2, the HILDA Survey confirms a relatively large increase in that state. But as also shown in Figure 7.2, levels of home working rose markedly in all states except Tasmania. Further, while levels were high in Victoria, they were no higher than in the Australian Capital Territory. This likely reflects differences in both the composition of employment (with jobs amenable to working from home relatively more prevalent in the Australian Capital Territory) and the greater significance of governments (both Federal and local) as employers in the Australian Capital Territory.

Differences across industries

Not all jobs involve tasks or services that can be easily

undertaken or provided from a worker's home. This is reflected in marked differences across industries in the extent of the increase in working from home.

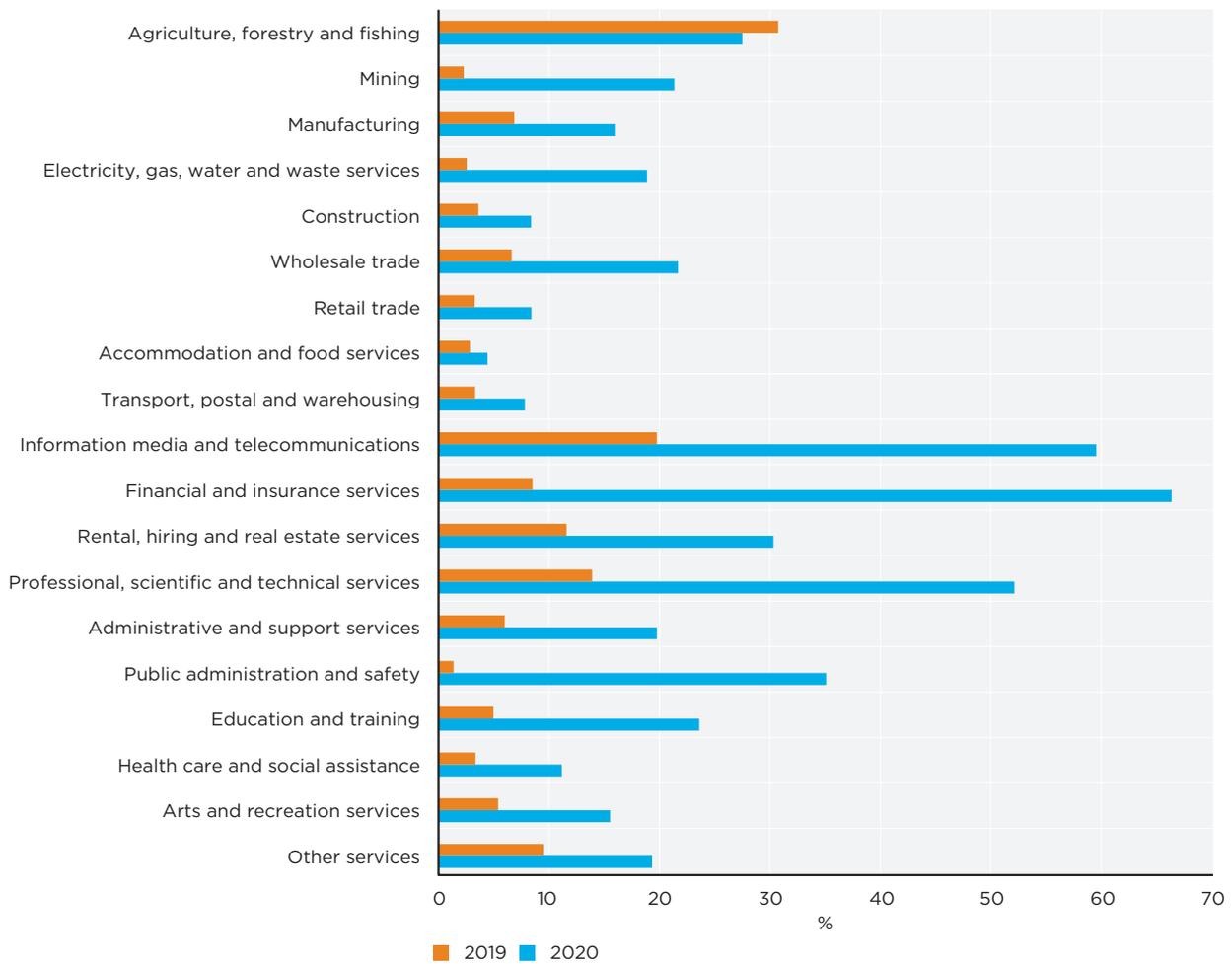
As shown in Figure 7.3, the proportion of employed persons spending 50% or more of their usual work hours in the home increased in all industries except one. The inter-industry variation in these increases, however, is substantial. In general, the increases have been most pronounced in service industries where there is relatively little need for in-person interaction with customers. Most obvious here are financial and insurance services (where the share of those working from home most of the time rose by 58 percentage points), information media and telecommunications (up 40 percentage points), professional, scientific and technical services

(up 38 percentage points), and public administration and safety (up 34 percentage points).

At the other end of the distribution are service industries where in-person services are central. Most notable here are accommodation and food services (up by less than 2 percentage points), retail trade (up 5 percentage points), and health care and social assistance (up 8 percentage points). And then there are industries where the nature of work simply makes working at home for most not feasible. Good examples here are construction (up 5 percentage points) and transport, postal and warehousing (up 4 percentage points).

Agriculture is the only example of an industry where the incidence of home working did not increase, even though this is

Figure 7.3: Proportion of employed people working mostly from home, by industry



Notes: The relative standard errors for the 2019 estimates for mining, electricity, gas, water and waste services, transport, postal and warehousing, public administration and safety, and arts and recreation services are all very high, and thus these estimates may be unreliable.

an industry where, for a sizeable fraction of the employed (mostly farm owners), the home and workplace (i.e., farm) are co-located. Work in this industry, however, is mostly tied to the location of the farm (or forest or fishery) and thus there is little scope for unexpected shocks to lead to an increase in the incidence of working from home in the short run.

Productivity impacts

A potentially important question, and one canvassed in Wave 20 of the HILDA Survey, is whether the surge in working from home has had any productivity impacts.

As summarised in a recent Productivity Commission (2021) paper, there are arguments

operating in both directions. On the one hand, physical distance between co-workers may increase coordination costs, reduce knowledge exchange and harm the effectiveness of collaboration processes. It also makes it more difficult for employers to monitor workers, increasing the possibility of shirking behaviour. On the other hand, reduced time commuting

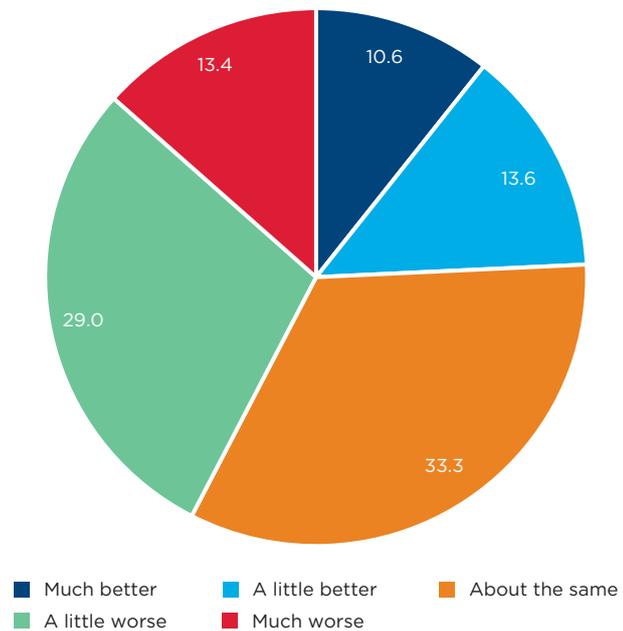


simultaneously increases the scope for workers to spend more time in paid work, directly increasing output, and achieve better work-life balance, indirectly increasing productivity via being better rested. Working from home is also typically accompanied by workers having greater control over their time, which may be associated with higher levels of job satisfaction and greater opportunity for workers to arrange work in way that best suits their own needs and preferences.¹

To find out more about this issue, all persons who were in paid employment at the start of March 2020 were first asked whether, as a result of the pandemic, they had started or increased the amount of time they spent working from home. Almost 34% of this group indicated they had. This sub-group of respondents was then asked: *Compared with your normal working situation, would you say your ability to do your job while working at home was 'much better', 'a little better', 'about the same', 'a little worse', or 'much worse'?*

As shown in Figure 7.4, the proportion of this group of workers who reported negative productivity effects (42%)

Figure 7.4: Self-reported effect of working from home on productivity –Persons who started or increased working from home, 2020 (%)



outweighed the proportion reporting positive effects (24%), although an alternative characterisation is that 58% reported their productivity was no worse.²

This average negative effect is not surprising given many Australian workers in 2020 were suddenly faced with the requirement to work from home without necessarily having access

to dedicated work spaces. Negative impacts on productivity might therefore be expected to be even more likely where multiple household members are required to work from home, and for workers from families with young children who may have had problems accessing child care or had to supervise children who were required to learn remotely. In short, productivity effects of working from home



¹ Working from home may also have indirect productivity benefits, such as reduced need for commercial office space, and indeed other indirect benefits, such as reduced environmental impact.

² This finding is in contrast to that reported in earlier survey-based research undertaken in Australia (Beck and Hensher, 2021). Few details are provided about the samples used in this study measuring working from home, but we know they are small (just 916 and 741 workers in their two samples), and all obtained via samples recruited online (and thus likely not probability samples).



may be more favourable in non-pandemic times, when child care and schools are open and when workers can *choose* whether or not to work from home.

Working from home and job satisfaction

As previously discussed, working from home is often argued to be associated with increased job satisfaction, both because of the

greater autonomy and job control that accompanies it, and because of the reduction in (if not elimination of) commuting time. Of course, this relationship may not hold in the context of a pandemic forcing people to work from home. Indeed, the HILDA Survey data show no strong relationship between working from home and changes in job satisfaction between 2019 and 2020.

In Table 7.1 we report mean levels of job satisfaction for four groups

of workers based on whether the majority of work hours were worked from home in 2019 and 2020. Mean job satisfaction did indeed increase most among those that increased the amount of time spent working from home, but the magnitude of this change was very small—just 0.06 of a point (or by only 0.8%). In short, despite the big changes in where paid work was undertaken, job satisfaction levels remained little changed.

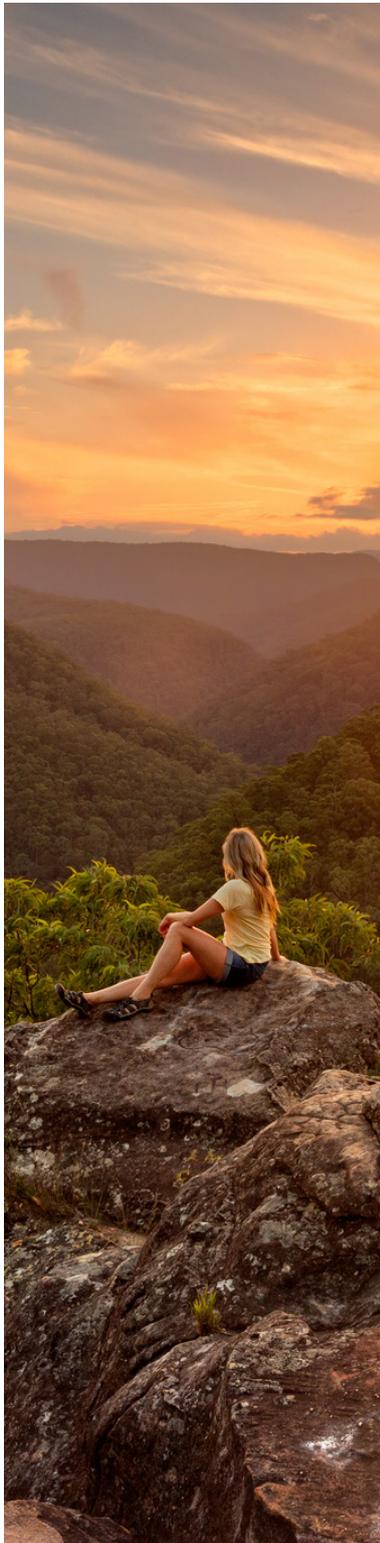
Table 7.1: Working from home and job satisfaction—Persons employed in both 2019 and 2020

<i>Working mostly from home in:</i>			<i>Mean job satisfaction</i>		
<i>2019</i>	<i>2020</i>	<i>% of all employed</i>	<i>2019</i>	<i>2020</i>	<i>Mean change in job satisfaction</i>
No	No	77.4	7.76	7.77	0.01
No	Yes	17.0	7.68	7.74	0.06
Yes	No	1.2	8.10	8.08	-0.02
Yes	Yes	4.5	8.26	8.20	-0.06

8

Mental health

Ferdi Botha



The mental health of Australians has attracted increasing attention in recent years. Good mental health has been linked to outcomes such as lower unemployment risk and better educational attainment. Since 2001, the HILDA Survey has tracked the reported mental health of Australians. Emergence of the COVID-19 pandemic and resulting public health interventions have raised fears for greater mental health issues among Australians. Previous work on Australian data has indeed reported that mental health was poorer in 2020 compared to pre-COVID (Botha et al., 2022; Butterworth et al., 2022), and that the 2020 lockdowns in Victoria had a negative impact on Victorians' mental health (Butterworth et al., 2022).

