Families, Incomes and Jobs:

A Statistical Report of the HILDA Survey

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Glossary

Absolute poverty

Confusingly, absolute poverty has two meanings in social science research. In this Report absolute poverty means lacking the basics—food, clothing and shelter. However, sometimes fixed or 'anchored' poverty lines, like the American 'adequate diet poverty line, are referred to as absolute poverty lines. They are absolute rather than 'relative' (see below for 'relative poverty') in the sense that they are not adjusted upwards as mainstream living standards rise.

Casual jobs

Casual employment means the absence of entitlement to both paid annual leave and paid sick leave.

Equivalence scale

An equivalence scale is used to calculate equivalised income. In this Report we have used the OECD equivalence scale, which allows 1.0 for the first adult in the household, 0.5 for other adults and 0.3 for children under 15. So a household of two adults and two children would have an equivalence score of 2.1 (1.0 + 0.5 + 0.3 + 0.3). Equivalised income is calculated by dividing household disposable income (income after taxes and transfers) by the equivalence score for the household.

Equivalised income

The purpose of constructing measures of equivalised income is to get a measure of material standard of living which adjusts for differences in household size. The most obvious adjustment would be household income per head, but this would make no allowance for economies of scale in larger households. Equivalised income is defined as household disposable income (i.e. income after taxes and transfers; pensions and benefits) divided by an equivalence scale (see below) based on household size. Normally, all individuals in a household are given the same equivalised income; the assumption being that income is shared, so that everyone's standard of living is the same.

Financial stress

A person or household is considered to be under financial stress if, *due to shortage of money*, it is not possible for them to meet basic financial commitments. The measure of financial stress used in this Report is based on questions about inability to pay utility bills on time, inability to pay the mortgage on time, having to pawn or sell possessions, going without meals, being unable to heat the home, asking for financial help from friends or family, or asking for help from a welfare/community organisation.

Household disposable income

Household disposable income is the combined income of all household members after receipt of public transfers (Government pensions and benefits) and deduction of taxes. It could also be termed 'household post-government income' (see later entry).

Household gross income

The combined cash income of all household members from all sources—labour income, asset income, private transfers and public transfers (Government pensions and benefits).

Household labour income

Household labour income is the sum of the wage, salary and self-employment earnings of all household members.

Household pre-government income

Household pre-government income means all income derived from market sources (labour income, asset income, private superannuation etc), plus inter-household gifts and bequests. The only income sources omitted here are Government benefits and taxes.

Household reference person

In many analyses it is useful to classify households according to the characteristics (e.g. the age) of one main person; the household reference person. For the purposes of this Report, the male partner is treated as the reference person in couple households, although the female partner would do equally well. In single parent households the reference person is the parent. In lone person households the reference person is that person. No reference person has been designated in multi-family and group households.

Income mobility

Income mobility is the extent to which incomes change *relative to each other*. How many people —and with what characteristics—are moving up the income distribution, and what kinds of people are moving down the distribution?

Jobless households

In this Report, a jobless household is defined as one in which no-one was in work for more than 26 weeks (50% of the time) in the last financial year.

Labour mobility

Measures of labour mobility deal with how many people change jobs each year, and how many move into and out of the labour force. That is, how many people go from being unemployed (or not in the labour force) to employed, and vise versa?

Relative income poverty

A person or a household 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. Two different relative income poverty lines are used in this Report. One defines individuals as poor if their equivalised household income is less than 50% of median equivalised income. The second relative poverty line uses a cut-off of 60% of median household income.

Resident and non-resident parents

Parents with children who live in their household at least 50% of the time are 'resident parents'. Parents who have children who live in a non-private dwelling—such as boarding schools, university halls of residence, or institutions—are also considered to be resident parents. Non-resident parents are parents who have children who live in another household more than 50% of the time.

Social capital

Most measures of social capital are essentially measures of social networks, although measures of neighbourhood quality and safety are sometimes also included. One's social networks range from intimate attachments to spouse and family, through friendship and social support networks, to acquain-

tances (including neighbours) whom one may be able to rely on for relatively minor assistance.

Wealth/net worth

Household wealth is measured by the net worth (total assets minus total debts) of all members of the household. Assets include housing and other property, pensions and superannuation, businesses and farms, equity investments (shares and managed funds), cars and other vehicles, and cash in bank accounts. The most common types of debt are mortgages on properties, loans for businesses or farms, HECS (student) debt and credit card debt.

Welfare reliance

In this Report households are defined as welfare reliant if more than 50% of their gross income (income from all sources) comes from Government income support payments and family payments.

Well-being

Well-being can be defined in many ways, but most observers treat it as at least partly a subjective, psychological concept. Two psychological variables central to the concept of well-being are 'life satisfaction' and 'stress'.

Introduction to the first annual statistical report on HILDA

This Statistical Report of the Household, Income and Labour Dynamics in Australia (HILDA) Survey contains short reports and statistical tables covering the four main areas of HILDA: households and family life, incomes and wealth, employment and unemployment/joblessness, and life satisfaction and well-being. Our target audiences are policy makers and the informed public.

The ambitious aim of the HILDA Survey is to provide, on an annual basis, a new type of social statistics for Australia; *longitudinal panel statistics* describing the ways in which people's lives are changing. The Australian social statistics we are all familiar with are *cross-sectional*. That is, they provide snapshots—still photographs—of the percentages of Australians who, at one moment in time, are married or single, income rich or income poor, employed or unemployed, healthy or sick. *Repeated cross-sections* of the kind provided by the Australian Bureau of Statistics yearbooks and annual surveys inform us about aggregate social trends, about whether and by how much the percentages who are married, poor, unemployed … are changing.

Panel data are quite different and add a new dimension to social statistics. A panel survey is longitudinal rather than just cross-sectional. It follows people's lives over time; the same households and individuals are interviewed every year. So we can see how individual lives are changing. We can see whether the same people remain married, income poor or unemployed every year. As readers of this volume will see, the panel method opens up new understandings. Cross-sectional statistics only change slowly and usually record only small changes from year to year. So it seems 'natural' or obvious to infer that the same people remain married, poor or unemployed year after year. Panel data in Australia and in many other Western countries show that, while the first inference is correct, the second and third are more wrong than right. That is, it is true that more or less the same people stay married year after year (only 2–3% of Australian marriages end each year, even though eventually over 30% end in separation), but it is false to believe that the same people stay income poor and/or unemployed year after year. On the contrary, most poor people cease to be poor within a year or two, and most unemployed people get jobs within a year, although long-term unemployment has increased in recent decades. On the other hand, panel data also show that people who have been poor or unemployed in the past are at greater risk of returning to poverty and unemployment than others.

So panel data offer something like video evidence rather than the photographic evidence of cross-sectional surveys. In social science jargon, panel data tell us about *dynamics*—family, income and labour dynamics—rather than *statics*. They tell us about *duration*, about how long people remain poor or unemployed, and about the correlates of entry into and exit from poverty and unemployment. For these reasons panel data are vital for Government and public policy analysis. The aims of policy include trying to reduce poverty and unemployment, so it is vital for policy makers to distinguish between short, medium and long termers—different policy interventions may be needed to assist different groups—and to gain an understanding of reasons for entry and exit from these states.

It is probably fair to say that panel studies in other Western countries have transformed and greatly improved understanding of many social and economic trends. It is hoped that the HILDA Survey will perform the same service in Australia.

This Report has been prepared by a small team at the Melbourne Institute of Applied Economic and Social Research of the University of Melbourne. The Report is not intended to be comprehensive. It focuses mainly on panel results rather than cross-sectional results of the kind well covered by ABS surveys, and it seeks just to give a flavour of what the HILDA Survey is finding. Much more detailed analysis of every topic covered by this volume could and should be undertaken. It is hoped that some readers will make their own analyses, and in this context it should be mentioned that the HILDA Survey data are available at nominal cost to approved users.[1]

The HILDA Survey sample

The HILDA Survey is commissioned and funded by the Australian Government Department of Family and Community Services and conducted by the Melbourne Institute at the University of Melbourne. The HILDA Survey Director is Professor Mark Wooden.

The HILDA Survey is a nation-wide household panel survey with a focus on issues relating to families, income, employment and well-being. Described in more detail in Watson and Wooden (2004), the HILDA Survey began in 2001 with a large national probability sample of Australian households occupying private dwellings. All members of those households form the basis of the panel to be interviewed in each subsequent wave, with each wave being approximately one year apart.

Note that like virtually all sample surveys, the homeless are excluded from the scope of the HILDA Survey. Also excluded from the initial sample were persons living in institutions, but people who move into institutions in subsequent years remain in the sample.

After adjusting for out-of-scope dwellings (e.g., unoccupied, non-residential) and households (e.g., all occupants were overseas visitors) and for multiple households within dwellings, the total number of households identified as in-scope in wave 1 was 11,693. Interviews were completed with all eligible members (i.e. persons aged 15 and over) at 6872 of these households and with at least one eligible member at a further 810 households. The total household response rate was, therefore, 66%. Within the 7682 households at which interviews were conducted, there were 19,917 people, 4790 of whom were under 15 years of age on the preceding June 30 and hence ineligible for interview. This left 15,127 persons of whom 13,969 were successfully interviewed. Of this group, 11,993 were re-interviewed in wave 2 and 11,190 were re-interviewed in wave 3. The total number of respondents in each wave, however, is greater than this for at least three reasons. First, some non-respondents in wave 1 are successfully interviewed in later waves. Second, interviews are sought in later waves with all persons in sample households who turn 15 years of age. Third, additional persons are added to the panel as a result of changes in household composition. Most importantly, if a household member 'splits off' from his/her original household (e.g. children leave home to set up their own place, or a couple separates), the entire new household joins the panel. Inclusion of 'split-offs' is the main way in which panel surveys, including the HILDA Survey, maintain sample representativeness over the years.

Attrition—that is, people dropping out of the sample due to refusal, death, or our inability to locate them—is a major issue in all panel surveys. In 2002 we secured interviews with 13,041 respondents (93% of the initial sample size) and in 2003 12,728 respondents were interviewed. Because of attrition, panels may slowly become less representative of the populations from which they are drawn, although due to the 'split-off' method this does not necessarily occur. The HILDA Survey data managers analyse attrition each year and supply *weights* to 'correct' for differences between the panel sample and the population. To give a straightforward example, if it were found that men had dropped out of the panel at a greater rate than women, and that consequently men were under-represented by 2% and women similarly over-represented, then the weights would have the effect of multiplying all men's results by 102/100 and all women's results by 98/100.

In this Report, cross-sectional weights are always used when cross-sectional results are reported and longitudinal (multi-year) weights are used when longitudinal results are reported.

Estimates based on the HILDA Survey like all sample survey estimates are subject to sampling error. It would be cumbersome to report the sampling errors for all statistics in this volume. So we have adopted an ABS convention and marked with an asterisk each estimate which has a standard error more than 25% of the size of the estimate itself. This is a conservative approach, given that most academic papers treat as statistically significant estimates which have standard errors up to 50%. The calculation and treatment of standard errors are covered more fully in Appendix 1.

Overview of contents

The four parts of this volume each begin with a report giving an overview of a central topic, focussing on *change* within the HILDA Survey panel. So Part 1 on Households and Family Life begins with a report on changes in marital status in 2001–2003 and levels of marriage satisfaction in marriages which split up and those which did not. Subsequent reports deal with the duration of first and second marriages, cohabitation between de facto partners, the impact of separation and divorce on children's subsequent educational performance, fertility intentions and so on.

Part 2 on Incomes and Wealth starts with an overview of income mobility; the extent to which households moved up or down the national income distribution in 2001–2003. It then covers topics such as the duration of income poverty, the impact of Government payments on poverty and inequality, the duration of reliance on welfare payments, and the composition and distribution of household wealth.

Part 3 on Employment and Unemployment/Joblessness begins with an overview of labour mobility in 2001–2003 and then deals, inter alia, with such topics as job satisfaction, the characteristics of people who hold multiple jobs and work very long hours, the satisfactions and dissatisfactions of people who hold part-time and non-standard jobs, the characteristics of jobless households and the duration of joblessness, and retirement issues.

Part 4 is on Life Satisfaction and Well-Being. Issues relating to life satisfaction have attracted a great deal of interest among HILDA Survey data users and, in recent times, within the economics profession. So Part 4 begins with an overview assessing the extent to which it is feasible in surveys to obtain reliable and valid measures of life satisfaction. Later articles deal with the satisfactions and dissatisfactions of different sections of the community, with whether income and wealth contribute much to life satisfaction, and with issues to do with social capital (social networks), health and time budgets.

Concluding points

The Report has been written by the HILDA Survey team at the Melbourne Institute, which takes responsibility for any errors of fact or interpretation. Its contents should not be seen as reflecting the views of either the Australian Government or the Melbourne Institute of Applied Economic and Social Research.

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Endnote

1 Readers who would like to enquire about the data should view www.melbourneinstitute.com/hilda

Reference

Watson, N. and Wooden, M., 2004, 'Assessing the quality of the HILDA Survey Wave 2 Data', *HILDA Technical Paper*, 5/04.

HOUSEHOLDS AND FAMILY LIFE 1

Changes in marital status 2001–2003; and satisfaction levels just before separation

The divorce rate in Australia is increasing, and eventually about 32% of marriages end in divorce.[1] This statistic might give rise to the impression that many marriages are unhappy for years before they eventually founder. However, jumping to this conclusion might be termed a 'fallacy of social pathology'. The HILDA Survey indicates that only about 2% of marriages end each year,[2] and it is likely that many are happy for years before one or both partners becomes dissatisfied and initiates separation. With only three years of HILDA Survey data yet available, it is not possible to be sure of this last point, but the early evidence tends to support it.

Table 1 summarises changes in marital status among respondents interviewed in 2001 and 2003.

An important point is that 95.6% of those who were married in 2001 were still married in 2003; 99.6% of them to the same person. The most stable group were the widowed, 98.6% of whom retained that status in 2003. The most volatile groups might appear to be separated people and those in de facto relationships, but in reality most of the separated individuals who changed status between 2001 and 2003 proceeded with a divorce, and most of the 17.7% of de factos who got married in fact married the person they were already living with. Of those who were single in 2001, 10.9% had moved into a de facto relationship by 2003.

Marital satisfaction—pre and post separation

All married and de facto respondents are asked each year to report on their level of satisfaction with their relationship with their partner. The satisfaction scale runs from 0 to 10, with 0 meaning 'completely dissatisfied' and 10 meaning 'completely satisfied'. Table 2 gives results for 2003.

It is clear that the large majority of both married and de facto men and women are well satisfied with their relationships; men slightly more so than women. Further, married people are significantly more satisfied than de factos.[3] Over 76% of married men and over 71% of married women report levels of satisfaction between 8 and 10 on the 0–10 scale.

Similar levels of relationship satisfaction were reported in all three years. The average levels of relationship satisfaction ranged from 8.1 out of 10 for women in 2003 to 8.7 out of 10 for men in 2001. Table 3 compares the levels of relationship satisfaction within couples.

In 87.5% of couples where the woman had reported a high level of satisfaction with the relationship, her partner had also given a response of 8 out of 10 or higher. For couples where the woman had rated her satisfaction with the relationship as medium (4 to 7 out of 10), 50.2% of partners agreed, and 46.8% rated their relationship satisfaction as high. In couples where the woman had said that her satisfaction with the relationship was low, only 19.4% of male partners were in agreement, with 40.6% rating their relationship satisfaction between 4 and 7 out of 10, and 40.0% giving answers of 8 or above.

Because the HILDA Survey provides panel data, it is possible to analyse marital satisfaction just prior to separation. Table 4 reports the satisfaction levels in 2002 of married people (not de factos) who were about to split up; and had done so by the time of their 2003 interview.

The level of satisfaction reported by people whose relationship broke up in the following year was lower than average. It was around 6.8 for men and 6.2 for women. However, a high percentage of people, particularly men, who had separated or divorced by 2003, reported *high levels of relationship satisfaction in the previous year*; 52.8% of men and 40.5% of women, who were about to split up, reported relationship satisfaction scores in the 8–10 range. The previous year even more of these people—67.0% of the men and 50.1% of the women—had reported satisfaction levels in this range. Especially for those who were still well satisfied in 2002, the split must have come as a considerable shock.

The explanation for the gender difference is almost certainly that more marital split-ups are initiated by women than men. The HILDA Survey data (2001) shows that 49.3% of divorces were initiated by women, 19.4% were initiated by men, and the remaining 30.3% were a joint decision. However, for divorces where no children were involved, the applicants were fairly even; 38% were women, 33% were men and 29% were joint applications (ABS, 2001).

In concluding, panel data give a somewhat different perspective on marital satisfaction from the perspective that comes from observing that many marriages eventually end and, in that sense, appear to fail. Panel data show that most people are well satisfied with their marriages and that this satisfaction lasts, in many cases, until shortly before separation. The probable, although not certain inference is that most marriages are 'successful' for a good many years, even if they eventually terminate.

Table 1: Changes in marital status: 2001 to 2003 (%)

Marital status in 2001	Marital status in 2003						
	Legally married	De facto	Separated	Divorced	Widowed	Never married and not de facto[a]	Total
Legally married	95.6	0.4	2.3	0.3	1.4	n.a.	100.0
De facto	17.7	66.8	*1.1	4.3	*0.4	9.6	100.0
Separated	*5.5	9.4	57.8	26.5	*0.9	n.a.	100.0
Divorced	*3.5	6.7	*0.4	87.5	*1.8	n.a.	100.0
Widowed	*0.3	*0.3	*0.0	*0.7	98.6	n.a.	100.0
Never married and not de facto[a]	3.4	10.9	*0.1	*0.1	*0.1	85.4	100.0
Total	53.6	9.7	3.0	5.7	5.5	22.4	100.0

Notes: Population weighted results. * Estimate not reliable. [a] People who had never been married and were not living in a de facto relationship at the time of interview.

Table 2: Satisfaction with marital and de facto relationships (0–10 scale), 2003 (%)

	Satisfaction with relationship			
	Low (0–3)	Medium (4–7)	High (8–10)	Total
Men—married	2.8	20.7	76.5	100.0
Men—de facto	*3.5	32.0	64.5	100.0
Women—married	3.8	25.1	71.1	100.0
Women—de facto	*3.9	35.0	61.0	100.0

Notes: Population weighted results. * Estimate not reliable.

Table 3: Relationship satisfaction within couples in 2003 (%)

Satisfaction with relationship—woman	Satisfaction with relationship—man			
	Low (0–3)	Medium (4–7)	High (8–10)	Total
Low (0–3)	19.4	40.6	40.0	100.0
Medium (4–7)	3.0	50.2	46.8	100.0
High (8–10)	1.4	11.1	87.5	100.0
Total	2.5	22.3	75.2	100.0

Note: Population weighted results.

Table 4: Marital status in 2003 related to marital satisfaction in 2002 (%)

Marital status in 2003	Satisfaction with relationship with partner in 2002			
	Low (0–3)	Medium (4–7)	High (8–10)	Total
Men—separated or divorced	*22.2	*25.0	*52.8	100.0
Men—still married	1.9	13.5	84.6	100.0
Women—separated or divorced	*16.2	*43.2	*40.5	100.0
Women—still married	2.6	17.3	80.1	100.0

Notes: Population weighted results. * Estimate not reliable.

Endnotes

1 Australian Bureau of Statistics, 2001.

2 2.1% of people who were married in 2001 were no longer married (separated, divorced or widowed) in 2002, and 2.0% of people who were married in 2002 were no longer married in 2003.

3 This relationship still holds when age and number of marriages are controlled for.

Reference

Australian Bureau of Statistics, 2001, *Marriages and Divorces, Australia,* ABS Catalogue No. 3310.0, Canberra.

How many times do people marry; and how long do second marriages last compared with first?

Although people are now delaying marriage until they are older, most people get married at least once. Over 30% of marriages end in divorce and many divorcees remarry.[1] However, it is not the case that, at any one time, the population contains a high proportion of remarried people. Table 1 gives an overview of the percentages of people aged eighteen and over who have never married, married once, twice, or three or more times.

Table 1 shows that women marry more than men, or, to put it another way, a larger pool of women marry a smaller pool of men. So more women than men marry once, and by a small margin more get married twice. This result is possibly a consequence of differential mortality between genders and the tendency of women to marry (on average) older men, i.e. widows are accounted for in the table but their husbands are not.

Looking at the results in more detail, we see that 30.1% of men aged eighteen and over in 2003 had never married, compared with 24.0% of women. A similar difference in rate of marriage is maintained through all age groups. A point of interest is that, despite the fact that most separated and divorced people eventually repartner, the population at any one time contains only about 10% of remarried people[2]; just under 10% who have married twice and about 1% who have married three or more times.

Age at first marriage

Were those who married more than once younger when they got married for the first time? Table 2 shows the age at first marriage for people who have been married once, twice or three or more times.

For people who have been married only once, the average age at the time of their marriage was 26 for men and 23 for women. For those who have been married twice, the average age at the time of their first marriage was around 2 years younger, and for those who had been married three or more times, the average age at the time of their first marriage was approximately 4 years younger than for people who had only been married once.[3]

Age at the time of divorce

What is the most common age for divorce? Table 3 shows the average age of men and women at the time their divorce was finalised, by year of divorce.[4]

Most men and women who got divorced did so in their late 20s or early 30s. However looking at the year of divorce, we can see that in the 1970s a large proportion (26.9%) of men who got divorced

Table 1: Number of registered marriages by sex and age, 2003 (%)				
	Number of times married			
	Never married	Once	Twice	Three or more times	Total
Men					
18–19	99.8	*0.2	*0.0	*0.0	100.0
20–24	94.4	5.6	*0.0	*0.0	100.0
25–34	49.7	47.5	2.7	*0.1	100.0
35–44	21.4	69.3	9.0	*0.4	100.0
45–54	10.5	72.6	15.9	*1.1	100.0
55–64	5.2	75.5	17.3	*2.0	100.0
65+	3.5	81.6	12.3	*2.6	100.0
Total	30.1	59.5	9.5	1.0	100.0
Women					
18–19	99.1	*0.9	*0.0	*0.0	100.0
20–24	87.9	11.9	*0.2	*0.0	100.0
25–34	38.5	58.8	2.7	*0.0	100.0
35–44	12.7	75.5	10.9	*1.0	100.0
45–54	6.2	77.8	14.7	*1.3	100.0
55–64	3.6	77.2	16.6	2.6	100.0
65+	2.7	83.8	12.7	*0.7	100.0
Total	24.0	65.5	9.7	0.9	100.0

Notes: Population weighted results. * Estimate not reliable.

Table 2: Average age at first marriage by number of marriages

| | Number of registered marriages | | | |
	One	Two	Three or more	Total
Men	25.9	23.8	22.2	25.6
Women	23.3	21.1	19.4	23.1
Total	24.5	22.4	20.8	24.2

Note: Population weighted results.

were in their late 20s, while in the 1980s divorce was more common for men in their late 30s and in the 1990s the most divorce prone men were in their early 30s.

For women, divorce was most common for those in their late 20s, although after 1989, women who divorced were more commonly in their early 30s. This is probably because over the last decade, people have tended to marry (for the first time) at a later age than they have in the past.

Length of second marriages compared with first

Focusing now on the people who marry a second time, an interesting question to ask is whether

second marriages tend to last longer, or whether people who have separated once tend to repeat a pattern of relatively short marriages. Table 4 gives relevant if not quite conclusive evidence. It covers only people who, by the time of their 2003 interview, had remarried and shows the years of duration of their second marriage.

On average, the first marriages of these respondents had lasted 8.5 years; 9.3 years for the men and 7.6 years for the women. Of this sub-sample 71.5% were still married to their second spouse, and the average time these marriages had already lasted was 14.3 years; 13.5 years for the men and 15.1 years for the women. So these second marriages had already lasted longer than typical first marriages and of course they might still have many more years to run.[5]

For a second group, widowhood had ended the second marriage. Clearly, this was not a voluntary termination, but given that these marriages had already lasted 15.7 years on average, it can be seen that they too were of considerably longer duration than typical first marriages.

The final group are those whose second marriages had already ended through separation. They comprised 22.1% of the total sample. Their second

Table 3: Average age at the time of divorce—by age group and year of divorce (%)

| | Age at the time of divorce | | | | | | |
Year of divorce	<25	25–29	30–34	35–39	40–44	45+	Total
Men							
Pre 1970	*18.3	*38.4	*27.9	*10.4	*5.0	*0.0	100.0
1970–1979	11.9	26.9	22.8	13.9	*8.5	16.0	100.0
1980–1989	*3.7	21.4	21.1	26.0	11.3	16.5	100.0
1990–1999	*4.4	18.5	28.4	15.5	10.5	22.7	100.0
2000–2003	*0.0	*3.5	23.5	18.9	*14.2	39.8	100.0
Total	5.8	20.2	24.7	18.2	10.5	20.6	100.0
Women							
Pre 1970	30.9	32.6	*17.4	*12.1	*4.9	*2.1	100.0
1970–1979	17.7	27.0	21.5	14.7	10.3	*8.7	100.0
1980–1989	18.0	29.8	22.0	16.1	5.7	8.5	100.0
1990–1999	9.2	23.7	24.0	17.4	11.8	13.9	100.0
2000–2003	*2.0	*11.1	26.7	*10.8	20.0	29.3	100.0
Total	14.6	25.5	22.6	15.3	10.0	12.0	100.0

Notes: Population weighted results. * Estimate not reliable.

Table 4: Duration of first and second marriages—people who were married more than once (years)

| | Duration of first marriage (years from date of marriage to date of separation) | Duration of second marriage | | |
		Still married to second spouse	Widowed	Separated or divorced
Men	9.3	13.5	*13.7	7.3
Women	7.6	15.1	16.3	8.4
Total	8.5	14.3	15.7	7.9
%	100.0	71.5	6.4	22.1

Notes: Population weighted results. * Estimate not reliable.

marriages lasted 7.9 years on average; 7.3 years for the men and 8.4 years for the women. These figures are virtually the same as the average length of first marriages. It is interesting that both first and second marriages which terminated did so after about 7–8 years on average. One might think that perhaps the folklore about 'a seven-year itch' contains a grain of truth. But, looking at the distribution of marriage durations, although 11.3% of marriages ended in divorce after 7 or 8 years, 23.6% ended within 2 years and 19.6% ended after 3 or 4 years.

Overall, then, it is clear that for people whose first marriage ended in divorce, second marriages generally last longer than first marriages and are, in that sense, relatively successful.

Endnotes

1 Australian Bureau of Statistics, 2001.

2 If people who have never married were excluded, the percentage of remarried people would increase to 15% for men and 14% for women.

3 Age at first marriage is significantly different at the conventional 5% level for those married 1, 2 or 3 times.

4 For those who have been divorced more than once, age at the time of their first divorce is used.

5 In other words, the data for duration of second marriage for the group who are still married to their second spouse are 'right censored'.

Reference

Australian Bureau of Statistics, 2001, *Marriages and Divorces, Australia,* ABS Catalogue No. 3310.0, Canberra.

Parenting stress, work–family stress and their effect on relationships

How stressful is parenting and what is the degree of stress parents experience in combining their work and family responsibilities?

The HILDA Survey asked parents to say how strongly they agreed or disagreed with statements related to *parenting stress* like, 'I feel trapped by my responsibilities as a parent'. The response scale ran from 1 (strongly disagree) to 7 (strongly agree). Parents in paid work were also asked how strongly they agreed or disagreed with statements relating to *work–family stress*, such as 'Because of my family responsibilities, the time I spend working is less enjoyable and more pressured'. Tables 1 and 2 show the differences in parenting stress and work–family stress for single parents and couple parents.

The majority of parents fell into the category of medium parenting stress (3 to 5 out of 7) and, as might have been expected, single parents reported higher stress than parents who were married or in a de facto relationship (14.8% of single mothers had high parenting stress compared to 10.1% of mothers with a partner and only 4.7% of fathers with a partner).

Parents who were employed full-time reported higher levels of work–family stress than those who worked part-time, women had higher levels of work–family stress than men, and, not surprisingly, single parents reported higher levels of work–family stress than parents with partners.

Does parenting stress and work–family stress affect relationship satisfaction?

On average, on a satisfaction scale running from 0 (completely dissatisfied) to 10 (completely satisfied), people who are either married or in de facto relationships report levels of 'relationship satisfaction' of over 8. Men report just slightly higher levels of satisfaction than women. But when we look specifically at couples with children, the gender difference is larger. Partnered men with children have an average relationship satisfaction level of 8.2, compared to 8.4 for men without children; an insignificant difference. But partnered women with children average only 7.8 for relationship satisfaction, compared with an average rating of 8.4 for women without children. This indicates that parenting stress does have some impact on women's relationship satisfaction. Presumably women are more affected because they still take most of the parenting responsibilities.

The HILDA Survey data indicate that there is a negative relationship between parenting stress and relationship satisfaction for both men and women. In 2003, 82.7% of women and 86.3% of men with low levels of parenting stress reported high levels of satisfaction with their relationship. However, only 46.9% of women and 47.0% of men with high parenting stress reported high levels of relationship satisfaction.

Work–family stress is also related to relationship satisfaction, but not as strongly.[1] For both men and women, there are weak negative associations between work–parenting stress and relationship satisfaction. Only 60.4% of men and 48.8% of women who reported high work–family stress in 2003 also reported high levels of relationship satisfaction, while 87.7% of men and 74.7% of women with low levels of work–family stress had high levels of relationship satisfaction.

Table 1: Parenting stress by gender and marital status, 2003 (%)				
	Low (1–2)	Medium (3–5)	High (6–7)	Total
Single mothers	19.1	66.1	14.8	100.0
Couple mothers	19.8	70.1	10.1	100.0
Single fathers	28.1	64.3	*7.6	100.0
Couple fathers	25.1	70.2	4.7	100.0
Total	22.4	69.4	8.2	100.0

Notes: Population weighted results. * Estimate not reliable.

Table 2: Work–family stress by gender, marital status and working hours, 2003 (%)				
	Low (1–2)	Medium (3–5)	High (6–7)	Total
Employed full-time				
Single mothers	*17.1	68.6	*14.3	100.0
Couple mothers	23.0	67.0	10.1	100.0
Single fathers	17.0	74.0	*9.1	100.0
Couple fathers	22.0	72.8	5.2	100.0
Total	21.6	71.6	6.8	100.0
Employed part-time				
Single mothers	29.7	62.5	*7.8	100.0
Couple mothers	37.2	57.7	5.1	100.0
Single fathers	*1.8	*4.5	6.3	100.0
Couple fathers	32.0	62.7	*5.3	100.0
Total	35.3	59.4	5.3	100.0

Notes: Population weighted results. * Estimate not reliable.

Do the same people report high levels of stress every year, or do problems get solved?

Given that the HILDA Survey has been running for three years, it is possible to assess whether stress is usually transient, or lasts for a fairly long time. Do parents tend to solve their problems, or do problems persist?

The answer is somewhat ambiguous. There were moderate correlations of just over 0.5 between 2001 and 2003 levels of both parenting stress and work–family stress.[2] So although more than half the people who reported high levels of parenting stress in 2001 had reduced their stress to a medium level in 2003, only 3.9% of men and 3.1% of women managed to reduce high levels to low. In contrast, 28.6% of men and 44.6% of women who reported high parenting stress in 2001 still had high levels in 2003. Results for work–family stress

were much the same, with more than half going from high levels in 2001 to medium in 2003, but 29.2% of men and 30.0% of women who were in the high category in 2001 were still there two years later.

Endnotes

1 The correlation between parenting stress and relationship satisfaction is –0.210, while the correlation between work–family stress and relationship satisfaction is –0.165.

2 Pearson correlations run between +1 and –1. A correlation close to +1 means that there is a strong positive linear association between 2 variables, such that high scores on one variable are associated with high scores on the other. A correlation approaching –1 mean that high scores on the first variable are associated with low scores on the second. A correlation close to zero means that there is little or no association between scores on the two variables.

Child care: Who's looking after the children?

Issues related to child care have become more important over the last two decades. Changes in women's employment patterns and changes in family structures (a growing number of singe parent families) have created a growing need for child care that is both accessible and affordable. There has recently been a great deal of media coverage claiming shortages of child care places, particularly for infants and babies.

In each wave of the HILDA Survey, parents with children under 15 are asked about what types of child care they use and the difficulties they have encountered in trying to find appropriate child care.

One of the questions asked of parents is:

At any time in the last 12 months have you used, or thought about using, any of these forms of child care so that you (or your partner) could undertake paid work?

- *Family day care, long day care or any other care at a child care centre*
- *Out of hours care or vacation care*
- *Someone paid to come to your home to take care of your child*
- *A friend, relative or neighbour caring for your child for free, or payment in kind.*

Table 1 shows the number of households with children under 15, and the proportion of households who had used, or had considered using, child care in the 12 months prior to their 2003 interviews.

In 2003, 28.9% of households had at least one resident child under the age of 15 and 44.3% of those households had used, or considered using, some type of child care in the past 12 months. While 48.7% of households with children under 2 years old had used or considered using child care in the last 12 months, it was more common for parents with children aged between 2 and 5 to consider using child care, with 56.8% of households with children aged 2 to 3 years and 51.0% households with children aged 4 to 5 years using or considering using child care, compared to 47.4% of households with children aged between 6 and 9 years, and only 32.8% of households with children aged between 10 and 14 years.