This chapter first shows trends in mental health over time since 2001 based on the SF-36 mental health measure (see Box 2.4, page 19). The mental health measure ranges from 0 to 100, with higher scores suggesting better mental health. Focusing then on mental health between 2019 and 2020, the chapter reports average mental health scores according to individual characteristics for both years, and finally reports on the factors that may explain the decline in mental health between 2019 and 2020.

Trends in mental health, 2001–2020

Figure 8.1 shows average mental health scores by gender since 2001. Females consistently reported poorer mental health than males throughout the sample period. Although mean levels of mental health remained relatively stable from 2001 to 2010, since roughly 2011 mental health has deteriorated quite substantially. For females, mental health worsened from 73.3 in 2011 to 68.9 in 2020, and from 70.5 in 2019 to 68.9 in 2020. For males, mental health deteriorated from 74.9 in 2011 to 72.1 in 2020, and from 73.2 in 2019 to 72.1 in 2020.

Figure 8.2 shows trends in mean mental health scores by age group between 2001 and 2020. Australians in the 55 to 64 and 65 and over age groups have consistently reported better

mental health relative to other age groups. Whereas mental health scores over time have remained stable for those aged 65 and over, especially since 2011 this has not been the case for other age groups, who all experienced a worsening in mental health. Most notably, however, are the sharp declines in mental health for the 15 to 24 and 25 to 34 groups. Between 2011 and 2020, average mental health (on the 0–100 scale) worsened from 73.6 to 64.2 and 8.2% (from 73.1 to 67.1) for those aged 15 to 24 and 25 to 34, respectively. For these two age groups, mental health deteriorated substantially between 2019 and 2020.

Focusing on 2019 and 2020, Figure 8.3 shows kernel densities of the mental health distribution for both years. (See the Technical Appendix for a brief explanation of kernel densities.) The distribution of mental health

Figure 8.1: Average of the SF-36 mental health measure, by gender

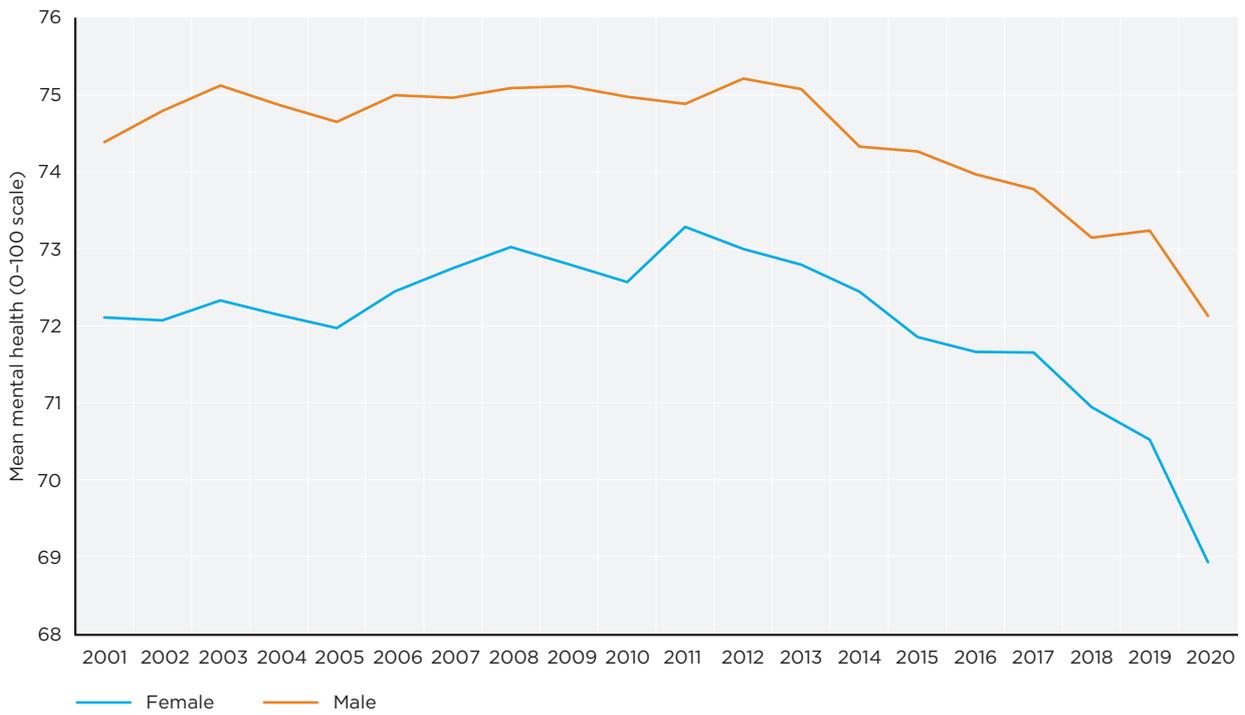


Figure 8.2: Average of the SF-36 mental health measure, by age group

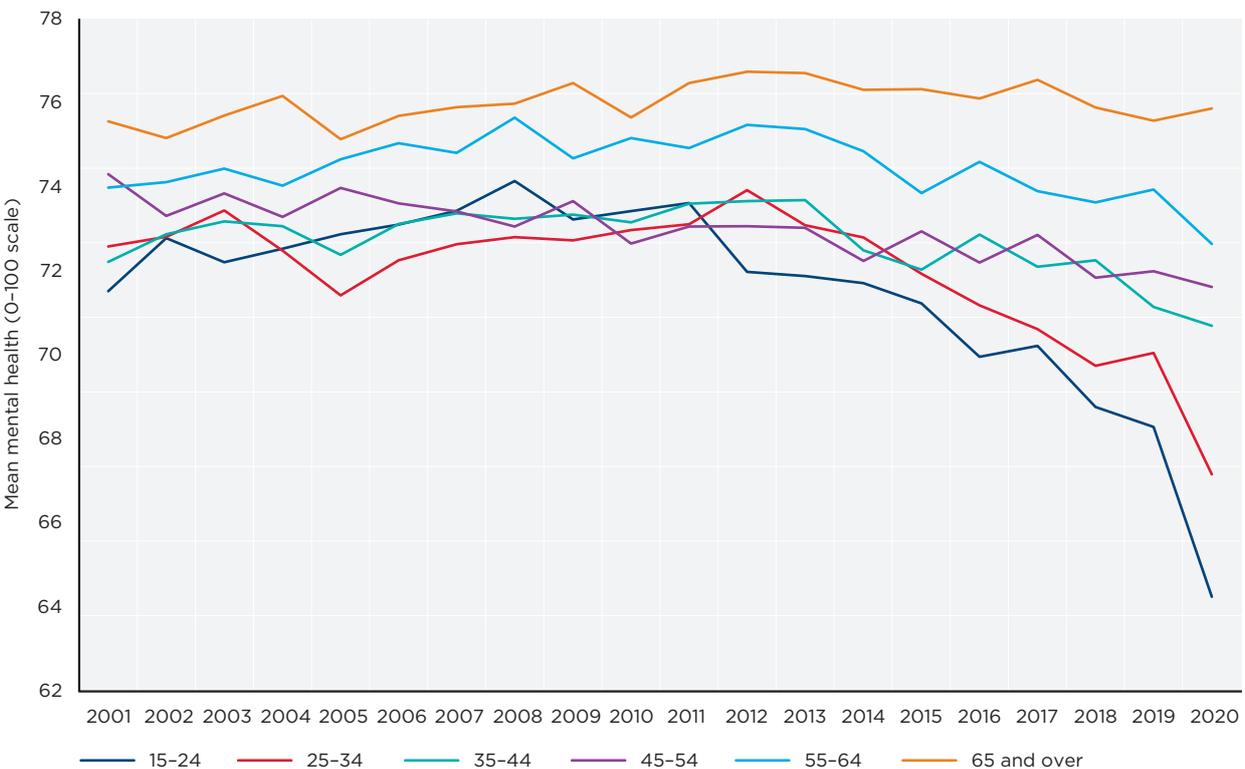
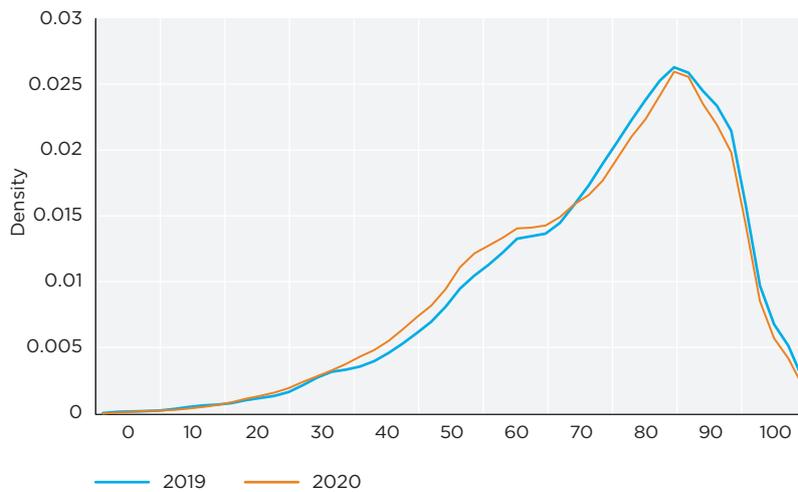


Figure 8.3: Kernel density of the SF-36 mental health measure (0-100 scale)



shifted to the left in 2020, suggesting that a greater proportion of people reported lower levels of mental health in 2020 than in 2019.

Who reports lower and higher average mental health?

Table 8.1 presents average levels of mental health by selected respondent characteristics in 2020. Men (72.5) report better average mental health than women (69.2). Average mental health improves with age, with the mean score for those aged 15-24, for example, being 64.0 compared to a score of 75.9 for those 65 and over.

Australians with higher levels of education tend to report better mental health.

Average mental health is much poorer for unemployed persons (61.9) relative to the employed (71.9) and those not in the labour force (69.9). As expected, people in higher household equivalised annual income quintiles report better average mental health, and mental health differs substantially by financial stress status. Mean mental health is 62.3 on the 0-100 scale for people in financial stress, whereas the score is 72.8 for those not experiencing financial stress.

The mean mental health score for people in poor general health (54.0) is substantially worse than the score of people not in poor general health (72.9). People living alone in single person

households report poorer mental health scores (69.1) than those not living alone (71.0). Partnered individuals report better average mental health compared to non-partnered people, whereas there is very little difference in mental health between people with and without resident children. A higher frequency of social contact tends to be associated with better mean mental health.

Average mental health is best for Australians living in separate houses, and mental health scores are similar for people living in semi-detached houses and in flats/units/apartments, at 69.9 on the 0-100 scale. Those living in major urban areas report the poorest average mental health, whereas those in non-urban areas report the best mental health score. Mental health is on average relatively similar across states, with Victorians reporting the poorest mental health in 2020, and Tasmania and Northern Territory residents reporting the best mental health. There are no major differences by migrant status, although mean mental health is worst among Australian-born respondents. Average mental health scores are much lower for Indigenous persons (64.6) compared to non-Indigenous Australians (71.0) and immigrants from main English-speaking countries (71.7) and immigrants from countries other than the main English-speaking countries (71.8).



Table 8.1: Mean mental health (0-100 scale) by individual characteristics, 2020

<i>Gender</i>	Females	69.2
	Males	72.5
<i>Age group</i>	15-24	64.0
	25-34	67.3
	35-44	70.4
	45-54	72.0
	55-64	72.6
	65 and over	75.9
<i>Educational attainment</i>	Year 11 and below	69.1
	Year 12	68.8
	Certificate III or IV, or Diploma	71.4
	Bachelor's degree or higher	72.5
<i>Labour force status</i>	Employed	71.9
	Unemployed	61.9
	Not in the labour force	69.9
<i>Household equivalised income</i>	Bottom quintile	68.2
	Second quintile	70.0
	Third quintile	69.4
	Fourth quintile	71.9
	Top quintile	72.8
<i>Financial stress</i>	Not in financial stress	72.8
	In financial stress	62.3
<i>SF-36 general health measure</i>	Not in poor general health	72.9
	In poor general health	54.0
<i>Single person household</i>	No	71.0
	Yes	69.1
<i>Partnered</i>	No	66.5
	Yes	73.4
<i>Have dependent children</i>	No	70.9
	Yes	70.5
<i>Frequency of social contact</i>	Once every 3 months or longer	64.6
	At least once a month	70.7
	At least once a week	73.2
<i>Dwelling type</i>	Separate house	71.0
	Semi-detached house	69.9
	Flat/unit/apartment	69.9
<i>Region of residence</i>	Major urban	70.5
	Other urban	71.4
	Non-urban	71.9
<i>State of residence</i>	Victoria	69.8
	New South Wales	71.0
	Queensland	71.0
	South Australia	70.7
	Western Australia	71.7
	Tasmania	72.5
	Northern Territory	75.4
Australian Capital Territory	71.3	
<i>Country of birth and Indigenous status</i>	Immigrant from main English-speaking country	71.7
	Immigrant from country other than main English-speaking countries	71.8
	Indigenous	64.6
	Non-Indigenous Australian-born	71.0

Predictors of the decline in mental health between 2019 and 2020

This section investigates the characteristics that jointly predict the observed decrease in mental health from 2019 to 2020 in a multivariate setting. The regression results are reported in Table 8.2.

For most variables, which are indicators, the displayed coefficient is interpreted as the change in mental health (ranging from 0 to 100) between 2019 and 2020 for that specific category relative to the omitted reference category. For household equivalised disposable income, financial stress, social support, social connection and the SF-36 general health measure, each variable is defined as the difference between its 2020 value and 2019 value. The income

coefficient, for example, is interpreted as the change in mental health between 2019 and 2020 for a \$10,000 increase in annual income between 2019 and 2020.

First considering Australia overall, there were no gender differences in the change in mental health between 2019 and 2020. There are no significant associations of the change in mental health with age, educational attainment, partnership status and living in a single person household. Among people with children aged four or younger, mental health was on average 1.22 points worse in 2020 than 2019 relative to people without children in that age range. Individuals who reported an increase in social connection reported an improvement in mental health of roughly 0.29 points.

Those who reported an increase in perceived social support between 2019 and 2020 also

reported significantly better mental health in 2020 compared to 2019. Each 1-point increase in social support (on the 1-7 scale) was associated with an improvement of 4.2 points in mental health on the 0-100 scale. Better mental health was related to an improvement in general health. Compared to persons who did not start working from home or did not increase their hours working from home, people who did do so reported a 1.87 point deterioration in mental health.

There is no relationship between an individual's initial labour force status in 2019 and the decline in mental health. There is also no association between changes in mental health and changes in labour force status from 2019 to 2020. Changes in household equivalised annual disposable income were not related to mental health changes. However, people who experienced financial stress in 2020 but not in 2019 reported a decline in mental





health than people who experienced no such change in financial stress.

Changes in mental health between 2019 and 2020 did not significantly differ by country of birth or Indigenous status, dwelling type or region of residence. Relative to all other employment industries, people in the health and social assistance industry reported a 1.13-point improvement in mental health. Respondents in the Northern Territory reported a 2.64-point greater decline in mental health between 2019 and 2020 as compared to Victorian residents.

Given that Victoria experienced a substantial lockdown in 2020 that has more formally been linked to poorer mental health (Butterworth et al., 2022), Table 8.2 also reports the regression results for the Victorian sample only. Similar for Australia as a

whole, in Victoria there is no evidence of gender differences in the change in mental health. For those aged 35 to 44, mental health improved significantly by 2.98 points relative to those in the age group 15–24.

Educational attainment, partnership status, living in a single person household and social connection frequency are not related to the change in mental health in Victoria. Similar to the case for all Australians, in Victoria mental health declined by 2.44 points among people with children aged four or younger as compared to people who do not have children of that age range. Changes in social support and the commencement or increase in working hours from home again explain the changes in mental health, as do changes in general health. For instance, mental health was about 3.97

points worse for Victorians who started working from home relative to those who did not commence or increased their hours working from home. Persons who in 2019 were employed or not in the labour force reported better mental health than persons who were unemployed in 2019. Transitioning from unemployment in 2019 to employment in 2020 was related to significantly better mental health of 6.69 points on the 0–100 scale. The mental health of Indigenous individuals was 6.44 points better compared to non-Indigenous Australian-born individuals. For Victorians there are no significant relationships of the change in mental health with household equivalised annual disposable income, changes in financial stress, dwelling type, region of resident or employment industry.

Table 8.2: Predictors of change in SF-36 mental health measure (0-100 scale) between 2019 and 2020

	Australia	Victoria
Male	ns	ns
<i>Age (Reference category: 15-24)</i>		
25-34	ns	ns
35-44	ns	2.979
45-54	ns	ns
55-64	ns	ns
65 and over	ns	ns
<i>Educational attainment (Reference category: Year 11 and below)</i>		
Year 12	ns	ns
Certificate III or IV, or Diploma	ns	ns
Bachelor's degree or higher	ns	ns
Partnered	ns	ns
Single person household	ns	ns
Children: aged 0-4	-1.221	-2.439
Children: aged 5-9	ns	ns
Children: aged 10-14	ns	ns
Change in frequency of social connection	0.292	ns
Change in social support	4.200	4.008
Change in general health	0.293	0.271
Started or increased hours working from home	-1.872	-3.970
<i>Labour force status in 2019 (Reference category: Unemployed)</i>		
Employed	ns	7.213
Non in the labour force	ns	5.098
Employed in 2019 and unemployed in 2020	ns	ns
Employed in 2019 and not in labour force in 2020	ns	ns
Unemployed in 2019 and employed in 2020	ns	6.687
Unemployed in 2019 and not in labour force in 2020	ns	ns
Not in labour force in 2019 and employed in 2020	ns	ns
Not in labour force in 2019 and unemployed in 2020	ns	5.468
Change in household equivalised income (\$'0,000, December 2020 prices)	ns	ns
Change in financial stress	-0.464	ns
<i>Country of birth and Indigenous status (Reference category: Non-Indigenous Australian-born)</i>		
Immigrant from main English-speaking country	ns	ns
Immigrant from country other than main English-speaking countries	ns	ns
Indigenous	ns	6.441
<i>Dwelling type (Reference category: Free-standing house)</i>		
Semi-detached house	ns	ns
Flat/Unit/Apartment	ns	ns
<i>Region of residence (Reference category: non-urban)</i>		
Major urban	ns	ns
Other urban	ns	ns
<i>Industry of employment (Reference category: All other industries)</i>		
Retail trade	ns	ns
Arts and Recreation	ns	ns
Health and Social Assistance	1.131	ns
Accommodation and Food	ns	ns
Education	ns	ns
Manufacturing	ns	ns
Construction	ns	ns
<i>State of residence (Reference category: Victoria)</i>		
New South Wales	ns	-
Queensland	ns	-
South Australia	ns	-
Western Australia	ns	-
Tasmania	ns	-
Northern Territory	-2.635	-
Australian Capital Territory	ns	-
Number of observations	12,339	3,189

Notes: The table presents estimates from ordinary least squares regression models of the predictors of the change in mental health from 2019 to 2020. See the Technical Appendix for a brief explanation of these models. The dependent variable is a person's mental health in 2020 subtracted from a person's mental health in 2019. ns indicates the estimate is not significantly different from 0 at the 10% level.

9

Education participation and experiences

Esperanza Vera-Toscano



In Waves 12, 16 and 20, the HILDA Survey collected information on 'human capital', which includes a question sequence regarding each child in the household attending school. These questions gathered information on the type of school, the amount of school fees and subjective assessments of school experiences and prospects for attending university. Moreover, in Wave 20, particular attention was paid to the 'learning from home' experience due to the different policies put in place to cope with the COVID-19 pandemic. Parents were asked to assess how 'learning from home' affected their children's learning experience and the impact on their own employment situation.

Children's education 2012 to 2020

Table 9.1 draws on the information collected on school type and fees, presenting comparisons of enrolment, school fees and family characteristics across the three main school types in Australian education systems: government schools, Catholic schools and other non-government schools. The table shows that 66.8% of primary-school children were enrolled in government schools in 2012, with this proportion increasing by 6.1 percentage points to 72.9% in 2020. In contrast, results show that 63.4% of high-school children were enrolled in government schools in 2012, with this proportion decreasing by 6.2 percentage points in 2020 to 57.2%. Catholic schools account for 19.4% of primary-school enrolments and 20.9% of high-school enrolments in 2012, decreasing to 15.1% of primary-school and 17.8% of high-school enrolments in 2020. The high-school enrolment in other non-government schools significantly increased from 13.5% in 2012 to 22.9% in 2020 (9.4 percentage points). However,

primary-school enrolment in other non-government schools decreased from 12.7% in 2012 to 10.9% in 2020.

Unsurprisingly, school fees are paid for most students in non-government schools and Catholic schools. The mean annual school fee in 2012 was \$2,024 for primary-school students at Catholic schools, \$6,621 for primary-school students at other non-government schools, \$5,477 for high-school students at Catholic schools, and \$12,407 for high-school students at other non-government schools. School fees increased by 28.5% for primary-school students and 24.5% for high-school students in Catholic schools between 2012 and 2020. However, school fees decreased by 4.5% for primary-school students at other non-government schools and slightly increased by 5.3% for high-school students between 2012 and 2020.

Substantial differences in students' family characteristics are evident across the three school types, with no significant differences across time. The mean SEIFA decile (see Box 9.1, page 130), mean equivalised income (see Box 3.2, page 34)

and proportions of parents holding university degrees are all highest for students at other non-government schools and lowest for students of government schools.

Interestingly, there has been a 14.6 percentage point increase in the share of mothers holding a university degree for high-school students at government schools between 2012 and 2020.

The proportion living in a single-parent household is also lowest for children in other non-government schools and highest for children in government schools. In almost all cases, the

Table 9.1: School fees and family characteristics by type of school—Children enrolled at school, 2012, 2016 and 2020.

	Primary school (Year 6 and below)								
	2012			2016			2020		
	Government school	Catholic school	Other non-government school	Government school	Catholic school	Other non-government school	Government school	Catholic school	Other non-government school
Percentage enrolled at school type ^a	66.8	19.4	12.7	70.4	17.2	10.7	72.9	15.1	10.9
<i>School fees</i>									
Percentage for whom school fees paid	–	98.6	98.4	–	99.7	97.6	–	98.9	96.1
Mean fee (\$, December 2020 prices)	–	2,024	6,621	–	2,196	7,903	–	2,597	6,321
<i>Family characteristics</i>									
Live in major urban area (%)	59.5	58.2	72.8	64.1	50.2	60.6	60.1	58.5	61.6
Mean SEIFA decile	5.3	5.9	6.5	5.5	5.6	6.3	5.6	5.7	6.0
Mean household equivalised income (\$, December 2020 prices)	50,210	57,464	68,056	49,192	58,385	66,699	53,626	62,387	66,181
Live in single-parent household (%)	21.6	17.3	*11.2	20.8	12.1	*10.1	18.9	11.6	16.1
Mean number of school children in household	2.2	2.3	2.1	2.1	2.2	2.2	2.2	2.1	2.3
Mother has a university degree (%)	28.1	36.7	55.9	32.1	42.5	55.2	34.2	45.8	60.6
Father has a university degree (%)	20.7	32.1	54.2	24.0	28.4	39.6	25.3	33.3	40.2
One or more parents CALD immigrant (%)	18.3	22.5	23.8	21.9	28.2	25.1	26.7	22.5	37.6
One or more parents MESC immigrant (%)	13.5	10.6	23.9	17.8	11.7	18.7	14.2	12.8	12.1
	High school (Year 7 and above)								
	2012			2016			2020		
	Government school	Catholic school	Other non-government school	Government school	Catholic school	Other non-government school	Government school	Catholic school	Other non-government school
Percentage enrolled at school type ^a	63.4	20.9	13.5	59.1	22.2	17.4	57.2	17.8	22.9
<i>School fees</i>									
Percentage for whom school fees paid	–	97.8	99.6	–	96.7	98.9	–	99.5	98.5
Mean fee (\$, December 2020 prices)	–	5,477	12,407	–	6,140	13,059	–	6,819	13,070
<i>Family characteristics</i>									
Live in major urban area (%)	59.4	66.3	64.3	59.5	62.9	69.9	56.6	58.7	71.6
Mean SEIFA decile	4.9	6.2	6.8	5.1	6.3	7.1	5.2	6.3	6.7
Mean household equivalised income (\$, December 2020 prices)	46,514	60,361	69,699	45,931	60,905	73,935	50,200	63,650	73,130
Live in single-parent household (%)	22.2	17.6	12.9	25.6	15.2	18.4	23.1	12.5	10.1
Mean number of school children in household	2.1	2.0	1.9	2.1	2.0	2.1	2.1	1.9	2.1
Mother has a university degree (%)	18.6	30.9	47.5	24.1	28.0	50.7	33.2	36.8	56.1
Father has a university degree (%)	15.8	25.2	44.9	16.7	29.5	46.4	21.1	28.2	47.5
One or more parents CALD immigrant (%)	18.8	23.8	18.4	20.0	20.0	17.6	21.4	*15.6	18.4
One or more parents MESC immigrant (%)	18.8	19.5	17.1	12.9	10.7	17.6	14.4	10.0	26.3

Notes: ^a An 'other' school type was reported for 1.3% of primary-school children and 1.9% of high-school children (pooling all three years together). *Estimate not reliable.

share of students living in a single-parent household is larger for high-school students than primary-school students, the only exception being in 2020 for other non-government schools.