What type of child care and how many hours?

Parents who said that they had used or considered using child care in the past 12 months were asked whether they had actually used any child care, how much of this child care was used while they were undertaking paid work, and how much was

Table 1: Proportion of households with resident children—by age of children, 2003 (%)		
	Proportion of households with children under 15	*Proportion who used or considered using child care in the past 12 months*
Households with at least one child aged under 2 years	6.6	48.7
Households with at least one child aged 2–3 years	6.0	56.8
Households with at least one child aged 4–5 years	6.6	51.0
Households with at least one child aged 6–9 years	11.5	47.4
Households with at least one child aged 10–14 years	14.2	32.8
Total households with children aged under 15 years	28.9	44.3
Note: Population weighted results.		

Table 2: Use of work related and non-work related child care—by age of children, 2003 (%)		
	Used work related child care	*Used non-work related child care*
Households with at least one child aged under 2 years	33.4	12.9
Households with at least one child aged 2–3 years	47.9	17.3
Households with at least one child aged 4–5 years	45.4	14.2
Households with at least one child aged 6–9 years	47.3	13.1
Households with at least one child aged 10–14 years	37.5	8.6
Total households with children aged under 15 years	41.7	12.1
Note: Population weighted results.		

used while parents were undertaking non-work activities. Table 2 shows the proportions of households with children under 15 where work related and non-work related child care was used.

In households with children under 15, 41.7% of households used work related child care and only 12.1% used non-work related care. Work related child care was less common in households with children under the age of 2 than for households with children aged between 2 and 9 years, where over 45% of households used work-related child care. Non-work related child care was most common in households with children aged between 2 and 3, and least common in households with children aged between 10 and 14.

Parents were also asked about the types of child care they used. Table 3 shows the types of child care used in a usual week for school aged children in households where some child care was used while the parents were at work.

Table 3: Work related child care for school aged children (households where child care is used for school aged children while parents are at work)

	Proportion of households that used this type of child care (%)			Average number of hours per child per week		
	2001	2002	2003	2001	2002	2003
Informal child care						
The child's brother or sister	18.6	17.3	18.1	3.9	4.6	5.5
Child looks after self	37.4	23.1	21.8	5.4	3.9	4.8
Child comes to my (or my partner's) workplace	3.3	5.3	*4.1	4.1	5.8	*5.3
A relative who lives with us	*3.2	3.7	4.5	*6.7	10.8	7.9
A relative who lives elsewhere	29.8	31.5	33.8	6.6	6.3	6.0
A friend or neighbour coming to our home	3.7	4.0	5.2	3.0	5.6	6.0
A friend or neighbour in their home	13.3	16.1	17.0	4.2	3.7	4.4
Total—informal child care	81.0	75.3	75.3	6.9	6.6	7.3
Formal child care						
Out of hours care at the child's school	18.0	22.1	21.6	6.3	5.4	6.3
Out of hours care elsewhere	5.5	6.7	7.1	8.6	7.4	6.2
A paid sitter or nanny	3.0	4.3	3.4	5.9	7.3	9.4
Family day care	4.3	4.6	4.4	7.2	7.8	10.0
Total—formal child care	32.1	40.1	38.9	7.1	6.6	7.2
Total—formal and/or informal child care	100.0	100.0	100.0	7.9	7.3	8.3

Notes: Population weighted results. * Estimate not reliable.

Table 4: Work related child care for pre-school aged children (households where child care is used for pre-school aged children while parents are at work)

	Proportion of households that used this type of child care (%)			Average number of hours per child per week		
	2001	2002	2003	2001	2002	2003
Informal child care						
The child's brother or sister	*0.8	*1.0	*1.7	*10.1	*3.2	*4.1
A relative who lives with us	*2.6	*2.4	*2.4	*21.1	*22.0	*15.3
A relative who lives elsewhere	40.7	39.8	35.9	15.6	12.2	12.0
A friend or neighbour coming to our home	*1.3	*3.1	*3.3	*3.3	*7.7	*11.0
A friend or neighbour in their home	7.3	8.9	10.6	9.9	8.3	10.3
Total—informal child care	48.8	49.6	48.3	15.9	12.7	12.9
Formal child care						
A paid sitter or nanny	4.4	6.9	6.1	16.9	16.5	13.2
Family day care	23.9	23.4	28.1	20.4	20.2	21.0
Long day care centre at workplace	5.6	9.7	6.1	23.8	20.2	20.2
Private or community long day care centre	30.8	28.4	30.2	21.6	20.4	21.8
Kindergarten/preschool	17.5	18.5	15.6	12.9	13.7	12.6
Total—formal child care	72.9	75.3	76.3	21.7	21.4	21.6
Total—formal and/or informal child care	100.0	100.0	100.0	23.6	22.5	22.7

Notes: Population weighted results. * Estimate not reliable

Of those households where work related child care was used for school aged children, around 60% used informal child care only, 25% only used formal child care and 15% used a combination of formal and informal child care.[1] Overall, around 75% of households who used child care for their school aged children while the parents were working used informal child care, while only around 40% used some type of formal child care.

The most common type of informal child care for school aged children was a relative who did not live in the household. For those who used formal child care, most used out of hours care at the child's school; very few used family day care or a paid sitter. In terms of hours per week,

school aged children whose parents used work related child care spent 6 to 8 hours per week, on average, in child care while their parents were at work.

Compared to school aged children, child care arrangements for pre-schoolers were quite different. Table 4 shows the types of work related child care used for pre-school age children.

Just over half the households who used child care for pre-school age children while the parents were working only used formal child care, the most common type being private or community long day care centres and family day care. Around 25% only used informal child care for their pre-schoolers

Table 5: Non-work related child care for school aged children (households where non-work related child care is used for school age children)				
	Proportion of households that used this type of child care (%)		Average number of hours per child per week	
	2002	2003	2002	2003
Informal child care				
The child's brother or sister	23.8	27.3	2.7	4.3
A relative who lives with us	*4.9	*7.2	*6.8	*4.1
A relative who lives elsewhere	46.4	49.3	4.2	4.3
A friend or neighbour coming to our home	9.5	8.0	3.0	1.1
A friend or neighbour in their home	15.5	19.2	3.7	2.5
Total—informal child care	84.1	89.2	4.5	4.6
Formal child care				
A paid sitter or nanny	8.5	8.4	3.1	2.8
Family day care	*3.4	*2.7	*6.2	*7.3
Private or community day care centre	7.5	*1.5	*6.8	*10.3
Kindergarten/preschool	*1.1	*1.6	*9.6	*20.6
Total—formal child care	20.2	13.6	5.3	6.8
Total—formal and/or informal child care	100.0	100.0	4.9	5.1
Notes: Population weighted results. * Estimate not reliable.				

Table 6: Non-work related child care for pre-school aged children				
	Proportion of households that used this type of child care (%)		Average number of hours per child per week	
	2002	2003	2002	2003
Informal child care				
The child's brother or sister	*5.2	*4.5	*3.3	*3.3
A relative who lives with us	*4.3	*2.7	*5.2	*5.3
A relative who lives elsewhere	43.0	44.1	5.6	5.7
A friend or neighbour coming to our home	9.0	8.8	2.0	2.2
A friend or neighbour in their home	9.0	12.4	2.9	2.7
Total—informal child care	58.2	60.1	5.6	5.6
Formal child care				
A paid sitter or nanny	7.1	*4.7	4.0	*4.7
Family day care	13.2	14.7	11.1	15.1
Private or community day care centre	20.0	15.4	10.1	14.0
Kindergarten/preschool	18.8	20.1	12.8	12.3
Total—formal child care	54.4	52.1	11.4	13.6
Total—formal and/or informal child care	100.0	100.0	9.4	10.4
Notes: Population weighted results. * Estimate not reliable.				

(usually a relative living elsewhere), and the remaining 25% used a combination of formal and informal child care.[2] Pre-schoolers who were in child care while their parents were working spent between 15 and 24 hours per week in child care. The obvious explanation for the difference in hours of child care used for pre-school children and school aged children is that pre-school aged children need extra child care for the hours when the school aged children are in school.

We have seen that non-work related child care (child care used while parents are not at work) is much less common than work related child care.

Table 7: Difficulties with child care, 2003 (%)					
	Level of difficulty				
	No problem at all (0)	*Low (1–4)*	*Med (5–7)*	*High (8–10)*	*Total*
Finding good quality child care					
Single parent households	38.9	29.3	17.2	14.6	100.0
Couple households	42.1	25.0	17.1	15.7	100.0
Total	41.8	25.7	16.9	15.5	100.0
Finding the right person to take care of your child					
Single parent households	35.3	32.0	11.2	21.4	100.0
Couple households	42.0	27.3	15.6	15.1	100.0
Total	40.9	28.1	14.4	16.6	100.0
Getting care for the hours you need					
Single parent households	34.5	27.0	14.4	24.1	100.0
Couple households	36.4	30.0	16.1	17.4	100.0
Total	36.3	29.2	15.7	18.7	100.0
Finding care for a sick child					
Single parent households	25.4	16.4	18.5	39.7	100.0
Couple households	34.7	23.4	13.9	28.0	100.0
Total	32.9	21.8	14.8	30.5	100.0
Finding care during school holidays					
Single parent households	34.5	30.8	14.1	20.7	100.0
Couple households	45.9	24.5	17.4	12.2	100.0
Total	43.6	25.6	16.7	14.0	100.0
The cost of child care					
Single parent households	28.4	28.2	22.3	21.2	100.0
Couple households	31.5	21.5	25.0	22.0	100.0
Total	31.3	22.8	24.0	21.9	100.0
Juggling multiple child care arrangements					
Single parent households	38.5	26.7	15.8	19.1	100.0
Couple households	45.5	24.9	16.3	13.3	100.0
Total	44.5	25.0	16.2	14.3	100.0
Finding care for a difficult or special needs child					
Single parent households	42.7	*14.9	*6.7	*35.7	100.0
Couple households	72.8	*7.4	*7.5	*12.3	100.0
Total	64.7	*9.3	*7.0	19.0	100.0
Finding a place at the child care centre of your choice					
Single parent households	45.7	21.3	12.3	20.7	100.0
Couple households	47.4	20.2	10.4	22.1	100.0
Total	47.1	20.2	11.2	21.6	100.0
Finding a child care centre in the right location					
Single parent households	44.6	28.0	*10.0	17.4	100.0
Couple households	49.5	19.7	12.1	18.8	100.0
Total	48.5	21.4	11.8	18.3	100.0
Finding care your child/children are happy with					
Single parent households	41.7	29.5	12.1	16.7	100.0
Couple households	47.7	27.7	14.7	9.9	100.0
Total	46.7	27.9	13.9	11.5	100.0
Notes: Population weighted results. * Estimate not reliable.					

Table 5 shows the types of non-work related child care used for school aged children.

The average amount of non-work related child care for school aged children was around 5 hours per week. Like work related child care, the majority of non-work related child care used for school aged children was informal, and the most common type of informal child care was a relative who did not live in the household. Around 8% of households that used non-work related child care for their school aged children used a paid sitter or nanny, but this was only for around three hours per week.

Table 6 shows non-work related child care used for pre-school aged children. Although fewer households use non-work related care and the number of hours of non-work related care is much lower than for work related care, the pattern is similar to that of work related child care in the sense that, compared to school aged children, more formal child care is used.

The most common type of informal child care used for pre-school children while parents are undertaking non-work activities is a relative who lives elsewhere, with over 40% of households who use non-work related child care for their pre-school aged children using this option. The number of hours pre-school aged children spent in non-work related child care varied significantly between formal and informal child care types, with the average time spent in informal care being 5 to 6 hours per week, while the average for formal care was around 12 hours per week.

Difficulties with child care

Parents who had used or considered using child care were asked about the difficulties they had encountered. They were asked to rate the level of difficulty they had with each aspect of child care shown in Table 7 on a scale from 0 to 10, with 0 being 'no problem at all' and 10 being 'very much a problem'.

The most common problem encountered was finding care for a sick child, with 30.5% of households reporting this difficulty. Apart from problems such as the lack of care available for sick children and the exclusion of sick children from child care, this type of child care would have to be arranged at very short notice, so, in that sense would be more difficult than other problems, which could be sorted out over time. It was also quite common for people to report difficulties with the cost of child care, and also with finding a place at the child care centre of their choice. Over 20% of households reported these problems.

It was much more common for single parent households to report difficulties with child care; 39.7% of single parent households reported problems finding care for a sick child, compared to 28.0% of couple households. Finding care for a difficult or special needs child also appeared to be a problem for single parent households (72.8% of couple households said they did not have a problem with this aspect of child care, compared to only 42.7% of single parent households). We have shown in the previous article *(Parenting stress, work–family stress and their impact on relationships)* that compared to parents with partners, single parents more commonly report higher levels of parenting stress, and single parents, particularly those who work full-time, report higher levels of work–family stress than partnered parents. Difficulties finding child care is likely to be a contributor to this stress.

Persistence of child care difficulties

Do the problems households have with child care persist for year after year, or do most parents solve their problems within a year or two? Focusing just on households with children under 15 in all three years, Table 8 shows the number of years problems persisted.[3]

Table 8: Problems finding child care, 2001–2003 (%)					
	Number of years when difficulty was 8+ (0–10 scale)[a]				
	0	*1*	*2*	*3*	*Total*
Finding good quality child care	73.9	17.9	*5.5	*2.6	100.0
Finding the right person to take care of your child	69.9	21.2	*5.9	*3.0	100.0
Getting care for the hours you need	81.3	17.3	*1.3	*0.0	100.0
Finding care for a sick child	48.1	23.9	15.0	13.0	100.0
Finding care during school holidays	71.5	20.2	*5.6	*2.7	100.0
The cost of child care	60.3	22.7	11.9	*5.2	100.0
Juggling multiple child care arrangements	73.2	18.1	*6.1	*2.6	100.0
Finding care for a difficult or special needs child	73.2	18.1	*6.1	*2.6	100.0
Finding a place at the child care centre of your choice	68.9	20.6	*6.7	*3.7	100.0
Finding a child care centre in the right location	70.2	21.0	*5.1	*3.7	100.0
Finding care your child/children are happy with	77.1	17.0	*4.8	*1.1	100.0

Notes: Population weighted results. * Estimate not reliable. [a] In this table, 0 means it was not a problem in any of the three years, 1 means it was a problem in only one of the three years, 2 means it was a problem in 2 out of three years, and 3 means it was a problem in all three years.

Most problems do not persist for more than one year. The only problem that persisted for three years for a large number of households was finding care for a sick child. However, child care costs were a problem for 22.7% of households in one out of the three years, 11.9% had this difficulty in two of three years, and 5.2% in all three years. Similarly, 21.2% of households had difficulties finding the right person to take care of their child in one out of the three years, but only 3.0% experienced this problem in all three years.

Endnotes

1 In 2001, 19.0% used formal care only, 67.0% informal only and 13.1% combination of formal and informal. In 2002, 24.7% used formal care only, 59.9% informal only and 15.4% combination of formal and informal. In 2003, 24.7% used formal care only, 61.1% informal only and 14.2% combination of formal and informal.

2 In 2001, 51.2% used formal care only, 27.1% informal only and 21.7% combination of formal and informal. In 2002, 50.4% used formal care only, 24.7% informal only and 25.0% combination of formal and informal. In 2003, 51.7% used formal care only, 23.7% informal only and 24.5% combination of formal and informal.

3 It should be noted that most of the results for two and three year persistence are not reliable. However, in this instance we report them in order to give an indication that most child care problems do *not* persist for this length of time.

The relationship between separation and divorce and children's educational performance, income, wealth and life satisfaction

It used to be that the case that the large majority of children grew up living with their own mother and father. Now a substantial minority grow up with just one parent, usually the mother, or with one parent and a step-parent.[1] An important issue is how, if at all, children's future prospects are affected by living with a single parent or in a blended family. This article compares the educational performance, income, wealth and life satisfaction of people who grew up in 'intact' families, with those whose parents split up. It should be noted that the comparisons made here are by no means a comprehensive study of all factors that impact on children's outcomes.[2]

At their first HILDA Survey interview, all respondents are asked whether they were living with their own mother and father around the time they were 14 years old. If they were not, they are asked what the reason was.

Table 1 shows that 80.7% of HILDA Survey respondents were living with their own parents at age 14, 9.5% were living with their mother only, 4.6% were living with one parent and one step-parent, and 2.0% were living with their father only.

Table 2 lists the main reason respondents gave for not living with their own parents. Three alternative reasons were directly offered to respondents—'parents never married or lived together', 'one or both parents died' and 'parents separated or divorced'—but they could also give their own reason if applicable.

Table 1: Family situation when respondent was 14 years old (%)	
Living with …	
Both own mother and father	80.7
Mother only—no father or step father	9.5
Mother and stepfather	3.7
Father only—no mother or step mother	2.0
Father and stepmother	0.9
Other	3.3
Total	100.0
Note: Population weighted results.	

Table 2: Reason not living with both parents at age 14 (%)	
Reason	
Parents separated or divorced	56.8
One or both parents died	30.7
Parents never married or lived together	2.8
Boarding school/studying	1.5
Did not get on with parents	1.3
Was working at 14	1.1
Parent/s living overseas	1.1
Fostered/adopted out	*0.8
Parent/s were ill (mentally/physically)	*0.6
One parent setting up for family to move to a new country	*0.1
Other	3.1
Total	100.0
Notes: Population weighted results. * Estimate not reliable.	

Table 3: Highest level of education by family situation at age 14 (%)					
	Highest level of education				
Family arrangement at age 14	Degree	Certificate or diploma	Year 12	Year 11 and below	Total
Men					
Both own mother and father	20.1	40.4	11.7	27.8	100.0
Parent and step parent	12.0	38.8	10.5	38.7	100.0
One parent only	*8.5	48.5	*7.7	35.3	100.0
Other household types	9.5	43.2	*8.0	39.3	100.0
Total	18.4	40.6	11.3	29.8	100.0
Women					
Both own mother and father	20.0	30.7	12.5	36.9	100.0
Parent and step parent	14.4	31.9	14.2	39.5	100.0
One parent only	*8.6	29.0	10.5	51.9	100.0
Other household types	12.7	28.0	*6.2	53.1	100.0
Total	18.7	30.7	12.5	38.2	100.0

Notes: Population weighted results. * Estimate not reliable.

Among people who were not living with both their parents[3] at age 14, the most common reason (56.8% of cases) was that their parents were divorced or separated. (For those whose parents divorced or separated, the average age of respondents at time of first parental separation was 6.7 years.) The second most common reason (30.7%) was that one or both parents had died.

Educational qualifications

Does being brought up without one or both parents have an impact later in life? Table 3 shows differences in educational qualifications (as of 2003) according to whether or not respondents were living with both parents at the age of 14.

It is evident that those who had lived with both parents obtained higher educational qualifications than those who had lived with one parent, or one parent and a step-parent.[4] This is most clearly seen in Table 3 by focusing on two columns of results—the first one showing percentages who obtained a degree, and the penultimate one showing percentages whose final full-time educational qualification was Year 11 or below. It can be seen that 20.1% of men and 20.0% of women who lived with both parents obtained degrees. These figures are substantially higher than for respondents brought up in other types of households. At the

other end of the educational spectrum, we find that 27.8% of men and 36.9% of women brought up by both parents completed only Year 11 or below. Among those who had grown up in other family arrangements a much higher proportion had completed only Year 11 or below.

Earnings and wealth

Does not living with both your parents as a child have an effect on earnings later in life? Table 4 shows the hourly earnings[5] of employed men and women of prime working age (25–54) who grew up in different types of households.

Average hourly wages ranged from $18.15 per hour for women who grew up with only one parent to $23.38 per hour for men who grew up

Table 4: Average gross hourly wage rates in 2003 —all employed aged 25–54 ($)			
Family arrangement at age 14	Men	Women	Total
Both own mother and father	23.38	21.15	22.40
Parent and step parent	22.07	20.51	21.32
One parent only	21.48	18.15	20.19
Other household types	19.82	20.28	20.00
Total	23.10	20.99	22.16

Note: Population weighted results.

Table 5: Household net worth, mean and medians, 2002 ($'000)						
	Men		Women		Total	
Family arrangement at age 14	Mean	Median	Mean	Median	Mean	Median
Both own mother and father	486	288	472	281	479	286
Parent and step parent	384	187	307	145	343	161
One parent only	367	162	299	139	334	152
Other household types	302	138	295	126	298	131
Total	464	266	440	254	451	260

Notes: Population weighted results. Results are given to the nearest $1000.

living with both parents. Although not statistically different, the differences in earnings between those who grew up with both parents and those who grew up with one parent were 8.8% for men and 16.5% for women.

Next, we consider household wealth, or to be more exact, household net worth defined as assets minus debts. Table 5 gives the mean and median net worth of households in which men and women who had been brought up in different types of families were living in 2002 (2002 results are given rather than 2003 because that was the year in which the HILDA Wealth Survey was conducted). Medians provide a better guide to typical levels of household net worth than means, because means are inflated by inclusion of very wealthy households.

Here the differences are much larger. Men brought up in 'intact' families were living in households with a median net worth 78% higher than men who were brought up by one parent only. For women the difference was even larger, with the household median net worth of women who were brought up with both parents just over double that of women who had lived with one parent only.[6]

The HILDA Survey provides no direct evidence about why wealth differences are so much larger than earned income differences. It may be due to the fact that in some families substantial wealth is inherited[7], and that having an intact family preserves assets, whereas marriage break-up and widowhood reduce and disperse them. In particular, a marriage break-up often leads to the sale of the family home, and thus a reduction in property assets, which are the main type of asset held by most Australian families. There are, however, other possible explanations for this—the lower net worth of children of broken homes could be a cohort effect. As divorce rates have increased over time, it is more common for younger people to come from broken homes, younger people are also likely to have built up less net worth over their lifetimes and are less likely to have received an inheritance than older people. Alternatively, divorce may affect income during a child's schooling, which in turn may affect the child's outcomes.

Life satisfaction and satisfaction with personal relationships

Does family break-up have a negative effect on children's future prospects of a satisfying life and satisfying personal relationships? Respondents were asked to rate their satisfaction with their life as a whole, their relationship with their partner and their relationship with their children on a scale of 0 to 10, where 0 meant 'completely dissatisfied' and 10 meant 'completely satisfied'. Table 6 gives results for life satisfaction.

It appears that the family arrangements in which one grows up has little, if any, impact on future life

Table 6: Life satisfaction in 2003 (means)			
Family arrangement at age 14	Men	Women	Total
Both own mother and father	7.9	8.0	8.0
Parent and step parent	7.8	7.9	7.9
One parent only	7.9	8.0	8.0
Other household types	8.1	7.9	8.0
Total	7.9	8.0	8.0

Note: Population weighted results.

Table 7: Relationship satisfaction in 2003: Own current partner (means)			
Family arrangement at age 14	Men	Women	Total
Both own mother and father	8.3	8.2	8.2
Parent and step parent	8.3	7.9	8.1
One parent only	8.3	7.9	8.1
Other household types	8.5	8.2	8.4
Total	8.3	8.1	8.2

Note: Population weighted results.

Table 8: Satisfaction with relationship with children (means)			
Family arrangement at age 14	Men	Women	Total
Both own mother and father	8.2	8.6	8.4
Parent and step parent	8.2	8.4	8.3
One parent only	8.0	8.6	8.3
Other household types	7.8	8.2	8.0
Total	8.2	8.6	8.4

Note: Population weighted results.

satisfaction.[8] However, there is some indication that family arrangements may affect the personal relationships of women but not men. Tables 7 and 8 give results for satisfaction with one's relationship with current partner (if any) and children (if any).

Women whose parents were not together when they were 14 had lower levels of satisfaction with their own current relationships than women whose parents had stayed together (at least until the respondent was 14 years old). Women who were living with a parent and a step parent at the age of 14 had lower levels of satisfaction with their relationship with their own children than women who were living with only one parent when they were 14 years old and women who grew up with both parents. However, the satisfaction levels of those who grew up with only one of their own parents are, on average, still high and the differences between the groups, while statistically significant, are not large.[9]

Concluding points

The HILDA Survey data appear to show that, on average, children who grow up living with both their natural parents tend to be better off in the future in terms of educational attainment, income

and wealth. These should be regarded as preliminary results, which should be further assessed using more complex statistical methods. It is possible that multivariate analysis would not confirm that growing up in a non-intact family is itself the cause of lower attainment.

Endnotes

1　The proportion of one parent families has been gradually rising over the past 20 years (from 9.2% of families with dependent children in 1974 to 16.6% in 1991), primarily as a result of the increase in the rate of marriage breakdown and, to a lesser extent, to the increase in births to women who are not partnered (Australian Bureau of Statistics, 1994, see 'Household and Family Trends in Australia').

2　In the future, the HILDA Survey will be able to make an important contribution the information on the impact of family transitions such as separation and divorce on children's outcomes but the information currently available is limited.

3　Not living with both parents includes respondents who were living with one parent only, one parent and a step parent, or neither of their own parents, but not both their biological parents.

4　The average (current) age of respondents whose highest qualification was year 12 was substantially lower than for other groups, suggesting that many people who have only completed year 12 may go on to complete higher qualifications.

5　Average hourly wage is calculated by dividing usual weekly wage (from all jobs if respondent had more than one job) by usual hours worked per week in all jobs.

Note that overtime hours and pay are not specifically asked in the HILDA Survey and including overtime in this calculation could reduce the differences in average hourly wage reported in the table.

6　The difference in women's median household net worth is significant at the conventional 5% level. The difference between the men's median household net worth was not significant at this level.

7　Household wealth is also linked to household type (couple households, especially those with older non-dependent children and empty nesters tend to be wealthier), and the age of the household head (especially when it comes to wealth from inheritances).

8　Other factors, such as age, need to be controlled for to determine the impact of family arrangements on future income, wealth and life satisfaction.

9　Significant at the conventional 5% level. The difference between the two groups of men in terms of satisfaction with their relationship with their children was not significant at this level.

References

Australian Bureau of Statistics, 1994, *Year Book of Australia*, ABS Catalogue No. 1301.0, Canberra.

Australian Bureau of Statistics, 2003, *Family Characteristics, Australia*, ABS Catalogue No. 4442.0, Canberra.

Funder, K. and Kinsella, S., 1991 'Divorce, change and children: Effects of changing family structure and income on children', *Family Matters*, no. 30, December, pp. 20–3.

Contact between non-resident parents and their children

In 2003, 3.3% of people interviewed in the HILDA Survey had at least one non-resident child[1] under the age of 17, and 5.3% had at least one child under 17 living in their household, whose other parent lived elsewhere.[2] The Family Characteristics Survey (Australian Bureau of Statistics, 2003) estimated that there were 1.1 million children aged 0–17 years in 2003 who had a natural parent living elsewhere. In most cases, children live with their mother when parents separate. Table 1 shows that men make up 82.9% of non-resident parents. More than half of these fathers have not yet repartnered.

It is commonly believed that the amount of contact children have with a non-resident parent is slight. The child might spend the school holidays with the other parent, or maybe one weekend a fortnight. Table 2 shows that the amount of contact varies considerably, with 30.9% of non-resident parents seeing their children at least once a week (5.8% daily), and 14.0% never seeing their child at all.[3]

Contact with non-resident children also varies with the gender and relationship status of the non-resident parent. A high proportion of non-repartnered mothers and fathers see their non-resident children at least once a week, while parents who have repartnered typically see their non-resident children only about every three months. The latter group more commonly says that they never see their non-resident children: 24.4% of repartnered fathers never see their non-resident children.[4]

Table 1: Parents with non-resident children, 2003 (%)

Type of parent with non-resident child	
Father not repartnered	47.4
Repartnered father	35.5
Mother not repartnered	9.7
Repartnered mother	7.4
Total	100.0

Note: Population weighted results.

How much time do children spend with their non-resident parents? Table 3 shows the percentage of non-resident parents whose children never stay overnight with them, the average number of overnight stays per year of children who do stay overnight with their non-resident parent, and the average number of day visits non-resident parents have with their children.

Of those parents who have some contact with their non-resident children, 29.8% never have their child stay overnight with them. On all measures, parents who have repartnered spend the least time with their children.

Parents with non-resident children were asked their opinion of the amount of contact they have with their youngest non-resident child, and almost

three quarters said that the amount of contact was not enough, as shown in Table 4.

It was extremely uncommon for parents to say that the amount of contact with their non-resident children was too much. In fact, a high proportion of parents who had repartnered said the amount of contact with their resident children was nowhere near enough.

Of course, a parent's opinion of the amount of contact with their non-resident children will depend on the amount of contact there actually is. As expected, parents who see their child on a regular basis (daily, weekly or fortnightly) less commonly say that the amount of contact they have is nowhere near enough. Table 5 shows that 66.1% of parents who see their non-resident children less than every three months, quite reasonably think it is nowhere near enough.

Table 2: How often non-resident parents see their children (%)

Frequency see your (youngest) child who lives elsewhere	Father—not repartnered	Repartnered father	Mother—not repartnered	Repartnered mother	Total
At least once a week	42.2	11.1	59.0	*15.5	30.9
At least once a month	29.1	31.0	*17.3	*32.6	28.9
Once every 3 months	9.6	11.3	*9.8	*11.9	10.4
Less than every 3 months	11.4	22.1	*11.3	*19.4	15.8
Never	*7.6	24.4	*2.6	*20.6	14.0
Total	100.0	100.0	100.0	100.0	100.0
Median (typical case)	fortnightly	every 3 months	weekly	every 3 months	fortnightly

Notes: Population weighted results. * Estimate not reliable.

Table 3: Number of days/nights child stays with non-resident parent

Status of non-resident parent	Children who never stay overnight with their non-resident parent[a] (%)	Average number of overnight stays per year (children who stay overnight with their non-resident parent)[b]	Average number of day visits per year (children who have day visits with their non-resident parent)
Father not repartnered	25.7	66.6	76.0
Repartnered father	29.9	50.7	44.4
Mother not repartnered	*46.7	85.4	120.5
Repartnered mother	*31.5	*58.4	67.6
Total	29.8	62.7	72.1

Notes: Population weighted results. * Estimate not reliable. [a] Percentage of non-resident children who never stay overnight with their non-resident parent excludes those who never see their parent at all. [b] The average number of day/night visits are limited to those who have day/night visits, not entire population of non-resident parents.

Table 4: Opinion of amount of contact with non-resident children (%)

Opinion of amount of contact with (youngest) non-resident child	Non-repartnered father	Repartnered father	Non-repartnered mother	Repartnered mother	Total
Nowhere near enough	46.2	53.4	*22.7	*61.8	47.0
Not quite enough	24.7	26.9	*30.4	*4.4	24.6
About right	28.5	18.8	46.9	*33.8	27.8
Way too much	*0.6	*0.8	*0.0	*0.0	*0.6
Total	100.0	100.0	100.0	100.0	100.0

Notes: Population weighted results. * Estimate not reliable.

Table 5: Opinion of amount of contact with non-resident children (%)

Opinion of amount of contact with (youngest) non-resident child	At least once a week	At least once a month	Once every 3 months	Less than every 3 months	Total
Nowhere near enough	25.9	51.4	67.8	66.1	47.0
Not quite enough	29.5	30.1	*14.4	*12.1	24.6
About right	43.7	17.8	*17.9	*21.9	27.8
Way too much	*0.9	*0.8	*0.0	*0.0	*0.6
Total	100.0	100.0	100.0	100.0	100.0

Notes: Population weighted results. * Estimate not reliable.

Table 6: Opinion of amount of contact with non-resident children in 2001–2003 (%)

Number of years in 2001–2003 in which amount of contact with non-resident child was 'nowhere near enough' (0–3 years)	Non-repartnered father	Repartnered father	Non-repartnered mother	Repartnered mother	Total
0	34.5	*22.6	*36.0	*22.1	29.4
1	*14.2	*15.5	*0.0	*10.5	13.7
2	21.7	*21.0	*54.0	*0.0	22.5
3	29.6	40.9	*10.0	*67.5	34.5
Total	100.0	100.0	100.0	100.0	100.0

Notes: Population weighted results. For non-repartnered mothers the median was 2 years, and for repartnered mothers the median was 3 years. * Estimate not reliable.

In some cases the amount of time a child spends with his or her non-resident parent is beyond the control of the non-resident parent. It might be that the time the parent is able to spend with their child is limited as a result of a court ruling, or the non-resident parent may not be able to successfully negotiate with the resident parent to get more time with the child. For these reasons, a parent feeling that the amount of contact they have with a non-resident child is nowhere near enough could be a problem that persisted for years. Table 6 shows the number of years in 2001–2003 in which non-resident parents felt that the amount of contact with their child was 'nowhere near enough'.

Taking people who had some contact with their non-resident children in 2001 to 2003, 34.5% said the amount of contact with nowhere near enough at all three annual interviews. Persistence of dissatisfaction with the amount of contact with non-resident children is plainly more of a problem for parents who have repartnered.

Endnotes

1 Non-resident children are children who live in another household more than 50% of the time.

2 A small proportion (0.4%) of non-resident parents had children living with them who had parents living elsewhere, as well as children who lived in another household.

3 Non-resident parents with more than one child may spend different amounts of time with different children. The HILDA Survey asked about time with the youngest non-resident child.