Students in non-government high schools are also more likely than students in government schools to live in major urban areas (see Box 3.5, page 37), as are students in other non-government primary schools. However, primary-school children in Catholic schools are actually less likely to live in major urban areas than primary-school children in government schools.

There are no clear patterns in the prevalence of immigrant parents across the school types and over time. Depending on the year and school type, the proportion of children with at least one CALD immigrant parent varies between 15.6% and 23.8%, while the proportion with at least one MESC immigrant parent varies between 10.0% and 26.3%.

Box 9.1: Socio-Economic Index for Areas (SEIFA)

Constructed by the Australian Bureau of Statistics (ABS) using Census data, SEIFA is a suite of four indexes that can be used to explore different aspects of socio-economic conditions by geographic areas. For each index, every geographic area in Australia is given a SEIFA number, which shows how disadvantaged that area is compared with other areas in Australia. In analysis presented in this report, the SEIFA index used is the *Index of Relative Socio-Economic Advantage and Disadvantage*, which is derived from Census variables such as low income, low educational attainment, unemployment and dwellings without motor vehicles. For more information, see ABS (2009).

Tables 9.2 and 9.3 compare subjective assessments of school experiences and outcomes, and prospects for going to university, across school types and between boys and girls. The upper two panels are based on parent or guardian responses regarding the school children in the household, while the bottom panel is for school students aged 15 and over and is based on their responses.

As in Table 9.1, differences across school types are evident. Subjective assessments of the quality of education, school achievement and the likelihood of going to university are highest for students in other non-government schools and lowest for students in government

schools. Reported rates of experience of bullying and being contacted by the school because of poor behaviour are also generally highest for children at government schools.

Looking at the differences between boys and girls, there are indications that boys do not fare as well as girls at school. On average, parents and guardians report worse educational outcomes and prospects for boys—the notable exception being the experience of bullying in high school, which appears to be worse for girls than boys. Girls aged 15 and over at school also express more worry about bullying than do boys.

Table 9.2: Education outcomes and experiences of school children by school type, 2012, 2016 and 2020.

	Government			Catholic			Other non-government		
	2012	2016	2020	2012	2016	2020	2012	2016	2020
<i>Primary school (Year 6 and below): Parent or guardian responses for each child at school</i>									
Mean satisfaction with education	7.7	7.9	7.9	7.9	8.1	8.1	8.2	8.8	8.4
School achievement excellent or above average (%)	51.7	57.8	53.4	57.0	50.5	56.0	66.9	60.0	65.3
Child will definitely or probably go to university (%)	54.7	58.1	57.4	69.7	60.0	59.4	78.7	72.5	72.0
Bullied at school (%)	30.0	27.9	23.4	26.3	18.7	19.2	20.8	23.0	15.4
Bullied online (%)	–	*1.6	4.2	–	*0.4	*3.7	–	*3.4	*10.2
Contacted by school because of poor behaviour (%)	13.6	10.5	14.2	*6.9	*8.9	9.9	*10.7	*10.4	*9.9
<i>High school (Year 7 and above): Parent or guardian responses for each child at school</i>									
Mean satisfaction with education	7.3	7.5	7.5	7.9	8.0	7.9	8.2	8.7	8.4
School achievement excellent or above average (%)	45.2	50.9	47.3	60.9	59.7	51.7	67.0	74.3	65.1
Child will definitely or probably go to university (%)	48.8	51.6	47.8	73.2	65.1	67.0	75.2	83.3	71.9
Bullied at school (%)	21.5	22.4	20.0	15.3	12.5	11.5	11.2	11.2	15.6
Bullied online (%)	–	11.1	11.8	–	*7.0	*8.5	–	7.4	*4.8
Contacted by school because of poor behaviour (%)	24.2	19.3	20.9	12.3	17.6	13.1	*10.8	*5.4	15.3

Note: * Estimate not reliable.

Table 9.3: Education outcomes and experiences of school children by gender, 2012, 2016 and 2020.

	Boys			Girls		
	2012	2016	2020	2012	2016	2020
<i>Primary school (Year 6 and below): Parent or guardian responses for each child at school</i>						
Mean satisfaction with education	7.8	7.9	8.0	7.8	8.1	7.9
School achievement excellent or above average (%)	51.1	55.8	53.3	58.4	58.0	57.2
Child will definitely or probably go to university (%)	59.4	57.5	58.7	62.7	62.8	59.9
Bullied at school (%)	28.4	24.7	23.0	27.4	26.8	20.3
Bullied online (%)	–	*2.0	4.0	–	*1.1	5.9
Contacted by school because of poor behaviour (%)	15.5	12.6	15.7	8.6	7.6	10.0
<i>High school (Year 7 and above): Parent or guardian responses for each child at school</i>						
Mean satisfaction with education	7.6	7.8	7.8	7.6	7.9	7.8
School achievement excellent or above average (%)	49.0	55.9	49.2	54.9	58.6	55.6
Child will definitely or probably go to university (%)	56.7	57.2	54.0	59.1	63.2	58.7
Bullied at school (%)	17.4	17.6	16.1	19.9	18.7	18.5
Bullied online (%)	–	9.9	9.6	–	9.4	9.6
Contacted by school because of poor behaviour (%)	22.9	18.6	20.3	16.1	13.5	15.2
<i>Responses by those aged 15 and over attending school</i>						
Skipped school without an excuse (%)	20.1	16.9	10.2	15.0	21.2	20.7
Suspended or expelled (%)	8.6	8.5	*7.1	*3.8	*3.4	*2.3
Worry about bullying (%)	10.3	6.7	10.2	12.8	15.7	14.5
Worry about bullying online (%)	–	*3.9	*8.7	–	14.3	13.2

Note: * Estimate not reliable

Learning from home during the COVID-19 pandemic

As a response to the outbreak of COVID-19, education has changed dramatically, with the distinctive rise of learning from home. This means that teaching is undertaken remotely and on digital platforms. With this sudden shift away from the physical classroom, many wonder how such a shift will impact Australian’s children education. In 2020, the HILDA Survey gathered information on whether students stayed away from school and learned from home. It also collected information on the number of school weeks learning from home. Simultaneously, parents or guardians of children aged below 15 were asked to assess the learning from home experience. The same question

was asked of children aged 15 and above enrolled in education who responded by themselves.

Table 9.4 shows the results disaggregated by type of school and state. In Australia, the pandemic was met with international border closures and a nationwide lockdown commencing in late March 2020, which involved the closure of all non-essential businesses and schools and advice to work from home where possible. The national lockdown was lifted in early May. With the lifting of the national lockdown, primary responsibility for policies intended to contain the virus was left mainly to the different state and territory governments. In late June 2020, Melbourne became the epicentre of a local outbreak, which saw an increase in the number of COVID-19 cases. This prompted the Victorian State Government to impose a range of lockdown measures, including business closures, stay-at-home

orders, remote schooling and evening curfews. The State of Victoria was then subject to the second-longest continuous lockdown in the world in 2020 (111 days).

Results in Table 9.4 show that 89.9% of primary-school children from government schools in Victoria learnt at home, while this percentage goes up to 95% for Catholic schools and 100% for other non-government schools. It is worth noting that, despite the strict restrictions imposed, children of essential workers and from disadvantaged families were allowed to go to attend school in person. The proportion of students learning from home in New South Wales and the Australian Capital Territory was 94.9% for government schools and 91.1% and 92% for Catholic and other non-government schools, respectively. The rest of the states varied from 83% for those in government schools to 94.4% for non-government

Table 9.4: Learning from home and the impact on learning in 2020

	Government			Catholic			Other non-government		
	NSW/ ACT	VIC	Rest of Australia	NSW/ ACT	VIC	Rest of Australia	NSW/ ACT	VIC	Rest of Australia
<i>Primary school (Year 6 and below): Parent or guardian responses for each child at school</i>									
Students stayed away from school and learnt at home (%)	94.9	89.9	83.0	91.1	95.0	83.5	92.0	100.0	94.4
Number of school weeks stayed at home	6.9	14.0	5.2	6.1	12.6	6.3	7.6	14.5	6.0
Learning during the coronavirus crisis was:									
Worse (%)	50.4	56.8	38.7	56.9	58.2	44.0	45.9	50.3	48.7
About the same (%)	37.7	33.0	48.8	35.9	31.6	41.2	33.3	42.0	25.1
Better (%)	11.9	10.2	12.5	7.3	10.2	14.8	20.8	7.7	26.2
<i>High school (Year 7 and above): Parent or guardian responses for each child at school</i>									
Students stayed away from school and learnt at home (%)	97.1	98.1	87.2	97.0	100.0	92.6	96.7	98.8	94.5
Number of school weeks stayed at home	6.9	14.2	5.4	6.7	14.7	5.6	6.9	13.8	5.4
Learning during the coronavirus crisis was:									
Worse (%)	55.0	52.7	40.9	49.0	46.9	50.9	55.7	45.1	45.1
About the same (%)	30.6	31.5	47.7	36.4	47.1	40.3	28.2	38.2	43.2
Better (%)	14.5	15.8	11.4	14.6	6.0	8.8	16.2	16.7	11.7
<i>Responses by those aged 15 and over attending school</i>									
Students stayed away from school and learnt at home (%)	91.1	100.0	78.9	*95.4	*90.2	*89.0	*100.0	*91.4	*100.0
Number of school weeks stayed at home	6.5	13.2	5.5	*5.4	*14.4	*6.4	*5.9	14.6	**4.7
Learning during the coronavirus crisis was:									
Worse (%)	60.6	56.4	47.4	*57.4	*38.0	*68.4	*75.9	*58.3	*48.2
About the same (%)	35.4	35.4	39.8	*42.6	*61.9	*18.3	*6.4	*41.6	*45.2
Better (%)	3.9	8.2	12.8	*0.0	*0.0	*13.2	*17.6	*0.0	*6.6

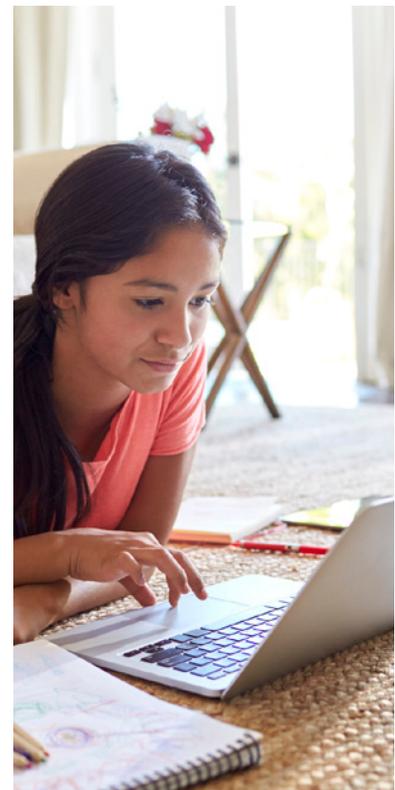
Notes: * Estimate not reliable. NSW-New South Wales; ACT-Australian Capital Territory; VIC-Victoria.

schools. Government and Catholic high schools had a higher percentage of children learning from home than primary schools. Other non-government high schools reported higher percentages of students learning from home, while other non-government schools were similar to primary schools.

Despite the high share of students affected by the shift to learning from home, it is worth noting that students from Victoria continued to learn from home the longest. They learned from home for around 14 school weeks compared with almost seven weeks for students in New South Wales and roughly five to six weeks for students in the rest of the country.

When looking at the impact on learning during the pandemic,

students from Victoria were those most affected. In particular, 56.8% of parents with primary-school students from government schools defined the learning from home experience as worse than physical learning. This percentage goes up to 58.2% for parents with children in Catholic schools, and is 50.3% for those with children in non-government schools. These percentages (of a negative experience) are slightly smaller for parents with high-school children. Still, over 50% of parents of children in Victorian other non-governments schools reported that learning during the COVID-19 crisis was worse. Again, results are similar for those aged 15 and over attending school and who completed the questionnaire by themselves.



Higher education students and the coronavirus crisis

The HILDA Survey asked students currently enrolled in higher education whether, because of the COVID-19 crisis, they unenrolled, withdrew from any course of study, or experienced any interruption in their study programs. Results in Table 9.5 show that, by state, female students were

consistently more likely to unenroll or withdraw than their male counterparts. By state, 4.9% of male students in Victoria reported having to unenroll or withdraw from any course of study, while the same is true for 9.5% of female students in Victoria. Female students and male students in New South Wales and the Australian Capital Territory also recorded a high rate of un-enrolment or withdrawal from course of study.

Over 30% of Australian students aged 15 and above reported an interruption to their studies due to the pandemic. The breakdown by states reveals that Victorian students were worse off, with 49% of female students and 47.6% of males reporting having experienced an interruption to their study program. Over half of these Victorian students expected that interruption to cause a delay in course completion.