4 The percentage is similar for repartnered mothers, however, numbers are too low for results to be reliable.

Reference

Australian Bureau of Statistics, 2003, *Family Characteristics, Australia*, ABS Catalogue No. 4442.0, Canberra.

Cohabitation: Who does it and who doesn't?

The number of marriages in Australia is declining[1], and living with a partner either before marriage or instead of marriage is becoming more common. Although marriage today is not as 'popular' as it used to be, most Australians will marry at some stage during their lifetime. However, the proportion of couples who cohabit before marriage has grown dramatically, from around 5% in the 1960s to just over 70% in the last three years, as shown in the figure below.

Figure 1: Proportion of people who lived together before most recent marriage

Note: Population weighted results.

Figure 2: Years living together before marriage—by year of marriage

Note: Population weighted results.

For those who cohabited before they married, the number of years spent cohabiting with the person they eventually married has also steadily increased. Figure 2 shows that for the small proportion of couples who lived together in the 1960s, the average amount of time spent living together before they married was just over a year. Today, for those couples who cohabit prior to marriage, the average time spent living together before marriage is just over three years.

What are the characteristics of people who cohabit? Does age, income or family background make a difference to whether people choose to live together? Table 1 confirms, unsurprisingly, that cohabiting is more common among younger people than middle aged or older members of the community; 19.7% of men and 20.1% of women between the age of 25 and 34 were living with a partner at the time of their 2003 interview. Also, quite a high proportion (19.7%) of women aged

between 18 and 24 were cohabiting. It was much more common for people over the age of 34 to be married than cohabiting, indicating that even though the number of people who cohabit is increasing, most will still eventually get married.

Using data from the 2001 Census, as well as the first year of HILDA Survey data, Dempsey and DeVaus (2004) found that age, gender and ethnicity all impact on cohabiting behaviour.

When country of birth is taken into consideration, there are substantial differences in the proportion of people cohabiting, particularly for those under the age of 35. Tables 2 and 3 show that, with the exception of the 65+ age group, men born overseas in a mainly English speaking country were more likely to cohabit than Australian born men, who in turn were more likely to cohabit than men who were born in non English speaking countries. In the 18 to 24 age group, 27.5% of overseas born

Table 1: Marital status by age group and sex, 2003 (%)							
	Married	Cohabiting	Separated	Divorced	Widowed	Never married and not cohabiting	Total
Men							
18–24	3.2	12.0	*0.1	*0.0	*0.0	84.7	100.0
25–34	41.7	19.7	1.2	1.1	*0.0	36.4	100.0
35–44	64.5	11.3	2.9	5.5	*0.3	15.4	100.0
45–54	72.0	7.8	3.9	8.6	*0.3	7.3	100.0
55–64	79.1	4.7	2.8	6.8	*1.1	5.4	100.0
65+	77.9	*1.7	2.2	4.3	10.5	3.3	100.0
Total	53.4	9.6	2.1	4.2	1.7	29.0	100.0
Women							
18–24	7.2	19.7	*0.4	*0.0	*0.0	72.7	100.0
25–34	50.8	20.1	3.2	2.5	*0.2	23.3	100.0
35–44	67.5	10.0	5.5	8.4	*0.8	7.9	100.0
45–54	69.1	6.8	5.1	10.9	3.2	4.9	100.0
55–64	70.9	3.6	3.6	10.4	8.8	2.7	100.0
65+	51.5	*0.6	*1.0	6.3	38.0	2.7	100.0
Total	51.4	9.9	3.1	6.2	7.7	21.6	100.0

Notes: Population weighted results. * Estimate not reliable.

Table 2: Proportion of people cohabiting in 2003—by gender, age group and ethnicity (%)						
	Men			Women		
Age group	Australian born	English speaking background[a]	Non-English speaking background[b]	Australian born	English speaking background	Non-English speaking background
18–24	13.2	27.5	*1.0	22.1	9.5	*8.9
25–34	20.8	23.4	*11.4	21.3	26.4	*10.8
35–44	11.1	22.2	*3.6	10.0	18.1	*5.8
45–54	7.7	11.2	*5.6	6.8	*10.1	*4.9
55–64	5.0	*7.6	*1.2	*2.3	*9.5	*4.6
65+	*1.7	*1.3	*2.4	*0.4	*2.0	*0.0
Total	10.2	13.1	4.5	10.6	12.0	5.8

Notes: Population weighted results. * Estimate not reliable. [a] Born overseas in a mainly English speaking country. [b] Born overseas in a non-English speaking country.

men from English speaking countries were cohabiting at the time of their 2003 interview, compared to 13.2% of Australian born men, and only 1.0% of men born in non-English speaking countries.

For women aged 25 or older, the same pattern emerges as for men. Women born overseas in a mainly English speaking country were more likely to cohabit than Australians, and Australians were more likely to cohabit than women born in non-English speaking countries.

The proportion of Australian born women aged between 18 and 24 who were cohabiting was higher than for women aged between 18 and 24 who were not born in Australia. Generally, the pattern is the same for women and men; people from non-English speaking countries are more often married and less likely to be cohabiting.

Dempsey and De Vaus explain the high proportion of de facto relationships among (non-Australian born) people from English speaking countries as being partly because of the high proportion of people in this category being New Zealand Maoris, for whom registered marriages are 'culturally alien', and partly due to the substantial number of young people from English speaking countries who cohabit while they are living in Australia on working holidays.[2] By contrast, people born in non-English speaking countries were less likely to cohabit and more likely to marry at a younger age because of both cultural and religious pressures in

their communities, where more conservative views about cohabitation and marriage prevail.

Cohabitation and income

Does income make a difference to whether people decide to cohabit or not? The HILDA Survey data show that people in high income households are more likely to cohabit than those in low income households. Table 4 shows the proportion of people cohabiting in each quintile of equivalised household disposable income, and each quintile of individual gross income.[3] Overall, the proportion of people cohabiting in low income households was around 12%, compared to 28% of people in the highest 20% of household income. Looking at individual income, Table 4 shows that women in the third and fourth income quintiles were the most likely to be cohabiting, while for men, the top two income quintiles had the highest proportions of cohabitation.[4]

Cohabitation by age cohort

As well as being asked about their current relationships, HILDA Survey respondents were asked about their previous marriages and de facto relationships. Table 5 shows how many people have cohabited at some time in their lives. Looking at men aged 18 to 25, 19.7% had cohabited at least once. This figure jumps to 36.0% for men in the 25 to 34 age group, with 39.2% of Australian born men and 35.4% of (non-Australian born) men from English speaking countries having cohabited at least once. Women

Table 3: Proportion of married people in 2003—by gender, age group and ethnicity (%)						
	Men			Women		
Age group	Australian born	English speaking background	Non-English speaking background	Australian born	English speaking background	Non-English speaking background
18–24	3.3	*2.4	*3.0	6.5	*19.9	*8.8
25–34	40.7	50.8	41.7	48.0	57.7	61.3
35–44	64.9	51.8	72.4	65.3	61.2	78.8
45–54	69.9	74.0	78.6	67.7	66.4	75.7
55–64	75.7	79.4	90.4	72.6	62.1	70.8
65+	75.4	77.8	87.9	50.2	57.0	53.0
Total	49.8	63.8	62.3	48.5	58.6	60.5

Notes: Population weighted results. * Estimate not reliable.

Table 4: Proportion of people (aged 18+) currently cohabiting—by income (%)						
	Equivalised household disposable income (2002–03 financial year)			Individual gross income (2002–03 financial year)		
Income quintile	Men	Women	Total	Men	Women	Total
1 (Lowest 20%)	11.5	12.9	12.2	6.9	17.6	12.3
2	15.6	17.8	16.7	11.2	15.4	13.3
3	19.7	19.9	19.8	18.1	28.6	23.5
4	24.3	23.0	23.6	33.6	26.2	29.9
5 (Highest 20%)	28.9	26.5	27.7	30.2	12.2	21.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Note: Population weighted results.

Table 5: Proportion of people (aged 18+) who have ever cohabited—by age and ethnicity (%)

	18–24	25–34	35–44	45–54	55–64	65+	Total
			Age group				
Men							
Australian born	21.7	39.2	36.1	21.9	11.4	5.7	25.3
English speaking background	*31.9	35.4	48.7	29.2	18.0	*8.2	27.9
Non-English speaking background	*4.9	19.3	17.1	17.3	*10.6	*5.1	13.3
Total	19.7	36.0	34.8	22.1	12.3	6.0	23.7
Women							
Australian born	34.3	41.3	31.5	18.2	10.7	*1.8	24.3
English speaking background	27.5	54.4	36.9	29.4	19.6	*4.7	27.2
Non-English speaking background	*12.6	20.7	15.3	11.7	*5.8	*3.4	12.4
Total	30.7	39.2	29.0	18.3	11.1	2.4	22.6

Notes: Population weighted results. * Estimate not reliable.

Table 6: Number of times cohabited for at least one month—by ethnicity (%)

	0	1	2	3	4 or more	Total
			Number of de facto relationships			
Men						
Australian born	74.9	17.0	4.8	2.1	1.2	100.0
English speaking background	72.2	17.6	5.8	1.6	2.8	100.0
Non English speaking background	87.2	9.4	1.8	*0.5	*1.1	100.0
Total	76.5	15.9	*4.4	*1.8	*1.4	100.0
Women						
Australian born	75.9	18.0	4.4	1.2	0.5	100.0
English speaking background	72.9	18.6	5.5	*1.2	*1.7	100.0
Non English speaking background	87.7	10.8	*1.2	*0.2	*0.0	100.0
Total	77.6	16.8	4.0	1.1	0.5	100.0

Notes: Population weighted results. * Estimate not reliable.

were more likely than men to have cohabited relationship by the age of 24. Of women in the 25 to 34 age group, 39.2% had cohabited at least once, with 41.3% of Australian born women and 54.4% of overseas born women from English speaking countries having cohabited by the age of 34.

How many times do people cohabit? Table 6 shows the number of times men and women have cohabited for at least one month.

It might be thought that people who live in de facto relationships have done so several times in their lives, but, it appears that most people do so only once. Just over three quarters of people aged 18 to 65 have never cohabited, 15.9% of men and 16.8% of women have cohabited once, around 4% of men and women have cohabited twice and only 3.2% of men and 1.6% of women have cohabited three or more times.

Endnotes

1 Even though the number of marriages per year has recently increased (106,400 in 2003 compared to 103,130 in 2001), the marriage rate (number of marriages per year per 1000 of the estimated resident population) has fallen from 12 in 1947 to 9.3 in 1970, 6.9 in 1990, down to 5.3 in 2001 (Australian Bureau of Statistics, 2004, Table 92: Crude marriage rates, states and territories,

1860 onwards). It is possible that some of the decline in marriage rate is a result of ageing of the population.

2 In 2003, 65.3% of people born overseas in English speaking countries were born in the United Kingdom, and 19.9% were born in New Zealand.

3 Equivalised disposable income is used to measure the household's material standard of living. The specific measure used here is household disposable income adjusted for household needs. The measure is described in detail in Part 2 of this volume 'Incomes and Wealth'. Individual gross income, the other concept used here, means income from all sources including Government payments, before tax.

4 As shown in a later article (*'Are low income men less likely to be married?'*), it is more common for men with high incomes to cohabit and it is more common for men with higher incomes to be married, in other words, compared to men with low incomes, a higher proportion of men with high incomes have partners.

References

Australian Bureau of Statistics, 2004, *Australian Historical Population Statistics—7, Marriages and Divorces*, ABS Catalogue No. 3105.0.65.001, Canberra.

Dempsey, K. and de Vaus, D., 2004, 'Who Cohabits in 2001? The Significance of Age, Gender, Religion and Ethnicity', *Journal of Sociology*, vol. 40, no. 2, pp. 157–78.

Fertility behaviour and intentions

As in most other Western nations, women in Australia are having fewer children. The average number of children that women have has fallen from 3.5 in 1961, to 1.9 in 1981 and 1.7 in 2001 (Australian Bureau of Statistics, 2004[1]). This trend is reflected in the HILDA Survey, with younger females having, and planning to have, fewer children than earlier generations.

Every year both male and female respondents aged 18 to 55 are asked:

> *Would you like to have a child of your own/more children in the future?*

This question was answered on a 0 to 10 scale where 0 meant 'definitely not' and 10 meant 'definitely would'. Then, on a similar scale, respondents were asked:

> *And how likely are you to have a child/more children in the future?*

A final question asked how many children the respondent intended to have in the future.

Figure 1 shows that, while women aged 65 years and over have had an average of 3 children, women aged less than 35 are now planning to have only 2 children. Further, although younger women may intend to have 2 children, the actual number they have is lower. The HILDA Survey data suggests that one reason why women may not achieve their fertility preferences is a lesser desire for children among men. Figure 2 shows that while women under the age of 35 are expecting to have 2 children, men aged 18 to 35 are planning to have fewer than 2 children.

One reason for the average number of desired children being less for men than for women is that quite a lot of men (over 20% in the 18 to 34 age group, compared with about 15% of women) do not intend to have children (see Table 1).

Other possible reasons for women not having the number of children they intend are issues of finding a partner and establishing themselves financially, the impact of longer times in education and repaying education debt, and because some women put off having children until they are older in order to pursue other interests, including their careers. The HILDA Survey data confirm the average age at which women have their first child is rising. Among mothers aged 35 to 44 in 2003, their average age at the birth of their first child was 26.4, compared to 25.[1] for women aged 45 to 54, and 24.0 for women aged over 55.

Who already has children and who wants children?

Does education, income or ethnic background affect the number of children a person has? The

Figure 1: Actual and intended number of children —women in 2003

Note: Population weighted results.

Figure 2: Actual and intended number of children —men in 2003

Note: Population weighted results.

Table 1: Percentage of people not intending to have any children, 2003 (%)

Age group	Men	Women	Total
18–24	25.2	16.4	20.9
25–34	20.6	13.8	17.2
35–44	18.0	11.5	14.7
45–54	13.1	10.3	11.7
55–64	11.0	7.4	9.2
65+	7.7	6.9	7.3
Total	16.2	11.1	13.6

Note: Population weighted results.

HILDA Survey data show that people whose highest level of education is year 11 or below have more children, on average, than others. Tables 2a and 2b show the actual and intended number of children for men and women according to their highest level of education. It should be noted that controlling for age might lead to a different result. Older people (who have already completed their fertility) have higher incomes now, but the HILDA Survey does not ask about their household income at the time their children were born.

The average number of children for women who had not completed year 12 was 2.6, compared to 1.3 for women who had degrees. Looking at the intended number of children, the average was still higher for people who had not completed year 12, suggesting that people with fewer years of education still prefer to have more children.

Looking at ethnic background, there was very little difference in the average number of children (Table 3a). In all three years, the average number of children for men born in Australia was 1.7, and 1.8 for men born in other countries. For women, the average number of children was between 1.8 and 2.1 regardless of country of birth. There was also very little difference in the number of intended children (see Table 3b).

Table 2a: Average number of children by highest level of education									
	2001			2002			2003		
Education	Men	Women	Total	Men	Women	Total	Men	Women	Total
Degree	1.5	1.3	1.4	1.5	1.3	1.4	1.5	1.3	1.4
Certificate or diploma	1.8	1.9	1.8	1.8	1.9	1.8	1.8	1.9	1.8
Year 12	0.9	1.2	1.1	0.9	1.3	1.1	0.9	1.3	1.1
Year 11 and below	2.1	2.6	2.4	2.0	2.6	2.4	2.0	2.6	2.3
Total	1.7	2.0	1.8	1.7	1.9	1.8	1.7	1.9	1.8

Note: Population weighted results.

Table 2b: Average number of intended children by highest level of education									
	2001			2002			2003		
Education	Men	Women	Total	Men	Women	Total	Men	Women	Total
Degree	2.2	2.0	2.1	2.1	2.0	2.0	2.1	2.0	2.0
Certificate or diploma	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Year 12	2.0	2.2	2.1	1.9	2.3	2.1	2.0	2.2	2.1
Year 11 and below	2.4	2.8	2.6	2.4	2.7	2.6	2.3	2.7	2.5
Total	2.2	2.4	2.3	2.2	2.4	2.3	2.2	2.4	2.3

Note: Population weighted results.

Table 3a: Average number of children by ethnic background									
	2001			2002			2003		
Country of birth	Men	Women	Total	Men	Women	Total	Men	Women	Total
Australian born	1.7	1.9	1.8	1.7	1.9	1.8	1.7	1.9	1.8
English speaking country	1.8	2.1	1.9	1.8	2.1	1.9	1.8	2.1	1.9
Non-English speaking country	1.8	2.0	1.9	1.8	1.9	1.8	1.7	1.8	1.7
Total	1.7	2.0	1.8	1.7	1.9	1.8	1.7	1.9	1.8

Note: Population weighted results.