Table 9.5: Unenrollment and interruptions in higher education students by state and gender, 2020

	Male			Female		
	NSW/ACT	VIC	Rest of Australia	NSW/ACT	VIC	Rest of Australia
Unenroll or withdraw from any course of study (%)	8.2	4.9	5.5	9.4	9.5	8.8
Experience any interruption in the study program (%)	34.3	47.6	34.8	41.0	49.0	31.6
Interruption will cause delay in course completion (%)	62.9	54.3	29.0	46.3	58.1	54.6

Notes: NSW-New South Wales; ACT-Australian Capital Territory; VIC-Victoria



10

Social connection and social support

Ferdi Botha



The degree of social contact with family and friends is an integral part of life. Moreover, the extent of social support available to an individual can be an important predictor of psychological and general wellbeing, with social connections also important in shaping perceptions of social support. The HILDA Survey has collected information on frequency of social contact as well as on perceived social support for the past 20 years. This chapter examines social connections, by considering changes in social contact over time, as well as the individual characteristics associated with social contact. The chapter also examines social support in terms of its changes over time as well as its determinants.

Box 10.1: HILDA Survey measure of frequency of social contact

In every wave of the HILDA Survey, a question has been included in the self-completion questionnaire ascertaining the frequency of in-person contact with friends or relatives not living with the respondent. The question reads: *In general, about how often do you get together socially with friends or relatives not living with you?*

Response options are *every day, several times a week, about once a week, 2 or 3 times a month, about once a month, one or twice every 3 months, less often than once every 3 months*. In this report, the social contact measure ranges from 1 (less often than once every 3 months) to 7 (every day), so that higher values correspond to greater frequency of social contact.

Frequency of social contact

Figure 10.1 shows the average incidence of social contact over time on the 1-7 scale for all Australians. The degree of social contact has clearly declined over time, falling from about 4.65 in 2001 to 4.13 in 2020, a decline of about 11%. There was also a notable decrease in social contact between 2019 and 2020, which reflects the inability of people to physically meet others due to COVID-19 restrictions.

Trends in social contact by age groups (Figure 10.2) reveal that the decline in social contact frequency has generally occurred among all ages. Persons aged 15-24 report the highest mean incidence of social contact throughout the period, but the largest relative decline in social

contact is also largest for this age group: falling from about 5.4 in 2001 to 4.6 in 2020, or roughly 17%. Also of note is the large drop in social contact in 2020, which was most severe for the 15-24 age group as well.

Table 10.1 shows average frequency of social contact scores in 2020, on the 1-7 scale, by selected personal characteristics. Females report slightly higher rates of mean social contact than males. People aged 15-24 have the most social contact (4.6) whereas those aged 45-54 have the least social contact (3.7). There are no clear differences in social connection across education groups. Social contact is only slightly lower for the employed relative to the unemployed and those not in the labour force. Higher levels of income tend to be associated

Figure 10.1: Average frequency of social contact, 2001-2020

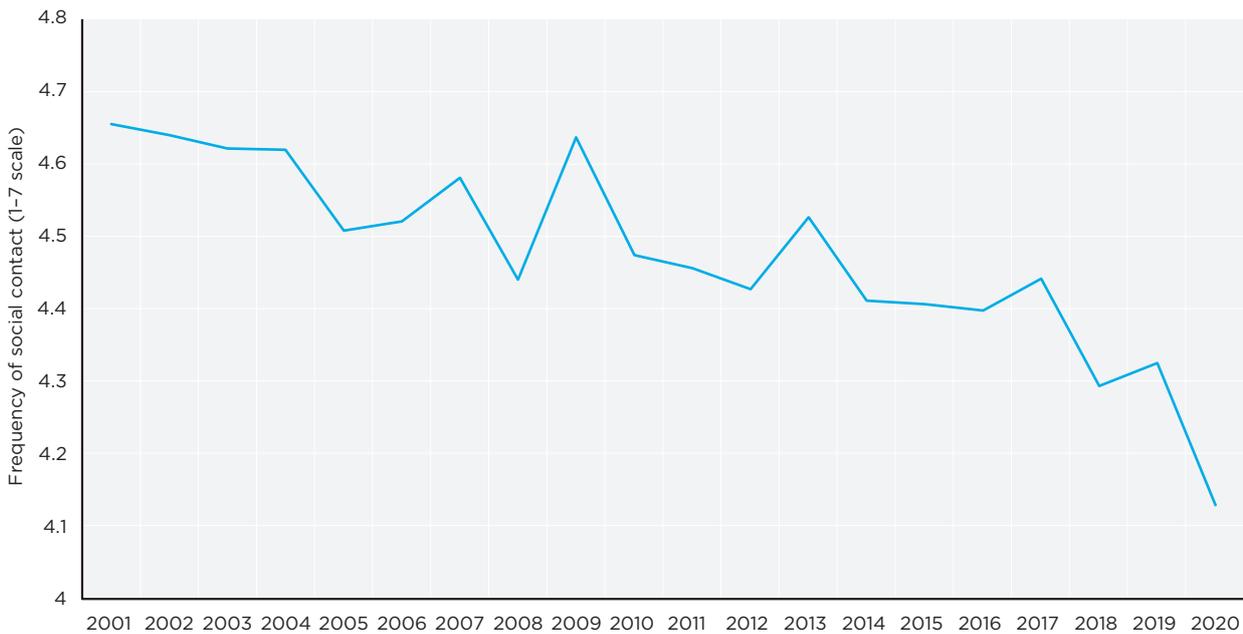
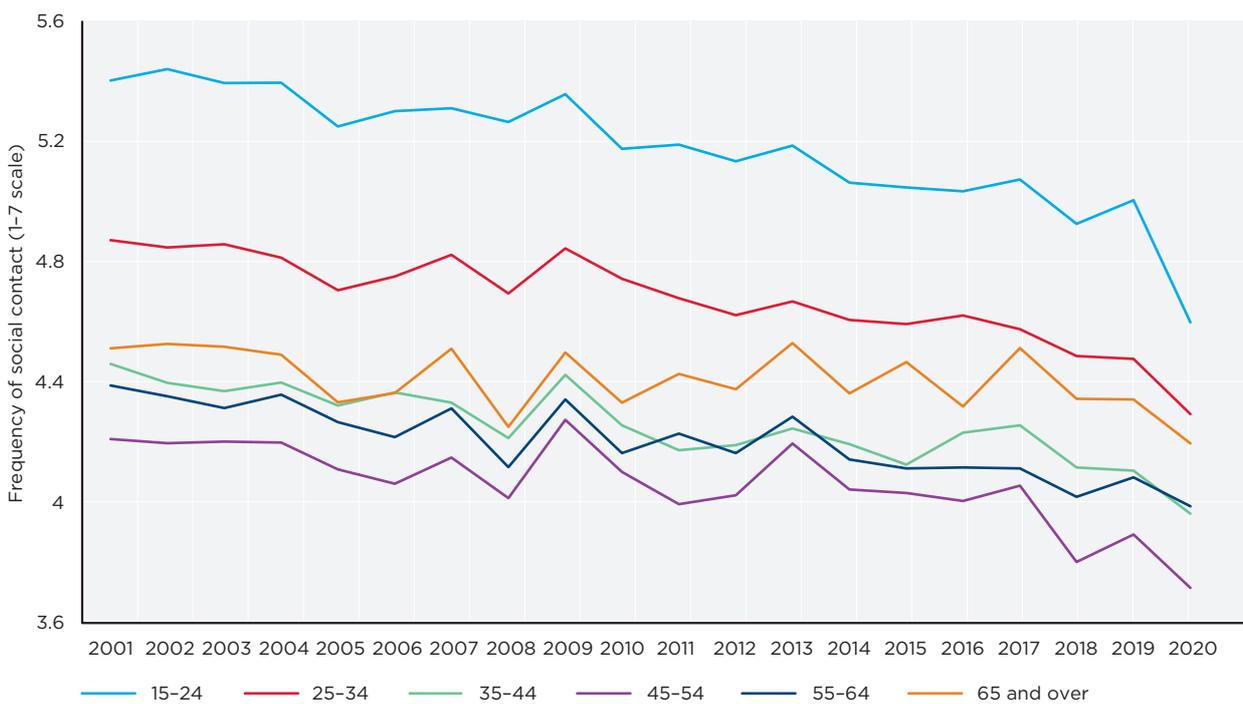


Figure 10.2: Average frequency of social contact, by age group, 2001-2020



with greater frequency of social contact.

Persons in poor general health (3.6) have much lower rates of social contact than people not in poor general health (4.2). A similar pattern is observed for mental health, with poor mental health being associated with lower rates of social contact.

Partnered individuals (4.0) report lower social contact than non-partnered individuals (4.3). Average social contact is relatively similar across household type.

Australians living in major urban areas report slightly higher mean social contact than those residing in other urban and non-urban



Table 10.1: Mean social contact frequency by individual characteristics, 2020 (1-7 scale)

<i>Gender</i>	
Females	4.2
Males	4.1
<i>Age group</i>	
15-24	4.6
25-34	4.3
35-44	4.0
45-54	3.7
55-64	4.0
65 and over	4.2
<i>Educational attainment</i>	
Year 11 and below	4.2
Year 12	4.2
Certificate III or IV, or Diploma	4.0
Bachelor's degree or higher	4.1
<i>Labour force status</i>	
Employed	4.1
Unemployed	4.2
Not in the labour force	4.2
<i>Household equivalised income</i>	
Bottom quintile	4.0
Second quintile	4.0
Third quintile	4.1
Fourth quintile	4.2
Top quintile	4.3
<i>SF-36 general health measure</i>	
Not in poor general health	4.2
In poor general health	3.6
<i>SF-36 mental health measure</i>	
Not in poor mental health	4.2
In poor mental health	3.7
<i>Partnered</i>	
No	4.3
Yes	4.0
<i>Household type</i>	
Couple without children	4.2
Couple with children	4.1
Single parent with children	4.1
Other household type	4.2
<i>Region of residence</i>	
Major urban	4.2
Other urban	4.0
Non-urban	4.1
<i>Country of birth and Indigenous status</i>	
Immigrant from main English-speaking country	4.1
Immigrant from country other than main English-speaking countries	3.9
Indigenous	4.1
Non-Indigenous Australian-born	4.2

areas. Australian-born individuals have the most social contact on average (4.2), whereas immigrants from countries other than the main English-speaking nations (3.9) report the least social contact.

Table 10.2 reports the regression results showing the predictors of social contact within a multivariate context. Social contact is greater among those aged 15-24 relative to all older age groups. For instance, compared to the 15-24 age group, people aged 45-54 report on average a 0.43-point lower rate of social contact on the 1-7 scale. Persons with at most Year 11 education report higher social contact than those with Year 12 or Certificate III, IV or Diploma.

While employed persons report on average about 0.14 points less social connection than unemployed persons, those not in the labour force report about 0.04 points greater social connection than unemployed persons. There is no significant relationship between household equivalised annual income and social contact. Better general and mental health are related to greater social contact. For instance, each additional one-point improvement in mental health (on the 0-100 scale) is associated with 0.008 points more social contact.

Partnered individuals have significantly lower social connection when compared to non-partnered persons. Individuals living in couple households without children report more social contact than people in all other household types. For example, social contact is about 0.2 points lower for single parents with children relative to those in couple households with children. There are no significant differences in social contact frequency across regions of residence.

Table 10.2: Predictors of social contact frequency, 2001-2020

Age (Reference category: 15-24)

25-34	-0.154
35-44	-0.363
45-54	-0.428
55-64	-0.294
65 and over	-0.112

Educational attainment (Reference category: Year 11 and below)

Year 12	-0.079
Certificate III or IV, or Diploma	-0.132
Bachelor's degree or higher	<i>ns</i>

Labour force status (Reference category: Unemployed)

Employed	-0.138
Not in the labour force	0.042

Household equivalised income (\$'0,000, December 2020 prices)

	<i>ns</i>
--	-----------

SF-36 general health measure (0-100 scale)

	0.003
--	-------

SF-36 mental health measure (0-100 scale)

	0.008
--	-------

Partnered

	-0.431
--	--------

Household type (Reference category: Couple without children)

Couple with children	-0.154
----------------------	--------

Single parent with children	-0.201
-----------------------------	--------

Other household type	-0.051
----------------------	--------

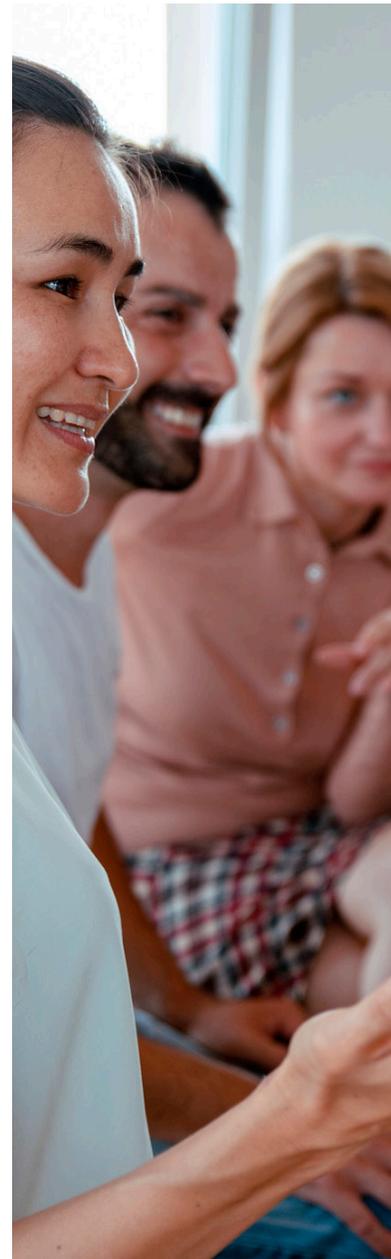
Region of residence (Reference category: Non-urban)

Major urban	<i>ns</i>
-------------	-----------

Other urban	<i>ns</i>
-------------	-----------

Number of observations 266,423

Notes: The table presents estimates from a fixed effects regression model of the predictors of the frequency of social contact on the 1-7 scale. See the Technical Appendix for a brief explanation of these models. Year indicators are included but not shown. *ns* indicates the estimate is not significantly different from 0 at the 10% level.



Social support

This section describes perceived levels of social support (see Box 10.2, page 137) among

Australians. The section shows changes in average social support over time and reports average social support by individual characteristics. Finally, regression results are reported showing the factors that jointly predict social support.

Figure 10.3 shows mean social support (on the 1-7 scale) for males and females over the period 2001 to 2020. Females consistently reported higher levels of social support than males. For both males and females, average social support has remained relatively stable

over time. Especially for males, in 2020 perceived social support declined significantly as compared to 2019 levels.

Box 10.2: Social support

The measure of social support is obtained from a set of 10 questions contained in the self-completion questionnaire. Respondents are asked to state the extent they agree or disagree with each of the following statements, where responses range from 1 (strongly disagree) to 7 (strongly agree):

- People don't come to visit me as often as I would like
- I often need help from other people but can't get it
- I seem to have a lot of friends
- I don't have anyone that I can confide in
- I have no one to lean on in times of trouble
- There is someone who can always cheer me up when I'm down
- I often feel very lonely
- I enjoy the time I spend with the people who are important to me
- When something's on my mind, just talking with the people I know can make me feel better
- When I need someone to help me out, I can usually find someone

In this report, an overall social support score is calculated as follows: $[(8 - a) + (8 - b) + c + (8 - d) + (8 - e) + f + (8 - g) + h + i + j]/10$. This results in an average social support score ranging from 1 (low social support) to 7 (high social support).

Figure 10.3: Average perceived social support, by gender, 2001-2020

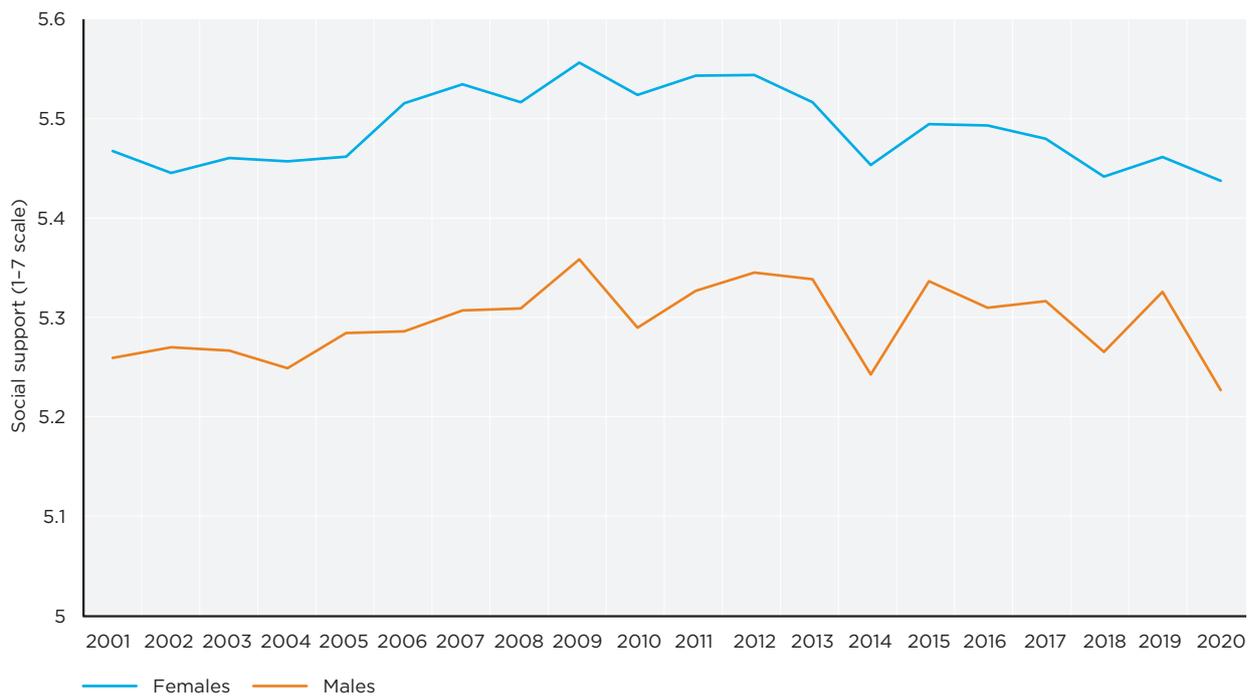


Table 10.3 reports mean social support scores in 2020 according to a range of individual characteristics. For both men and women, those aged 65 and over report the highest average social support. Higher levels of education are associated with greater mean social support. Unemployed and employed persons report lowest and highest social support, respectively. Higher levels of household equivalised income are related to greater mean social support.

Being in poor general or mental health is associated with less social support. For example, females in poor general health (4.8) report a lower mean social support score than females not experiencing poor general health (5.5). Among males, those in poor mental health have an average social support score of 4.3, compared to 5.4 for males not in poor mental health.

Average social support is higher among partnered people than among non-partnered people. Those in couple households without children report the

highest social support, whereas single parents with children report the lowest social support. An increased frequency of social contact is associated with greater social support. For example, females who see non-resident family or friends at least once a week have a social support score of 5.9 on the 1-7 scale, whereas the mean score is 4.8 among females for whom this frequency is three months or longer.

There are no clear patterns in mean social support according to area of residence, although Australians in major urban areas tend to report the highest average social support. Female immigrants from main English-speaking countries report highest, with Indigenous females reporting the lowest social support. Among males, social support is relatively similar across country of birth and Indigenous status.

Moving beyond average associations, this section next considers the characteristics that jointly explain perceived levels of social support, while controlling for a range of other factors. The





Table 10.3: Mean social support by individual characteristics, 2020
(1-7 scale)

	Females	Males
<i>Age group</i>		
15-24	5.3	5.2
25-34	5.4	5.2
35-44	5.5	5.2
45-54	5.4	5.2
55-64	5.5	5.2
65 and over	5.6	5.4
<i>Educational attainment</i>		
Year 11 and below	5.3	5.1
Year 12	5.4	5.2
Certificate III or IV, or Diploma	5.4	5.2
Bachelor's degree or higher	5.6	5.4
<i>Labour force status</i>		
Employed	5.5	5.3
Unemployed	5.0	4.8
Not in the labour force	5.3	5.2
<i>Household equivalised income</i>		
Bottom quintile	5.2	4.9
Second quintile	5.3	5.1
Third quintile	5.4	5.1
Fourth quintile	5.5	5.3
Top quintile	5.6	5.4
<i>SF-36 general health measure</i>		
Not in poor general health	5.5	5.3
In poor general health	4.8	4.5
<i>SF-36 mental health measure</i>		
Not in poor mental health	5.7	5.4
In poor mental health	4.6	4.3
<i>Partnered</i>		
No	5.3	5.0
Yes	5.6	5.4
<i>Household type</i>		
Couple without children	5.7	5.5
Couple with children	5.5	5.3
Single-parent with children	5.1	4.9
Other household type	5.4	5.0
<i>Frequency of social contact</i>		
Once every 3 months or longer	4.8	4.7
At least once a month	5.4	5.3
At least once a week	5.9	5.6
<i>Region of residence</i>		
Major urban	5.5	5.3
Other urban	5.4	5.1
Non-urban	5.4	5.2
<i>Country of birth and Indigenous status</i>		
Immigrant from main English-speaking country	5.6	5.2
Immigrant from country other than main English-speaking countries	5.4	5.2
Indigenous	4.9	5.1
Non-Indigenous Australian-born	5.4	5.2

regression results are reported in Table 10.4.

In general, for both males and females those aged 15–24 have higher social support than older age groups. Among men aged 35–44, for instance, social support is about 0.146 points lower relative to males aged 15–24 on the 1–7 scale. However, women aged 65 and over report significantly higher social support than females aged 15–24. Higher levels of education are associated with greater social support, but there are no significant differences in support between persons with at least a bachelor’s degree and Year 11 or below.

As compared to unemployed persons, social support is higher among employed persons and people not in the labour force. For example, social support for females who are employed or not in the labour force is on average 0.047 and 0.036 points higher than for unemployed females. For each additional \$10,000 in household equivalised annual disposable income, social support increases by roughly 0.003 and 0.004 points, respectively, for females and males. Better general health is also associated with higher levels of perceived social support.

Partnered people report significantly greater social support than non-partnered individuals with social support for partnered males, for example, being 0.147 points higher than for non-partnered males. With respect to household type, those living in couple households with children have the highest social support. For instance, among females, single parents with children report 0.119 points lower social support than couples without children.

Not surprisingly, more social contact is related to greater social support, as an additional one-point increase in the social

contact score is associated with a roughly one-point increase in social support among both men and women. Finally, after

controlling for other factors, there are no meaningful differences in social support across the regions of residence.

Table 10.4: Predictors of social support, 2001–2020

	Females	Males
<i>Age (Reference category: 15–24)</i>		
25–34	–0.050	–0.101
35–44	–0.078	–0.146
45–54	–0.047	–0.123
55–64	<i>ns</i>	–0.063
65 and over	<i>ns</i>	<i>ns</i>
<i>Educational attainment (Reference category: Year 11 and below)</i>		
Year 12	–0.070	–0.075
Certificate III or IV, or Diploma	–0.075	–0.088
Bachelor’s degree or higher	<i>ns</i>	<i>ns</i>
<i>Labour force status (Reference category: Unemployed)</i>		
Employed	0.047	0.044
Not in the labour force	0.036	0.043
Household equivalised income (\$’0,000, December 2020 prices)	0.003	0.004
SF–36 general health measure (0–100 scale)	0.009	0.010
Partnered	0.055	0.147
<i>Household type (Reference category: Couple without children)</i>		
Couple with children	–0.082	–0.074
Single parent with children	–0.119	–0.107
Other household type	–0.072	–0.098
Frequency of social contact (1–7 scale)	0.105	0.096
<i>Region of residence (Reference category: non-urban)</i>		
Major urban	<i>ns</i>	<i>ns</i>
Other urban	<i>ns</i>	<i>ns</i>
Number of observations	138,379	122,615

Notes: The table presents estimates from a fixed effects regression model of the predictors of social support on the 1–7 scale. See the Technical Appendix for a brief explanation of these models. Year indicators are included but not shown. *ns* indicates the estimate is not significantly different from 0 at the 10% level



References



- Australian Bureau of Statistics (ABS) (1995) *Standards for Statistics on the Family*, ABS Catalogue No. 1286.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) (2001) *Australian Standard Classification of Education (ASCED) 2001*, ABS Catalogue No. 1272.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) (2006) *ANZSCO—Australian and New Zealand Standard Classification of Occupations*, 1st ed., 2006, Catalogue No. 1220.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) (2008) *Australian and New Zealand Standard Industrial Classification (ANZSIC)*, 2006 (Revision 1.0), Catalogue No. 1292.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) (2009) *Information Paper: An Introduction to Socio-Economic Indexes for Areas (SEIFA)*, Catalogue No. 2309.0, 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 (ABS) (2014) *Education Variables, June 2014*, Catalogue No. 1246.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) (2017) *Household Expenditure Survey and Survey of Income and Housing, User Guide, Australia, 2015–16*, Catalogue No. 6503.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) (2018) *Labour Statistics: Concepts, Sources and Methods, Feb 2018*, Catalogue No. 6102.0.55.001, ABS, Canberra.
- Australian Bureau of Statistics (ABS) (2019) *Household Income and Wealth, Australia*, <https://www.abs.gov.au/statistics/economy/finance/household-income-and-wealth-australia/2017-18>.
- Australian Bureau of Statistics [ABS] (2021) *Working Arrangements, August 2021*, <<https://www.abs.gov.au/statistics/labour/earnings-and-work-hours/working-arrangements/aug-2021>>.
- 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>.
- Beck, M.J. and Hensher, D.A. (2021) 'Insights into working from home in Australia in 2020: Positives, negatives and the potential for future benefits to transport and society', ITLS Working Paper 21–08, Institute of Transport and Logistics Studies, University of Sydney.
- Botha, F., Butterworth, P. and Wilkins, R. (2022) 'Evaluating how mental health changed in Australia through the COVID-19 pandemic: Findings from the 'Taking the Pulse of the Nation' (TTPN) Survey', *International Journal of Environmental Research and Public Health*, vol. 19, no. 1, pp. 558–71. doi: <https://doi.org/10.3390/ijerph19010558>
- 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: Applied Economic & Social Research, The University of Melbourne.
- Butterworth, P., Schurer, S., Trinh, T.-A., Vera-Toscano, E. and Wooden, M. (2022) 'Effect of lockdown on mental health in Australia: Evidence from a natural experiment analysing a longitudinal probability sample survey', *Lancet Public Health*, doi: 10.1016/S2468-2667(22)00082-2.
- 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: Applied Economic & Social Research, The University of Melbourne.
- Creighton, B. and Stewart, A. (2010) *Labour Law*, 5th ed., Federation Press, Annandale, NSW.
- 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.
- 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.
- Hsiao, C. (2003) *Analysis of Panel Data*, Cambridge University Press, New York.
- Lusardi A. and Mitchell, O. (2014) 'The Economic Importance of Financial Literacy: Theory and Evidence', *Journal of Economic Literature*, vol. 52, no. 1, pp. 5–44.
- OECD (2019) 'Income poverty of households in Australia: Evidence from the HILDA Survey', Economics Department Working Papers No. 1539, OECD Publishing, Paris.
- OECD International Network on Financial Education (2011) *Measuring Financial Literacy: Questionnaire and Guidance Notes for Conducting an Internationally Comparable Survey of Financial Literacy*, OECD, Paris.
- Productivity Commission (2021) 'Working from home' Research Paper, Productivity Commission, Canberra.
- Rasch, G. (1960) *Probabilistic Models for Some Intelligence*

and Attainment Tests, Danish Institute for Educational Research, Copenhagen.