Table 3b: Average number of intended children by ethnic background									
	2001			2002			2003		
Country of birth	Men	Women	Total	Men	Women	Total	Men	Women	Total
Australian born	2.2	2.4	2.3	2.2	2.4	2.3	2.2	2.4	2.3
English speaking country	2.1	2.3	2.2	2.0	2.3	2.2	2.1	2.3	2.2
Non-English speaking country	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.2	2.3
Total	2.2	2.4	2.3	2.2	2.4	2.3	2.2	2.4	2.3

Note: Population weighted results.

Tables 4a and 4b show the number of children people have, and the number of children they intend to have, by quintile of equivalised household disposable income.[2] The average number of children in the households in the lowest 20% of equivalised disposable income was 2.3 in 2003; while for households in the highest 20%, the average number of children was only 1.3.[3] One possible explanation for this is that households with more children may have lower incomes because the woman works fewer hours (or not at all) because of child care responsibilities.

The same pattern can be seen for the number of children people intend to have—people in low income households intended to have 2.7 children on average, while people in high income households planned to have 2 children.

Do people have the number of children they want?

How many people actually have the number of children they intend to have? With only three years of HILDA Survey data available, it is not possible to answer this question, but we can see whether in

Table 4a: Average number of children by quintile of household income

	2001			2002			2003		
Country of birth	Men	Women	Total	Men	Women	Total	Men	Women	Total
1 (Lowest 20%)	2.3	2.5	2.4	2.2	2.5	2.4	2.2	2.4	2.3
2	2.0	2.3	2.2	2.0	2.2	2.1	1.9	2.2	2.1
3	1.7	1.9	1.8	1.7	1.9	1.8	1.7	1.9	1.8
4	1.4	1.6	1.5	1.4	1.5	1.4	1.4	1.6	1.5
5 (Highest 20%)	1.3	1.4	1.4	1.3	1.4	1.3	1.3	1.4	1.3
Total	1.7	2.0	1.8	1.7	1.9	1.8	1.7	1.9	1.8

Note: Population weighted results.

Table 4b: Average number of intended children by quintile of household income

	2001			2002			2003		
Country of birth	Men	Women	Total	Men	Women	Total	Men	Women	Total
1 (Lowest 20%)	2.7	2.8	2.7	2.6	2.8	2.7	2.6	2.7	2.7
2	2.4	2.6	2.5	2.4	2.6	2.5	2.4	2.6	2.5
3	2.1	2.3	2.2	2.2	2.4	2.3	2.2	2.4	2.3
4	2.1	2.2	2.1	2.0	2.1	2.1	2.1	2.1	2.1
5 (Highest 20%)	2.0	2.0	2.0	1.9	2.0	2.0	1.9	2.0	2.0
Total	2.2	2.4	2.3	2.2	2.4	2.3	2.2	2.4	2.3

Note: Population weighted results.

Table 5: Desire to have children—18 to 55 year olds in 2001 (%)

	Men	Women	Total
Have no children—don't want any	21.9	14.9	18.4
Have no children—want children	35.5	28.9	32.2
Have children—don't want any more	33.2	45.4	39.3
Have children—want more	9.4	10.8	10.1
Total	100.0	100.0	100.0

Note: Population weighted results.

Table 6: Percentage of people in 2003 who had had children since 2001 (%)

Situation and intentions in 2001	Men	Women	Total
Have no children—don't want any	2.1	2.5	2.2
Have no children—want children	12.6	16.4	14.3
Have children—don't want any more	4.1	3.6	3.8
Have children—want more	49.1	54.3	51.9
Total	10.9	12.6	11.8

Notes: Population weighted results. * Estimate not reliable.

the short run—between 2001 and 2003—those who wanted more children had them, and those who did not want children avoided having them.

In each wave of the HILDA Survey, people are asked if they would like to have a child (or more children) in the future, how likely they are to have a child, and how many more they intend to have.

Table 5 shows that in 2001, 18.4% of people aged between 18 and 45 had no children and did not want to have any, 32.2% did not have children but wanted to have children in the future, 10.1% had children and wanted to have more children and the remaining 39.3% had children and did not want any more.

Did the people who wanted more children actually have more children? Did those who said they did not want any children end up having children? Table 6 shows the percentage of people in each group who had children since their interview in 2001.

In the short-term most did what they intended. Less than 3% of people who said they did not want children or did not want more children had a new baby by 2003. Of the people who already had children and wanted to have more, 54.3% of women and 49.1% of men had another child by 2003. However, only around 14% of people who had no children in 2001 but said they wanted to have children were parents in 2003. One possible reason for this is that the people who already had

children were more likely to be in relationships where the potential of having a child in the next two years was high, while the people who had no children and wanted them were more likely to be younger single people who wanted to have children at some time in the more distant future.[4]

Endnotes

1 Table 39: Age-specific fertility rates and total fertility rate, Australia, 1921 onwards.

2 Equivalised disposable income is probably the best available measure of a household's material standard of living. The specific measure used here is household disposable income adjusted for household needs. The measure is described in detail in Part 2 of this volume 'Incomes and Wealth'. Individual gross income, the other concept used here, means income from all sources including Government payments, before tax.

3 Controlling for age might lead to a different result. Older people (who have already completed their fertility) have higher incomes now, but we have no information about their household income at the time their children were born.

4 A small proportion (approximately 4%) of people aged 18 to 45 were pregnant (or their partner was pregnant) at the time of interview.

Reference

Australian Bureau of Statistics, 2004, *Australian Historical Population Statistics—4, Births*, Catalogue No. 3105.0.65.001, Canberra.

How often do people move house?

Moving house is widely regarded as stressful. Be this as it may, the HILDA Survey shows that approximately 17% of the population moves each year, and 25.3% of the people who were interviewed in all three years had moved house at least once since their first interview in 2001.

In the first year of the HILDA Survey (2001), every respondent was asked when they began living at their current address. In subsequent years they

were asked whether they had moved since they were last interviewed and, in the case of those who had moved, what were their reasons for moving.[1]

Table 1 shows the average time respondents had been living at their current address.

The overall average time spent at one's current address is about ten years, but people between the ages of 20 and 35 stay in the same place for shorter periods than older people. The average

Table 1: Average years living in current residence by gender and age									
	2001			2002			2003		
Age group	Men	Women	Total	Men	Women	Total	Men	Women	Total
15–19	8.1	7.2	7.7	7.9	7.8	7.9	8.2	8.2	8.2
20–24	6.3	4.4	5.4	6.0	4.5	5.3	6.8	5.0	5.9
25–34	4.3	3.9	4.1	4.0	3.7	3.8	5.1	4.2	4.6
35–44	6.2	6.5	6.3	6.0	6.5	6.3	6.6	6.9	6.7
45–54	10.7	11.6	11.1	10.3	10.9	10.6	10.9	11.5	11.2
55–64	15.5	15.2	15.3	15.3	15.4	15.4	15.6	16.6	16.1
65+	20.1	20.4	20.3	19.6	20.6	20.2	20.6	21.1	20.9
Total	9.8	9.9	9.9	9.5	10.0	9.7	10.5	10.8	10.7
Note: Population weighted results.									

Table 2: Years living in current residence by age group and quintile of household disposable income (median)[a]

Age group	Quintile of equivalised household disposable income	2001	2002	2003
15–24	1 (Lowest 20%)	1.3	1.8	2.3
	2	2.3	2.8	4.3
	3	3.1	4.0	3.9
	4	3.5	5.4	6.1
	5 (Highest 20%)	5.8	7.0	7.1
	Total	2.7	3.7	4.4
25–34	1 (Lowest 20%)	1.3	1.3	1.4
	2	1.8	2.0	1.8
	3	2.0	2.2	2.0
	4	2.2	2.0	2.0
	5 (Highest 20%)	1.8	1.6	1.6
	Total	1.9	1.9	1.8
35–44	1 (Lowest 20%)	3.8	3.3	3.6
	2	4.2	4.7	4.4
	3	5.9	5.1	4.5
	4	4.8	4.4	3.8
	5 (Highest 20%)	3.7	3.6	3.6
	Total	4.4	4.3	4.0
45–54	1 (Lowest 20%)	7.3	7.2	7.2
	2	8.6	7.0	7.2
	3	9.3	9.3	7.3
	4	10.0	9.3	8.6
	5 (Highest 20%)	8.4	7.8	7.4
	Total	8.9	8.3	7.5
55–64	1 (Lowest 20%)	8.5	7.2	10.1
	2	10.3	11.9	13.8
	3	17.0	15.1	12.7
	4	14.8	12.8	13.7
	5 (Highest 20%)	14.8	12.7	12.6
	Total	11.9	11.9	12.6
65+	1 (Lowest 20%)	15.4	15.3	13.3
	2	14.4	13.4	14.6
	3	14.8	18.4	17.7
	4	18.0	13.4	14.8
	5 (Highest 20%)	13.1	16.8	15.7
	Total	15.0	14.8	14.8
Total	1 (Lowest 20%)	6.2	6.1	5.8
	2	5.4	5.6	6.4
	3	5.8	5.7	5.0
	4	5.3	5.5	5.5
	5 (Highest 20%)	4.9	4.9	5.1
	Total	5.4	5.5	5.5

Notes: Population weighted results. [a] Medians (rather than means) are used in this table as means are affected by very long durations.

Table 3: Average years living in current residence by current household type

Household type	2001	2002	2003
Couple family without children under 15	12.4	12.1	13.3
Couple family with children under 15	6.7	6.6	7.0
Lone parent with children under 15	4.8	4.9	5.5
Lone parent without children under 15	10.9	11.3	12.1
Other related family without children under 15	8.9	8.2	10.1
Lone person	10.9	10.1	10.5
Group household	2.3	3.7	6.0
Multi family household	7.9	7.9	9.4
Total	9.9	9.7	10.7

Note: Population weighted results.

The average time spent in one house is slightly lower for people in high income households. People in the lowest income quintile stay in the same place for an average of around 12 years, compared to eight or nine years for people with high household incomes. Looking at the medians of time spent living at the current residence, people in the lowest income quintile tend to stay in one home for slightly longer than those with higher incomes. However, this changes with age. For younger people (aged 20–24), those with the highest household incomes stay in one place for the longest. In the 25 to 34 age group, household income doesn't seem to affect time in current residence—the median for all but the lowest quintile is around 2 years. For people aged 35 to 44, it is those in the middle income quintile who stay in one place the longest, and for people aged between 45 and 64 those in the lowest income quintile have the shortest median time at their current residence.

Which types of households move most? Table 3 shows the average time living at current residence by household type.[4] With the exception of group households, which are usually temporary arrangements, people with children under the age of 15 move most often. Lone parents with children under 15, who often face severe financial pressures[5] are the most frequent movers of all.

In 2003, the average time in their current residence for a couple with children under 15 was 7 years, compared to 13.3 years for a couple without children under 15. Lone parents with children under 15 had stayed in their current residence for an average of 5.5 years, compared to 12.1 years for lone parents whose children were 15 and over.

Table 4 confirms that the age of the children in the household appears to be related to how long people stay in one place.

length of time for a 25 to 34 year old to stay in one home is around four years, compared to approximately 20 years for those over the age of 65.[2]

How, if at all, is frequency of moving house related to income? Table 2 shows average time living at current residence, grouped by age and quintiles (20% groupings) of equivalised household disposable income.[3]

Table 4: Average years living in current residence by age of youngest resident child			
Age of youngest resident child	*2001*	*2002*	*2003*
Youngest child aged 0 to 4	4.5	4.6	4.9
Youngest child 5 to 9	7.2	7.1	7.6
Youngest child 10 to 14	8.9	8.8	9.7
No children in household	11.4	11.3	12.4
Total	9.9	9.7	10.7

Note: Population weighted results.

Table 5: Average years living in current residence by housing tenure			
Housing tenure	*2001*	*2002*	*2003*
Own/currently paying off mortgage	12.4	12.1	12.9
Rent or pay board —private rental	2.3	2.7	3.6
Rent or pay board —government housing	7.7	7.8	8.8
Involved in a rent/buy scheme**	n.a.	*5.8	*6.9
Live rent free/life tenure	8.1	7.8	8.7
Total	9.9	9.7	10.7

Notes: Population weighted results. ** This group was included in the 'rent or pay board' category in 2001. * Estimate not reliable.

People with young children moved around a lot more than people without children. While those with no children living in the household had lived in their current home for 11 to 13 years on average, people with children under four years old had lived in their current residence for just four or five years. Plainly, parents with growing children need to increase their housing space and the number of bedrooms as the children mature. They may also want to move closer to preferred schools.[6] Other factors that may impact on the housing tenure of parents of young children include the impact of home purchase and child bearing, and that they are likely to have formed a relationship more recently than parents of older children.

Another factor that affects how often people move is whether they own their home or rent. Table 5 shows that, as expected, people who owned their own home or were paying off a mortgage had lived in the same place for longer than those who were renting.

For people who owned their home outright or were paying off a mortgage, the average number of years in their current residence was 13 in 2003. On the other hand, the average time spent in one home for people who were renting was only 3.6 years.

Why do people move?

The most common reason for moving reported in the 2003 HILDA Survey by people who had moved since their 2002 interview was 'personal or family reasons', followed by housing related reasons, and then work and education (see Table 6).

'Personal and family reasons' include young people moving out of home, moving in with a new spouse or partner, moving out because of a relationship breakdown, moving to be closer to friends or family, or to follow a spouse or parent who wants to move. The next most common reason for shifting was specifically for housing reasons—moving to a larger or better place, or, in the case of some older people, moving to a smaller less expensive place. Among renters a common reason for moving was that the property in which they had previously been living was no longer available. Other reasons for moving were work or study reasons—people moving because of work transfers, or wanting to be closer to their place of work or study—and finally, moving to a better neighbourhood. Table 6 shows that the reasons why people move change with age.

Moving for work or study reasons was most common for people under the age of 25, while older people more commonly said that their reason for moving was to move to a better neighbourhood. A very high proportion of people under the age of 20 (64.1% of men and 59.0% of women) said they had moved for personal or family reasons.

How far do people move?

Although many people move house every year, most do not move very far, with 59.3% moving less than 10 km from their previous residence. Table 7 shows that the distance moved depends, to some extent, on the reason for moving.[7]

People who moved very short distances most commonly moved for personal or housing reasons, while a high proportion of people who moved because of work or education moved more than 100 kilometres from their previous address.

Who moves the most?

Focusing just on people who responded in all three years of the HILDA Survey, 17.1% had moved house between their 2001 and 2002 interviews and 16.7% had moved between 2002 and 2003. The proportion of this group who were repeat movers—moving house at least twice since their first interview in 2001—was 6.1%. In fact, 3.0% had moved in the 12 months prior to their first interview in 2001 and at least twice since then.

Among those who had moved at least twice in the last two years, 76.2% of these repeat movers moved less than 100 kilometres and 64.1% moved less than 20 kilometres from their previous residence the last time they moved. Of repeat movers, 23.9% moved less than 5 kilometres both times they moved. Table 8 shows the age groups of these repeat movers.

Table 6: Reasons for moving in the last 12 months, 2003 (%)

	Men				Women			
Age group	Personal/ family	Housing	Work/ education	Neighbour- hood	Personal/ family	Housing	Work/ education	Neighbour- hood
15–19	64.1	16.2	14.3	*7.7	59.0	21.3	19.7	*2.5
20–24	50.0	29.2	28.7	*2.1	57.0	34.5	17.8	*3.4
25–34	49.9	35.5	18.7	6.5	48.6	42.8	17.6	8.0
35–44	39.8	42.2	17.9	10.3	42.6	46.6	9.9	12.4
45–54	41.2	47.9	*13.4	*10.3	54.7	35.9	*10.6	*9.4
55–64	58.3	36.0	*5.3	*17.9	49.4	44.4	*8.2	*9.3
65+	51.4	*40.5	*1.8	*19.5	49.9	49.0	*0.0	*12.4
Total	49.1	35.2	17.9	8.2	51.0	39.2	14.5	7.7

Notes: Population weighted results. Respondents were able to choose more than one reason, therefore rows do not total to 100.
* Estimate not reliable.

Table 7: Distance moved by reasons for moving in the last 12 months, 2003 (%)

	Personal/family	Housing	Work/ education	Neighbourhood	Total
0 (or moved within postcode)	35.9	40.8	11.7	21.3	35.6
1–4 km	9.9	16.1	*7.9	18.2	12.2
5–9 km	9.3	15.0	*4.7	*7.9	11.5
10–19 km	13.2	13.4	8.2	*9.7	11.8
20–49 km	8.5	7.1	12.1	15.9	8.5
50–99 km	5.3	3.3	7.7	*7.6	4.5
100–499 km	9.6	3.0	23.1	13.1	7.8
500+ km	8.3	*1.3	24.5	*6.3	8.0
Total	100.0	100.0	100.0	100.0	100.0

Notes: Population weighted results. Respondents were able to choose more than one reason, therefore rows do not total to 100.
* Estimate not reliable.

People in their twenties moved most frequently; 59.3% of all repeat movers were in fact in this age group. It was much less common for older people to be repeat movers, with 7.8% of repeat movers in the 45 to 54 age group, and only 6.7% of repeat movers were over the age of 55.

The main reason for repeat movers moving house was for family or personal reasons, as shown in Table 9. This could be moving in with a new partner, separating from a previous spouse or partner, or just moving to be closer to family or friends.[8]

Overall, 45.1% of repeat movers said the reason for their last move was personal or family reasons, 38.0% moved for housing reasons, 19.1% moved for work reasons, and 8.5% said their reason for moving was to move to a better neighbourhood.

Do the people who say they want to move actually move?

HILDA Survey respondents were asked about their preference to continue living in their local area. Did the people who had a strong preference to stay actually stay, and did those who said they had a strong preference to leave relocate in the next

Table 8: Age group of repeat movers, 2003 (%)

Age group	Men	Women	Total
15–19	*8.0	10.7	9.4
20–24	28.1	27.3	27.7
25–34	30.6	32.4	31.6
35–44	18.9	15.1	16.9
45–54	7.3	8.2	7.8
55–64	*4.2	*4.4	4.3
65+	*2.8	*1.9	*2.4
Total	100.0	100.0	100.0

Notes: Population weighted results. * Estimate not reliable.

Table 9: Repeat movers—reason for last move (%)

Reason for last move	Men	Women	Total
Personal/family	43.3	46.7	45.1
Housing	37.2	38.8	38.0
Work/education	21.2	17.3	19.1
Neighbourhood	*7.1	9.8	8.5

Notes: Population weighted results. Respondents were able to choose more than one reason, therefore columns do not total to 100.
* Estimate not reliable.

Table 10: Preference to continue living in local area in 2001			
	% in 2001	*% moved more than 5km from previous residence by 2002*	*% moved more than 5km from previous residence by 2003*
Strong preference to stay	49.2	3.4	7.5
Moderate preference to stay	24.3	9.1	16.8
Unsure/No strong preference to stay or leave	16.8	14.0	24.6
Moderate preference to leave	6.0	18.7	30.9
Strong preference to leave	3.7	33.9	46.5
Total	100.0	8.6	15.5
Note: Population weighted results.			

12 months? Table 10 shows the proportion of people who moved since their 2001 interview.

Most people said they had a strong preference to stay in their local area and less than 10% of people who answered this question in 2001 said they had a preference (either moderate or strong) to leave. Those who expressed a preference to leave their local area were much more likely to have moved house, and moved more than 5 kilometres away from their previous residence, within the next 12 to 24 months. Of the 3.7% of people who said they had a strong preference to leave their local area, 33.9% moved out of that area in the next 12 months, and by the time of their 2003 interview, 46.5% had moved. Conversely, of the 49.2% who said they had a strong preference to stay in their local area, only 3.4% of had left that area by 2002 and 7.5% had moved by 2003.

Endnotes

1   As households change over time (people join and leave) all figures in this article refer to individual moves, not 'household moves'.

2   As home ownership is related to age (i.e. older people more commonly own their home or are paying off a mortgage) it follows that young people are more likely to pay rent or board rather than owning, and people who pay rent or board generally live in one place for shorter periods than those who own their home or have a mortgage.

3   Equivalised household disposable income is probably the best measure of material standard of living. It is household disposable income adjusted for household size in order to take account of the needs of households of different sizes.

4   Note: this is household type at the time of interview. Household types inevitably change as individuals join and leave the household.

5   In 2003, 37.0% of lone parents with children under 15 said they would not be able to raise $2000 in an emergency, compared to only 8.6% of people in couple households with children under 15.

6   Other factors that may impact on the housing tenure of parents of young children include the impact of home purchase and child bearing, and that they are likely to have formed a relationship more recently than parents of older children.

7   Calculation of distance moved by great circle formula applied to latitude and longitude of centroids of postcode of previous and current address. The great circle formula calculates the distance between two locations using their latitude and longitude.

8   Of those who said they moved for personal reasons, 37.9% said it was 'to get a place of my/our own', 14.6% said they moved to be closed to friends and family, 11.7% moved because of a relationship breakdown and 9.5% moved in with a new spouse or partner.

Neighbourhood problems

The negative aspects of particular neighbourhoods attract a good deal of media publicity. Positive aspects, including good neighbourliness, seemingly attract less attention.

At each HILDA Survey interview respondents are asked how common various positive and negative events are in their own neighbourhood. The response scale runs from 1 (never happens) to 5 (very common). Table 1 gives results for 2003.

Most people were moderately positive about their neighbours. Over half said that 'neighbours helping each other out' was 'very common' or 'fairly common'. On the other hand, about 60% said that 'neighbours doing things together' either 'never

happens', or was 'very rare', or 'not common'.[1] (No follow-up question was asked, so it is not possible to say how many regretted this lack of joint activities.)

Table 1 shows that no explicitly negative features were identified as present in their own neighbourhood by a majority of respondents. The most frequently reported negative attribute was loud traffic noise, with 31.2% saying this was very common or fairly common. Two other negative features were mentioned by over 20% of respondents—noise from airplanes, trains or industry (22.2%) and 'teenagers hanging around on the streets'[2] (21.4%). Problems mentioned by 15–20% of respondents were 'homes and gardens in bad condition',

Table 1: Neighbourhood events in 2003 (%)							
	Never happens	Very rare	Not common	Fairly common	Very common	Don't know	Total
Neighbours helping each other out	4.4	13.2	19.8	37.2	17.2	8.1	100.0
Neighbours doing things together	12.4	17.6	31.1	23.1	6.3	9.6	100.0
Loud traffic noises	8.1	31.7	28.8	19.0	12.2	0.3	100.0
Noises from airplanes, trains or industry	23.4	32.5	21.5	14.4	7.8	0.5	100.0
Homes and gardens in bad condition	7.3	35.5	42.1	10.4	2.4	2.3	100.0
Rubbish and litter lying around	13.7	42.5	31.8	8.7	2.6	0.6	100.0
Teenagers hanging around on the streets	16.2	32.2	28.7	15.3	6.1	1.4	100.0
People being hostile and aggressive	26.2	40.3	23.8	4.7	1.7	3.1	100.0
Vandalism and deliberate damage to property	16.9	39.7	27.2	10.3	3.2	2.8	100.0
Burglary and theft	9.7	34.5	32.1	12.7	3.5	7.6	100.0

Note: Population weighted results.

Table 2: Neighbourhood events in 2003 (% who said event is 'fairly common' or 'very common' by deciles of the SEIFA Index of Relative Socio-Economic Disadvantage)											
	SEIFA 2001 Decile of Index of Relative Socio-Economic Disadvantage										
	1	2	3	4	5	6	7	8	9	10	All
Neighbours helping each other out	50.7	56.1	59.4	67.0	61.0	62.5	61.4	55.8	58.7	57.5	59.3
Neighbours doing things together	26.0	29.3	33.1	39.3	34.6	36.5	35.1	29.8	30.6	29.4	32.5
Loud traffic noises	37.7	33.0	34.7	31.0	31.6	28.0	32.8	27.9	28.2	28.4	31.2
Noises from airplanes, trains or industry	23.1	25.9	19.7	27.1	19.8	21.1	27.5	20.8	19.9	18.1	22.3
Homes and gardens in bad condition	23.5	15.8	17.3	13.6	14.3	12.4	13.3	11.4	7.2	5.2	13.1
Rubbish and litter lying around	15.3	11.3	15.0	10.8	11.9	11.8	11.9	9.7	9.3	7.9	11.4
Teenagers hanging around on the streets	26.9	28.5	27.6	24.1	22.6	19.9	20.2	18.6	18.0	13.5	21.8
People being hostile and aggressive	10.9	10.4	10.6	8.1	8.7	4.9	5.2	4.3	4.0	*1.4	6.7
Vandalism and deliberate damage to property	18.3	16.0	17.4	14.0	16.1	13.9	13.1	11.3	12.8	7.0	13.9
Burglary and theft	23.0	20.6	18.1	17.5	16.9	16.9	15.9	15.9	17.5	13.4	17.5

Notes: Population weighted results. * Estimate not reliable.

'rubbish and litter lying around', vandalism and burglary. The one problem mentioned by fewer than 10% was 'people being hostile and aggressive'.

Neighbourhood benefits and problems: How closely are they related to socio-economic disadvantage?

To what extent are the positive and negative aspects of neighbourhoods a reflection of the socio-economic status of their inhabitants? In Table 2 respondents have been grouped according to the decile of socio-economic disadvantage[3] of the area in which they live. The deciles (equal groupings of 10%) were determined by the Australian Bureau of Statistics.

Table 2 shows that, although more than 50% of people in all deciles said that 'neighbours helping each other out' is fairly common or very common, it is least common in the most disadvantaged areas and most common in the middle deciles. The least disadvantaged (or best off) areas occupy an intermediate position on this 'good neighbours' indicator. Only about a third of respondents reported that it was common for neighbours to do things together, but again it was the middle deciles which were most neighbourly and the most disadvantaged areas which were least neighbourly, with the best-off areas being in-between.

In contrast, negative neighbourhood features were related in a more or less linear fashion to socio-economic status; the lower the status of the neigh-

bourhood, the more respondents reported adverse events.[4]

Do people who perceive neighbourhood problems move house?

It seems plausible that people who find their neighbours unhelpful and perceive neighbourhood problems would be more likely than others to move house. Table 3 compares the neighbourhood perceptions in 2001 of those who had moved house by 2003 with the perceptions of those who stayed put.

It is clear that those who chose to move house between 2001 and 2003 were less satisfied with the local neighbourhood than those who stayed. They were less likely to perceive their neighbours as helpful and doing things together and more likely to perceive a range of neighbourhood nuisances and problems.

Persistence of neighbourhood problems

Are most neighbourhood benefits and problems perceived as persisting for several years? One might expect this to be the case, at least among those who do not move. Table 4 shows the number of years (zero to three) in 2001–2003 in which HILDA Survey respondents classified particular events in their neighbourhood as either 'fairly common' or 'very common'. Results are given separately for people who stayed put in 2001–2003, compared with those who moved house.

Table 3: Neighbourhood events in 2001 (%)							
	Never happens	Very rare	Not common	Fairly common	Very common	Don't know	Total
Moved since 2001 interview							
Neighbours helping each other out	8.4	13.5	19.3	32.3	11.5	15.1	100.0
Neighbours doing things together	17.6	16.1	26.8	17.7	3.9	17.9	100.0
Loud traffic noises	8.0	27.2	27.1	20.6	16.4	*0.7	100.0
Noises from airplanes, trains or industry	24.0	30.9	20.5	14.8	9.0	*0.8	100.0
Homes and gardens in bad condition	7.9	36.9	37.2	12.5	2.7	2.9	100.0
Rubbish and litter lying around	14.6	39.6	30.6	11.0	3.2	1.0	100.0
Teenagers hanging around on the streets	15.7	27.6	25.3	20.5	8.7	2.2	100.0
People being hostile and aggressive	24.3	37.6	24.5	6.2	2.5	4.9	100.0
Vandalism and deliberate damage to property	16.9	33.7	25.3	12.9	5.8	5.4	100.0
Burglary and theft	9.2	27.7	27.7	16.3	6.6	12.5	100.0
Did not move since 2001 interview							
Neighbours helping each other out	4.2	11.7	17.4	39.8	19.2	7.7	100.0
Neighbours doing things together	11.7	18.2	28.6	24.1	7.2	10.1	100.0
Loud traffic noises	9.6	32.8	27.5	17.7	11.9	0.4	100.0
Noises from airplanes, trains or industry	23.9	33.5	20.9	14.1	7.2	0.4	100.0
Homes and gardens in bad condition	9.2	37.5	39.9	8.9	1.6	2.9	100.0
Rubbish and litter lying around	16.9	43.4	29.3	7.8	1.9	0.6	100.0
Teenagers hanging around on the streets	18.8	32.0	26.7	15.1	6.0	1.4	100.0
People being hostile and aggressive	29.2	40.2	21.8	3.9	1.7	3.2	100.0
Vandalism and deliberate damage to property	17.1	39.2	25.7	11.0	4.1	3.0	100.0
Burglary and theft	9.3	33.2	29.5	16.0	4.6	7.4	100.0
Notes: Population weighted results. * Estimate not reliable.							

Table 4: Neighbourhood events—number of years the event was common (%)					
	0	*1*	*2*	*3*	*Total*
Did not move since first interview					
Neighbours helping each other out	19.9	15.1	17.0	48.0	100.0
Neighbours doing things together	48.2	18.5	13.5	19.8	100.0
Loud traffic noises	57.6	15.0	9.6	17.8	100.0
Noises from airplanes, trains or industry	68.2	12.1	8.5	11.2	100.0
Homes and gardens in bad condition	79.3	12.0	5.3	3.3	100.0
Rubbish and litter lying around	82.1	9.9	4.8	3.2	100.0
Teenagers hanging around on the streets	66.8	14.7	9.3	9.2	100.0
People being hostile and aggressive	89.9	6.3	2.2	1.7	100.0
Vandalism and deliberate damage to property	75.0	13.1	6.4	5.4	100.0
Burglary and theft	68.2	14.3	9.1	8.4	100.0
Moved since first interview					
Neighbours helping each other out	20.8	24.8	27.4	27.1	100.0
Neighbours doing things together	49.2	24.8	17.4	8.6	100.0
Loud traffic noises	35.9	30.7	22.8	10.6	100.0
Noises from airplanes, trains or industry	55.2	23.9	15.1	5.8	100.0
Homes and gardens in bad condition	70.6	19.1	7.4	2.9	100.0
Rubbish and litter lying around	72.6	18.2	6.7	2.5	100.0
Teenagers hanging around on the streets	51.2	22.8	16.2	9.8	100.0
People being hostile and aggressive	81.7	12.6	3.6	2.2	100.0
Vandalism and deliberate damage to property	65.8	20.1	9.2	4.8	100.0
Burglary and theft	58.6	21.9	13.0	6.5	100.0
Note: Population weighted results.					

The results are somewhat surprising and may indicate a degree of psychological adaptation to the neighbourhood environment.[5] Focusing first on those who did not move, we find that fewer than half the respondents who *ever* mentioned particular neighbourhood benefits or problems mentioned them in all three years. The only exception is 'neighbours helping each other out', which was mentioned by 80.1% of respondents in at least one year and more than half of these (48.0%) in all three years. Every other benefit or problem was mentioned three times (every year) by far fewer than half of those who ever mentioned it.

As we have seen, people who had moved house since their first interview in 2001 were *more likely* in 2001 to have reported every one of the negative neighbourhood aspects listed, as compared with people who did not move.[6] But they were also *less likely* to report negative aspects in all three years. These results could be interpreted as confirming that some people who moved house did so to escape neighbourhood problems, and that they mostly succeeded.

Endnotes

1 Similar responses appeared in waves 1 and 2, with around 55% of respondents saying that 'neighbours helping each other out' was 'very common' or 'fairly common', and around 60% saying that 'neighbours doing things together' either 'never happens', or was 'very rare', or 'not common'.

2 Some may not perceive this as being a negative feature.

3 The Australian Bureau of Statistics' socio-economic indicators for areas (SEIFA) from the 2001 census (see ABS 2001). These deciles are created by sorting the indexes and assigning the deciles according to the population counts (1 = most disadvantaged, 10 = least disadvantaged).

4 Noise from airplanes, trains or industry was a partial exception, being most frequently mentioned by respondents in deciles 4 and 7.

5 Another possible explanation is that some events are perceived as of borderline significance. So if, for example, a person perceives burglary and theft as on the borderline between 'fairly common' and 'not common', it would be understandable to give one answer one year and the other answer in a different year.

6 They were also more likely to report 'good neighbour' benefits.

Reference

Australian Bureau of Statistics, 2001, *Information Paper: Census of Population and Housing—Socio-Economic Indexes for Areas, Australia*, ABS Catalogue No. 2039.0, Canberra.

Are low income men less likely to be married?

Do Australian women prefer to marry men with high incomes? Or, to put it another way, why is it hard for low income men to find partners?

The HILDA Survey shows that, for men aged 25–59 (treated here as the age range in which they are most likely to be married), there is a moderate correlation between individual gross income and being married. This is particularly for men under 40. Overall, 37.0% of men in the lowest income quartile (lowest quarter of incomes) were married in 2003, compared to 70.0% of men in the highest income quartile.

Among men aged 25 to 29, those with high incomes are more likely to be married, with 38.1% of men in the highest income quartile being married, compared with only 15.4% with low incomes. But it is men in their 30's where there is the largest difference between income groups. In this group, 34.2% of men in the lowest income quartile are married, while in the highest income quartile 68.4% are married. For men over 40, those in the lower half of the income scale are still less likely to be married, but the differences are not so dramatic.