Saucier, G. (1994) 'Mini-markers: A brief version of Goldberg's unipolar big-five markers', *Journal of Personality Assessment*, vol. 63, no. 3, pp. 506-16.

Silverman, B.W. (1986) *Density Estimation for Statistics and Data Analysis*, Chapman & Hall, London.

Summerfield, M., Garrard, B., Hahn, M., Jin, Y., Kamath, R., Macalalad, N., Watson, N., Wilkins, R. and Wooden, M. (2020) 'HILDA user manual - Release 19', 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.

Treasury (2020) *The JobKeeper Payment: Three-month review*, Australian Government, Canberra, <<https://treasury.gov.au/publication/jobkeeper>>.

Treasury (2021) *Insights from the First Six Months of JobKeeper*, Australian Government, Canberra, <<https://treasury.gov.au/publication/p2021-211978>>.

United Nations (2011) *Canberra Group Handbook on Household Income Statistics*, 2nd ed., United Nations, New York and Geneva.

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.

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 Lass, I. (2018) *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 16*. Melbourne Institute: Applied Economic & Social Research, 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, University of Melbourne.

Wilkins, R., Vera-Toscano, E. and Botha, F. (2020) *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 18*, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.

Wooden, M. and Fok, Y.K. (2013) 'Working at home: Whatever happened to the revolution?' In R. Wilkins, *Families, Incomes and Jobs, Volume 8: A Statistical Report on Waves 1 to 10 of the Household, Income and Labour Dynamics in Australia Survey*, Melbourne Institute of Applied Economic and Social Research, University of Melbourne (pp. 106-113).



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 2020 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 2020 prices, the value is multiplied by the ratio of the CPI for the December quarter of 2020 (116.2) 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 2020 prices, the wage is multiplied by 1.56 (116.2/74.7). The interpretation of this adjustment is that prices on average rose by 56% between the September quarter of 2001 and the December quarter of 2020, which means that the amount of money required to buy a given bundle of goods and services had on average increased by 56%. We therefore need to increase the wage measured in the September quarter of 2001 by 56% to make it comparable with a wage measured in the December quarter of 2020. Note that for dollar values measured over an annual time-frame, 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.

Kernel density estimates

Kernel density estimation is a method for estimating a probability density function from observed values of a variable or quantity of interest (such as the SF-36 mental health measure). A density function shows how a variable is distributed—that is, how frequently it takes on each of its possible values. See Silverman (1986) for explanation of kernel density estimation.

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 upon the value of that explanatory variable at which the effects are evaluated, and indeed also depend on the values of the other explanatory variables at which they are evaluated. For example, in the Logit model of the probability of experiencing financial stress presented in Chapter 3, the effects of income will depend on the values of the other explanatory variables. This makes it difficult to interpret coefficient estimates. We therefore report 'mean marginal effects' estimates, which provide a straightforward way of ascertaining the effects of explanatory variables that are analogous to those obtained in linear regression models—that is, the effect on the dependent variable of a one-unit increase in the explanatory variable. Specifically, continuing with the example above, the mean marginal effect estimate for income, which is measured in thousands of dollars, is the mean effect on the probability of experiencing financial stress, evaluated over all members of the sample, of increasing income by \$1,000.

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). Multinomial Probit and Logit models examine variables that take on more than two distinct values, such as the models of the method of setting pay estimated in Chapter 3. The interpretation of estimates in these models is the same as in the binary models.
- **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.
- **Random-effects** models are also often applied to panel data. They differ from fixed-effects models by allowing estimation of the effects of characteristics that typically do not change over time (such as gender). This is made possible by assumptions about the distribution and nature of unobserved fixed individual traits, such as intrinsic motivation. The models are relatively complicated. For more information on random-effects models, see, for example, Hsiao (2003).
- **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. A commonly used model is 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 that 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.

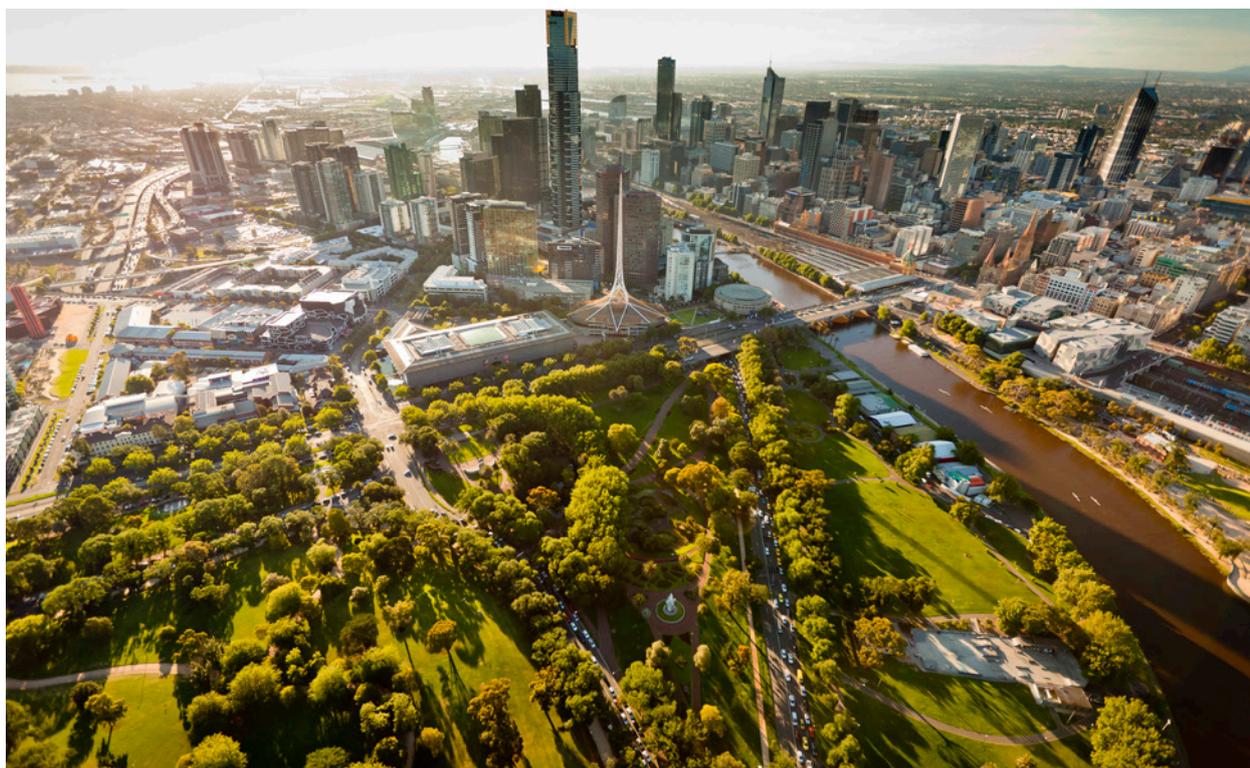
B. Population inferences from the HILDA Survey data

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. These coverage rules were broadly in line with those adopted by the Australian Bureau of Statistics 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 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, two 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. Nonetheless, immigrants arriving after 2011 are under-represented in the HILDA Survey sample from Wave 12 onwards.

Non-response is an issue for all household surveys, and *attrition* (that is, 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.¹ 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 20 excludes most immigrants arriving after 2011. For example, in Wave 20, 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. 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 20, the household population weights sum to 9.8 million and the 'person' population weights sum to 25.0 million.

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 (that is, 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 and 18. 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 (for example, 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 (for example, 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.

¹ Further details on how the weights are derived are provided in Watson and Fry (2002), Watson (2004b) and Summerfield et al. (2020).

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 an entirely new '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%.

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 123 interviewers in Wave 20, 102 of whom were face-to-face interviewers. However, due to COVID-19 and the restrictions imposed by state, territory and federal governments, interviews were largely conducted by telephone. The remaining 21 were dedicated telephone interviewers. In Wave 20, 1,680 interviews (or 9.6% 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 20).² Table A1 presents the number of households, respondents and children under 15 years of age in each wave. In Wave 20, interviews were obtained with a total of 17,070 people, of which 13,467 were from the original sample and 3,603 were from the top-up sample. Of the original 13,969 respondents in 2001, 6,866, or 58.7% of those still in scope (that is, alive and in Australia), were still participating at Wave 20.

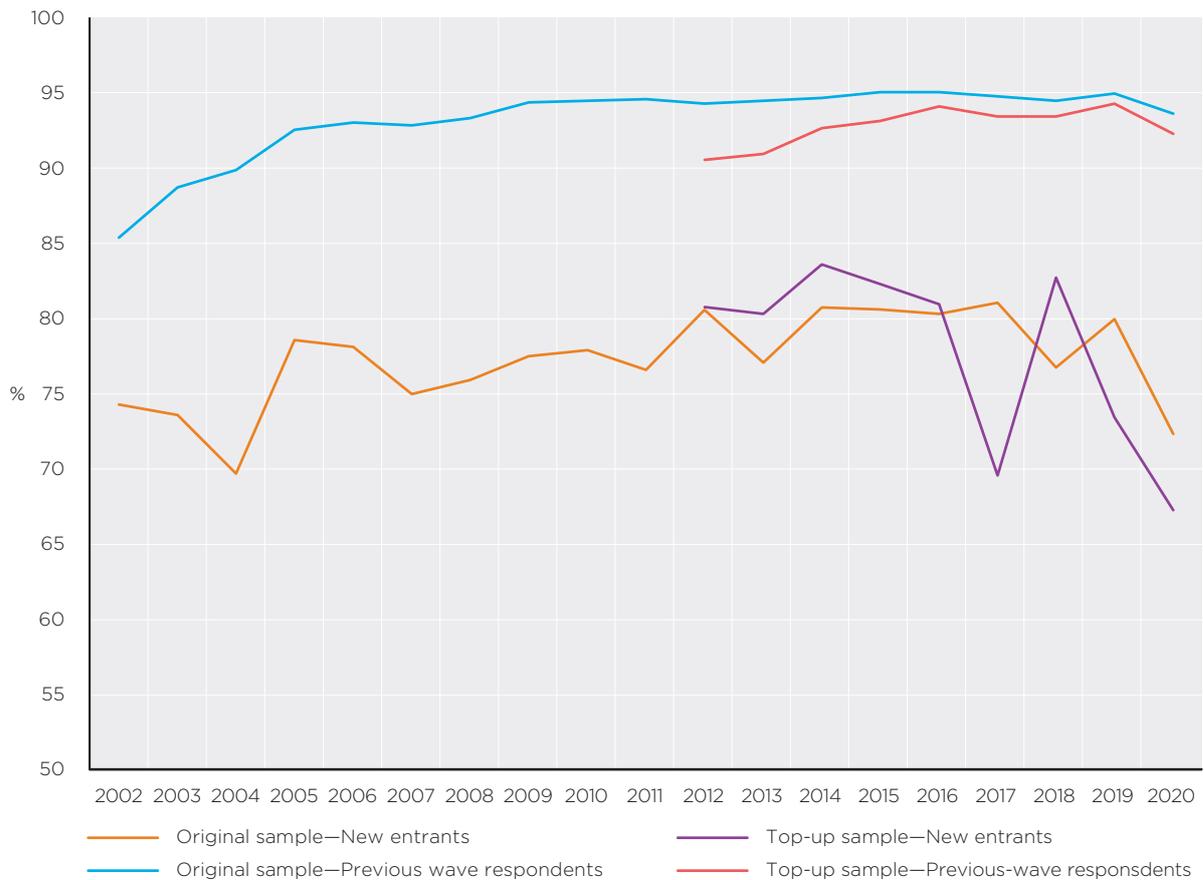
Note that—the top-up sample aside—the total number of respondents in each wave is greater than the number of Wave 1 respondents interviewed in that wave, for three main reasons. First, some non-respondents in Wave 1 are successfully interviewed in later waves. Second, interviews are sought in later waves with all people

Table A1: HILDA Survey sample sizes

	<i>Households</i>	<i>People interviewed</i>	<i>Children under 15</i>
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 (original sample)	7,390	13,603	3,601
Wave 12 (original sample)	7,420	13,536	3,608
Wave 13 (original sample)	7,463	13,608	3,680
Wave 14 (original sample)	7,441	13,633	3,625
Wave 15 (original sample)	7,546	13,753	3,653
Wave 16 (original sample)	7,635	13,834	3,765
Wave 17 (original sample)	7,660	13,791	3,822
Wave 18 (original sample)	7,615	13,723	3,834
Wave 19 (original sample)	7,633	13,748	3,863
Wave 20 (original sample)	7,552	13,467	3,846
Wave 11 (top-up sample)	2,153	4,009	1,180
Wave 12 (top-up sample)	2,117	3,939	1,090
Wave 13 (top-up sample)	2,092	3,892	1,055
Wave 14 (top-up sample)	2,097	3,878	1,045
Wave 15 (top-up sample)	2,085	3,852	1,037
Wave 16 (top-up sample)	2,115	3,859	1,054
Wave 17 (top-up sample)	2,082	3,779	1,025
Wave 18 (top-up sample)	2,023	3,711	1,011
Wave 19 (top-up sample)	2,031	3,714	995
Wave 20 (top-up sample)	2,003	3,603	964

² More detailed data on the sample make-up, and in particular response rates, can be found in Summerfield et al. (2021).

Figure A1: HILDA Survey response rates, Waves 2 to 20 (2002 to 2020)



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 (for example, 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.

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, and remaining above that level ever since. In Wave 20, the re-interview rate was 95.5% for the original sample and 94.1% for the top-up sample. 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, in Wave 20, the rate dropped to 73.3% for the original sample and 68.0% for the top-up sample.

Within the top-up sample, the re-interview rate in Wave 20 was 95.2%. The comparable rate within the original sample is the rate recorded in Wave 10, which was 96.4%.

All people who are interviewed are also asked to complete a separate paper-based questionnaire. Of the 17,070 people who were interviewed in Wave 20, 15,679 (91.9%) returned this self-completion questionnaire.

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 20 waves and the proportion responding in Wave 20, disaggregated by characteristics in Wave 1 (that is, 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 20	Wave 1 characteristics	Interviewed in all waves	Interviewed in Wave 20
<i>Area</i>			<i>Indigenous status</i>		
Sydney	45.7	56.4	Indigenous	34.8	61.7
Rest of New South Wales	48.6	58.2	Non-Indigenous	48.1	58.7
<i>Melbourne</i>			<i>Education attainment</i>		
Rest of Victoria	45.6	56.3	Year 11 or below	41.9	53.3
Brisbane	52.1	61.9	Year 12	47.6	58.9
Rest of Queensland	48.9	58.8	Certificate 3 or 4	46.8	58.1
Adelaide	49.8	59.2	Diploma	53.2	63.2
Rest of South Australia	46.2	59.8	Degree or higher	59.9	69.2
<i>Perth</i>			<i>Dwelling type</i>		
Rest of Western Australia	42.7	58.4	House	48.4	59.4
Tasmania	52.4	65.2	Semi-detached	46.1	57.5
Northern Territory	57.4	71.4	Flat, unit, apartment	43.0	53.4
Australian Capital Territory	53.7	64.8	Other	44.4	54.4
<i>Gender</i>			<i>Labour force status</i>		
Male	45.9	57.2	Employed full-time	49.5	60.4
Female	49.4	60.0	Employed part-time	51.9	63.1
<i>Age group (years)</i>			<i>Unemployed</i>		
15-19	35.1	53.3	Unemployed	37.6	52.0
20-24	37.4	52.8	Not in the labour force	43.6	53.9
25-34	45.3	58.0	<i>Employment status in main job^a</i>		
35-44	51.5	61.5	Employee	50.5	61.7
45-54	55.6	65.0	Employer	48.2	57.9
55-64	55.7	63.6	Own account worker	49.5	58.4
65-74	41.6	46.9	Contributing family worker	45.0	61.9
75 and over	14.7	18.2	<i>Occupation^a</i>		
<i>Marital status</i>			Managers/administrators	52.0	62.9
Married	50.6	59.9	Professionals	59.5	69.7
De facto	45.1	57.7	Associate professionals	50.5	60.4
Separated	48.7	60.6	Tradespersons	42.3	55.2
Divorced	56.0	65.7	Advanced clerical/service	49.1	59.3
Widowed	46.6	50.9	Intermediate clerical/sales/service	51.2	62.3
Single	40.4	55.5	Intermediate production/transport	45.9	54.7
<i>Country of birth</i>			Elementary clerical/sales/service	49.4	62.3
Australia	49.5	60.5	Labourers	40.7	51.9
Overseas			<i>All Wave 1 respondents</i>		
Main English-speaking	49.6	58.6	All Wave 1 respondents	47.8	58.7
Other	36.9	49.3	Total number responding	5,377	6,866

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 (%)

<i>Wave 11 characteristics</i>	<i>Interviewed in all waves</i>	<i>Interviewed in Wave 20</i>	<i>Wave 11 characteristics</i>	<i>Interviewed in all waves</i>	<i>Interviewed in Wave 20</i>
<i>Area</i>			<i>Indigenous status</i>		
Sydney	62.3	66.8	Indigenous	65.6	69.2
Rest of New South Wales	68.2	72.7	Non-Indigenous	65.6	70.9
Melbourne	69.9	75.1	<i>Education attainment</i>		
Rest of Victoria	65.2	69.1	Year 11 or below	59.9	66.6
Brisbane	65.5	74.0	Year 12	65.2	71.1
Rest of Queensland	66.3	74.0	Certificate 3 or 4	68.3	74.4
Adelaide	68.4	69.8	Diploma	67.9	74.2
Rest of South Australia	64.7	68.6	Degree or higher	68.7	71.4
Perth	58.2	66.8	<i>Dwelling type</i>		
Rest of Western Australia	53.9	63.7	House	65.8	71.5
Tasmania	71.8	74.4	Semi-detached	61.6	66.4
Northern Territory	54.2	66.7	Flat, unit, apartment	67.1	70.8
Australian Capital Territory	66.0	66.7	Other	100.0	100.0
<i>Gender</i>			<i>Labour force status</i>		
Male	64.5	70.2	Employed full-time	65.8	72.2
Female	66.5	71.5	Employed part-time	65.8	70.4
<i>Age group (years)</i>			Unemployed	70.9	74.8
15-19	58.9	66.1	Not in the labour force	64.5	69.0
20-24	62.9	71.0	<i>Employment status in main job^a</i>		
25-34	69.8	74.9	Employee	66.0	71.8
35-44	64.7	69.8	Employer	59.2	70.0
45-54	65.9	70.9	Own account worker	65.7	69.7
55-64	70.0	75.6	Contributing family worker	60.0	70.0
65-74	72.7	76.5	<i>Occupation^a</i>		
75 and over	42.9	45.6	Managers	63.4	72.1
<i>Marital status</i>			Professionals	68.9	73.4
Married	67.3	71.7	Technicians and trades workers	62.3	68.1
De facto	65.3	72.6	Community and personal service workers	65.9	70.6
Separated	75.5	78.8	Clerical and administrative workers	64.6	72.3
Divorced	67.9	72.9	Sales workers	65.6	70.7
Widowed	56.0	58.9	Machinery operators and drivers	66.2	71.1
Single	61.9	68.9	Labourers	69.5	73.5
<i>Country of birth</i>			<i>All Wave 11 top-up respondents</i>		
Australia	66.7	72.2		65.6	70.9
Overseas			<i>Total number responding</i>		
Main English-speaking	64.9	71.1		2333	2585
Other	61.7	65.8			

Notes: Estimates are for the sample and are therefore not population-weighted. ^a Employed people only.



HILDA Survey Personnel



Melbourne Institute survey management team

Director

Professor Mark Wooden

Deputy Director, Research

Professor Roger Wilkins

Deputy Director, Survey

Methodology

Associate Professor Nicole Watson

Deputy Director, Survey

Management

Ms Michelle Summerfield

Database Manager

Ms Ninette Macalalad

Survey Methodologist

Dr Mossamet Kamrun Nessa

Database Support Officers

Ms Roopa Kamath

Ms Brooke Garrard

Senior Research Fellow

Dr Esperanza Vera-Toscano

Research Officer

Mr Markus Hahn. Resigned
December 2021

External Reference Group

Professor Ann Evans, Australian
National University (Chair)

Professor Garry Barrett, The
University of Sydney

Professor Peter Butterworth,
Australian National University

Professor Belinda Hewitt, The
University of Melbourne

Professor David Johnston, Monash
University

Professor Anne Kavanagh,
The University of Melbourne.
Resigned 2022.

Professor Rachel Ong ViforJ,
Curtin University

Dr Chris Schilling, Australian
Institute of Family Studies

Professor Peter Siminski, University
of Technology Sydney

Dr Diana Warren, Australian
Institute of Family Studies.
Resigned 2022.

Professor Mark Western,
The University of Queensland.
Resigned 2022.

Technical Reference Group

Professor Robert Breunig,
Australian National University

Dr John Henstridge, Data Analysis
Australia

Mr Bruce Fraser, Australian Bureau
of Statistics

Roy Morgan Research

HILDA project team

Antonina De Maria

Ben Telford

Davina Heng

Diane Soulidis

Edith Feher

Evan Strouss

Evelyn Hamilton

Jodi Norton

Joshua Button

Kieran Dong

Louisa Katerelos

Mary-Ann Patterson

Patrick Scott

Rayoul Borges

Shane Pickard

Tania Sperti

Vivek Malpani

HILDA Team 1800

Blaise Adamson

Jane Baird

Jennifer Balcomb

Harry Bernardo

Rinata Buccheri

Ruben Bull Milne

Lucy Cooper

Stephanie Cowey

Fiona Crockett

Tansy Fisher

William Hollingsworth

Rebecca Jarvis

Liam Jemmeson

Christine Karafillis

Louise Liu

Tim Macpherson

Sean Mijares

Lia Sharard

Jack Smith

Jade Smith

Daniel Stojkovich

Andrew Szetho

Samantha Tait

Oliver Wicks

George Wood

HILDA face-to-face field interviewing team

Jan Alcock

Mel Anderson

Cathy Andrew

Farah Aslankoochi

Jo Avery

Merril Bennett

Pam Bowtell

Christine Brennan

Linda Buttel

Gordon Caldwell

Jay Clark

Peter Comber

Andrew Craker

David Cummins

Melanie Davidson

Beth Donnelly

Geoff Ebbs

Brenda Edith

Almari Edwards

Sandra Essex

Lana Fitt
Anthony Foley
John Girvan
Elizabeth Griffiths
Garry Grooms
Philip Hands
Jackie Hendriksen
Donna Hickey
Loretta Ho
Stephen Hogarty
Josie Holland
Ian Hosking
Jan Houghton
Ben Huisman
Marianne Hunter
Dylan Hyde
Andrew James
Linda Jones
Candida Kelly
Patricia Kempster
John Kenney
Stephanie Kent
Lynette Krause
Christine Leece
Ross Lewis
John Lockhart
Angela Malberg

Claire Marlow
Linda Martin
Priscilla Martinus
Gaynor Martyn
Kaleil Merren
Tony Moloney
Colleen Moore
Peter Mulholland
Robert Neal
Gwen Nickolls
Vicky Nowak
Scott O'dea
Elaine O'gorman
Sally O'neal
Lyn Olsen
Jurek Osada
Mary-Ann Patterson
Elizabeth Pedler
Cheryl Perrett
Zoe Perrett
Jan Pianta
Sarah Ponton
Sandra Potter
Beverley Price
Amanda Pritchard
Glen Randall
David Reed

Margaret Reid
Karen Reid-Smith
Marg Reynolds
Lynndal Richards
Aaron Rinder
Beth Ritters
Sandra Robertson
Karen Schipanski
Debbie Schreurs
Roma Sirc
Karen Steele
Margaret Stubbs
Bridgitte Tadrosse
Lynda Taylor
Sandra Teagle
Suzanne Torok
Robin Trotter
Sunita Waghmode
Tim Walker
Karen West
John Wieruszewski
Dennis Williams
Marlene Wills
Bev Worrall
Jayne Wymer
Karen Yaxley





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 at the University of Melbourne. Roy Morgan Research has conducted the fieldwork since 2009, prior to which The Nielsen Company was the fieldwork provider.