What is the explanation for these results? One possible explanation is that women under 40, who have children or want to have children, are the group who most strongly prefer to have a partner with a high income, thereby providing financial security, and giving the woman a choice of whether to work full-time, part-time or not at all. Even women who earn high incomes are likely to prefer to marry someone who also earns well, because it ensures that they have choices when it comes to having children. They are under less pressure to keep working and have the choice of taking time out to look after their children. On the other hand, married men may have higher incomes because they profit from the stability, support and perhaps ambitions provided by their partner and families.

More generally, it is well known from research in many countries[1] that, while men quite often marry 'down' the social scale, women are less likely to do so. So low status men have a restricted choice in the sense that, while they may reasonably hope to marry someone of their own status, they are unlikely to marry 'up'. As a previous article (*Cohabitation: Who does it and who doesn't?*) in this volume indicated, a larger pool of women marry, and in some cases marry more than once, within a smaller pool of 'eligible' men.

Endnote

1   See Laumann et al, 1994.

Reference

Laumann, E. O., Gagnon, J. H., Michael, R. T., and Michaels, S., 1994, *The Social Organization of Sexuality: Sexual practices in the United States*, University of Chicago Press, Chicago.

Table 1: Marital status of men by age and income quartile, 2003 (%)					
	% Married by age group				
Income quartile	*25–29*	*30–39*	*40–49*	*50–59*	*Total (age 15+)*
1 (lowest 25%)	*15.4	34.2	70.4	70.8	37.0
2	*19.3	35.7	41.0	59.6	43.3
3	23.0	49.3	67.3	72.3	50.3
4 (highest 25%)	38.1	68.4	74.4	84.5	70.0
Total	27.2	57.3	68.9	76.2	53.4
Notes: Population weighted results. * Estimate not reliable.					

Division of domestic chores: Do you do your fair share?

It has traditionally been the case that, in couple families, the men went out to work and women were responsible for most of the domestic chores. Now, a majority of prime age women work, so it seems reasonable that men whose partner works should contribute to the household chores—but does this actually happen? The 1997 ABS Time Use Survey found that women who work still spend a lot more time doing housework than their partners do, but the men spend more time working and commuting to work than the women do.

How long do we spend on household chores each week?

HILDA Survey respondents were asked about how much time they spend on particular activities each week. Table 1 shows the average number of hours per week men and women spend on employment related activities (time at work or traveling to and from a place of employment), housework and household errands (cleaning the house, washing clothes, preparing meals, washing dishes, ironing and sewing and errands such as shopping and banking), and outdoor tasks (home maintenance, car maintenance and gardening).

On average, men spend 32.0 hours per week in employment related activities, compared to 18.0

hours per week for women. The average time spent on housework and household errands is 21.0 hours per week for women, and 8.7 hours per week for men.

Employed men spend between 7 and 8 hours per week on average doing household chores, regardless of whether they were employed full-time or part-time. Compared to employed men, employed women spent significantly more time each week doing housework (14.6 hours for women who worked full-time and 19.0 hours for women who worked part-time). Men who were unemployed or not in the labour force spent more time doing housework and outdoor tasks than men who were employed.

The HILDA Survey data confirms previous findings[1] that women still do the majority of housework. However, looking at the total of time spent at work, commuting to and from work, doing household chores and doing outdoor tasks, the total number of hours men and women spend in work related activities (paid and unpaid work) is very similar—around 60 hours per week. Table 2 focuses on couples where both partners were working full-time at the time of their 2003 interview.

In couples where both partners work full-time, men spend more hours per week working and

Table 1: Time use—by gender, labour force status and relationship status (hours)								
	Average hours per week							
	Employment and commuting to work		Housework and household errands		Outdoor tasks		Total	
	Men	Women	Men	Women	Men	Women	Men	Women
Lives with partner								
Employed full-time	50.7	43.9	8.0	16.9	5.1	2.7	63.0	62.9
Employed part-time	22.1	21.2	9.6	24.3	6.3	3.3	37.7	48.4
Unemployed	n.a.	n.a.	17.0	27.6	8.4	3.5	25.2	31.1
Not in the labour force	n.a.	n.a.	11.1	30.9	9.3	4.1	20.2	34.9
Total	35.5	18.3	9.0	25.2	6.3	3.5	49.7	46.2
No partner								
Employed full-time	47.6	45.1	7.7	10.8	3.0	2.2	57.6	56.9
Employed part-time	17.0	18.4	5.9	10.3	2.2	1.8	25.0	30.3
Unemployed	n.a.	n.a.	8.8	14.9	3.6	2.1	12.4	17.0
Not in the labour force	n.a.	n.a.	10.3	19.3	3.9	3.7	14.0	22.8
Total	25.7	17.6	8.2	14.3	3.1	2.7	35.8	33.9
Total								
Employed full-time	49.9	44.3	7.9	14.6	4.5	2.5	61.5	60.6
Employed part-time	19.1	20.1	7.4	19.0	4.0	2.7	30.3	41.5
Unemployed	n.a.	n.a.	11.5	20.0	5.2	2.6	16.6	22.7
Not in the labour force	n.a.	n.a.	10.8	26.6	7.2	3.9	17.8	30.5
Total	32.0	18.0	8.7	21.0	5.2	3.2	44.7	41.5

Note: Population weighted results.

Table 2: Time use—couples where both partners work full-time, 2003 (hours)				
	Average hours per week			
	Employment and commuting to work	Housework and household errands	Outdoor tasks	Total
Men	49.9	7.9	4.5	61.5
Women	44.3	14.6	2.5	60.6
Total	48.0	10.1	3.9	61.2
Note: Population weighted results.				

Table 3: Perception of domestic division of labour, 2003—by gender and labour force status (%)						
	Share of work around the house					
Labour force status	I do much more than my fair share	I do a bit more than my fair share	I do my fair share	I do a bit less than my fair share	I do much less than my fair share	Total
Men						
Employed full-time	9.1	11.8	53.7	21.6	3.9	100.0
Employed part-time	7.8	11.2	51.9	23.1	6.0	100.0
Unemployed	12.2	*8.5	55.7	18.1	*5.4	100.0
Not in the labour force	11.2	9.9	56.4	16.0	6.5	100.0
Total	9.6	11.1	54.2	20.2	4.9	100.0
Women						
Employed full-time	33.3	23.0	36.4	5.9	1.3	100.0
Employed part-time	29.8	22.8	36.8	8.9	1.6	100.0
Unemployed	26.6	25.2	37.2	*7.8	*3.1	100.0
Not in the labour force	28.4	20.1	42.0	6.5	3.0	100.0
Total	30.1	21.8	38.9	7.0	2.2	100.0
Notes: Population weighted results. * Estimate not reliable.						

commuting to work (49.9 hours compared to 44.3 hours for women). Women spend an average of 14.6 hours per week doing housework and household errands, while the average for men is only 7.9 hours. Men spend more time than women doing outdoor tasks—4.5 hours compared to 2.5 hours. But, looking at the total time spent doing all these things, it seems to all even out. The amount of time per week is almost the same— 61.5 hours per week for men and 60.6 hours per week for women.

Do you do your fair share?

Each year, HILDA Survey respondents are asked if they think they do their fair share around the house. Table 3 shows the distribution of responses by gender and labour force status.

Regardless of labour force status, more than half the men said they do their fair share of domestic jobs. Only 3.9% of men who were working full-time said they did much less than their fair share of housework, compared to around 6% of men who were unemployed, not in the labour force, or working part-time.

It was much more common for women to say that they did more than their fair share of domestic chores, with 51.9% of women saying they did a bit more or much more than their fair share, and

33.3% of women who worked full-time saying that they did much more than their fair share.

Does having children affect people's perception of whether or not they do their fair share of housework? Table 4 shows the distribution of responses for couples[2] broken down by labour force status and household type.

In couple households, it was more common for men with children to say they do more than their fair share of work around the house; 21.2% of men with children over the age of 15 (and no children under 15) said they did more than their fair share (either a bit more or much more), compared to 18.1% of men with children under 15, and 14.4% of men with no children.

For women in couple households, the presence of children had a substantial impact on perceptions of the division of household chores, with 46.2% of women with no children saying they do more than their fair share of the housework, compared to 68.6% of women with children under 15 and 69.1% of women with children aged 15 or over.

Still concentrating on couple households, the proportion of women with no children who said they did more than their fair share of domestic chores was around 20%, but slightly higher (24.6%) for women who were working full-time. Around 39%

Table 4: Perception of domestic division of labour, 2003—by gender, labour force status and household type (%)

| Labour force status | Share of work around the house | | | | | |
	I do much more than my fair share	I do a bit more than my fair share	I do my fair share	I do a bit less than my fair share	I do much less than my fair share	Total
Men—partnered with no children						
Employed full-time	4.0	10.1	58.3	23.9	3.7	100.0
Employed part-time	*3.1	*10.1	64.3	20.7	*1.8	100.0
Unemployed	*19.8	*2.6	71.1	*4.9	*1.7	100.0
Not in the labour force	6.4	8.3	64.2	14.8	6.3	100.0
Total	5.2	9.2	61.5	19.5	4.5	100.0
Men—partnered with at least one child under 15						
Employed full-time	6.3	10.8	55.4	23.8	3.7	100.0
Employed part-time	*11.7	*17.4	53.2	*14.1	*3.6	100.0
Unemployed	*4.3	*17.9	63.2	*10.1	*4.5	100.0
Not in the labour force	*11.1	*11.1	52.1	*18.6	*7.2	100.0
Total	6.8	11.3	55.3	22.6	4.0	100.0
Men—partnered with at least one child aged 15 or over (no children under 15)						
Employed full-time	8.1	14.1	55.4	20.1	*2.2	100.0
Employed part-time	*3.8	*14.7	*40.4	*35.2	*5.9	100.0
Unemployed	*0.0	*0.0	*73.2	*26.8	*0.0	100.0
Not in the labour force	*14.4	*7.1	51.7	*18.2	*8.5	100.0
Total	8.9	12.3	53.8	21.1	3.9	100.0
Women—partnered with no children						
Employed full-time	20.2	31.0	44.2	4.2	*0.4	100.0
Employed part-time	24.6	24.5	45.2	*4.4	*1.3	100.0
Unemployed	*14.6	*36.1	*37.9	*4.8	*6.6	100.0
Not in the labour force	19.7	22.2	50.2	4.2	3.6	100.0
Total	20.6	25.6	47.3	4.2	2.3	100.0
Women—partnered with at least one child under 15						
Employed full-time	44.0	26.2	25.7	*3.1	*0.9	100.0
Employed part-time	38.8	31.6	28.3	*1.3	*0.0	100.0
Unemployed	*21.4	*42.4	*36.1	*0.0	*0.0	100.0
Not in the labour force	37.5	29.1	29.9	*2.7	*0.9	100.0
Total	38.9	29.7	28.6	2.2	*0.5	100.0
Women—partnered with children over 15 (no children under 15)						
Employed full-time	48.3	20.3	28.8	*2.4	*0.3	100.0
Employed part-time	49.9	26.4	23.8	*0.0	*0.0	100.0
Unemployed	*56.7	*30.6	*12.7	*0.0	*0.0	100.0
Not in the labour force	36.4	26.5	30.3	*5.3	*1.5	100.0
Total	44.6	24.5	27.6	*2.7	*0.6	100.0

Notes: Population weighted results. * Estimate not reliable.

of women with children under the age of 15 said that they did much more than their fair share of household chores, and—as with women with no children—it was more common for women who worked full-time to say that they did much more than their fair share. For women with children aged 15 or over (and no children under 15), the proportion who said they did much more than their fair share was nearly 50% for women who worked full-time and also for women who worked part-time (48.3% and 49.9% respectively). Of women who worked full-time, 68.6% said they did more than their fair share of domestic chores, compared to 76.3% of women who worked part-time and 62.9% of women who were not in the labour force.

Is it the same situation with looking after the children? Do women think they do more than their fair share? As with the household duties question, parents with responsibility for children under the age of 17 were asked whether they do their fair share of looking after the children.[3] The results are shown in Table 5 for men and women, according to whether they have a spouse or partner living with them.

Overall, 62.6% of men with partners said that they did their fair share of looking after the children, and only 10.4% said they did more than their fair share. Only 42.2% of men without partners said they did their fair share, and 32.0% said they did more than their fair share—presumably they believe they do

Table 5: Perception of division of child care, 2003—by labour force status and relationship status (%)						
	Share of looking after the children					
Labour force status	I do much more than my fair share	I do a bit more than my fair share	I do my fair share	I do a bit less than my fair share	I do much less than my fair share	Total
Men—with a partner						
Employed full-time	3.3	5.8	62.3	23.5	5.2	100.0
Employed part-time	*8.3	*9.5	63.8	*14.8	*3.6	100.0
Unemployed	*3.8	*7.9	76.1	*12.2	*0.0	100.0
Not in the labour force	*12.3	*7.9	61.6	*13.5	*4.7	100.0
Total	4.2	6.2	62.6	22.1	4.9	100.0
Men—no partner						
Employed full-time	16.5	*13.6	42.4	*14.8	*12.8	100.0
Employed part-time	*12.8	*12.4	*44.5	*14.4	*15.8	100.0
Unemployed	*14.0	*22.3	*36.3	*11.3	*16.2	100.0
Not in the labour force	*34.1	*13.2	*40.5	*7.6	*4.6	100.0
Total	18.4	13.6	42.2	13.6	12.2	100.0
Women—with a partner						
Employed full-time	36.2	21.6	39.9	*2.1	*0.2	100.0
Employed part-time	35.1	32.7	32.1	*0.1	*0.0	100.0
Unemployed	*41.8	*29.3	*28.9	*0.0	*0.0	100.0
Not in the labour force	41.8	27.3	30.2	*0.4	*0.3	100.0
Total	38.1	27.9	33.1	*0.7	*0.2	100.0
Women—no partner						
Employed full-time	66.2	*16.6	14.1	*0.0	*3.1	100.0
Employed part-time	72.6	*10.6	16.8	*0.0	*0.0	100.0
Unemployed	81.0	*10.4	*5.8	*0.0	*2.8	100.0
Not in the labour force	78.8	*6.1	13.7	*0.8	*0.6	100.0
Total	74.4	10.1	14.0	*0.3	*1.2	100.0

Notes: Population weighted results. * Estimate not reliable.

more than their fair share either because the child lives with them most of the time (33.4% of this group have resident children), or they spend a lot of time caring for non-resident children.

Of women with partners, 38.1% said they did much more than their fair share of looking after the children. This figure was higher for women who were not in the labour force (41.8%) than for women who were employed (36.2% for women who were working full-time and 35.1% for women who were working part-time). Not surprisingly, a very high proportion of women without partners said they did much more than their fair share of the child care, but the proportions ranged from 66.2% for women who were working full-time to 81.0% for women who were unemployed.

Concluding points

The HILDA Survey data show that, on average, women spend more hours per week doing household duties than men do, but, men spend more time working and commuting than women do. Most men thought they did their fair share of household chores and looking after the children. Women, particularly those with resident children and those who worked full-time, thought they did more than their fair share of domestic chores.

Endnotes

1 Bittman (1991) found that the vast majority of unpaid work is done by women, and even if women are in paid work, they still do more unpaid work than men. He also found that women did more 'housework' while two-thirds of men's unpaid work was done outdoors.

2 Single parent households and single persons are not included in the table as most said they do their fair share, or more than their fair share.

3 This question is not restricted to parents with children who live with them most of the time, i.e. parents of non resident children are also included. When restricted to parents with resident children living with them more than 50% of the time, almost all say that they do their fair share or more than their fair share.

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INCOMES AND WEALTH

2

Income mobility 2001–2003

Social science textbooks often present an image of society as being like a layer cake, or a pyramid. Better off and higher status people are pictured on the top layer (or at the top of the pyramid) and the impression is given that they remain there for long periods, or perhaps for an entire lifetime, or even inter-generationally. Middle income or middle class people are pictured as remaining long term in the middle layers of society, and the poor or lower status people are shown in the lower layers, or at the bottom of the pyramid. This is a static view of society and of the income distribution.

An alternative view is that society and the economy are, or should be, characterized by a high degree of opportunity and mobility. This is a more dynamic view of how society is, or should be.

Panel studies, like the HILDA Survey, are ideally placed to investigate the extent to which the income distribution is relatively static or dynamic. However, the reader should be aware that the best evidence about *current levels* and *recent trends* in income comes from regular surveys conducted by the Australian Bureau of Statistics.[1] ABS surveys include very detailed questions on individual and household incomes and also have very high response rates. As explained in the Introduction to this Report, the HILDA Survey has a lower response rate and unavoidably suffers some respondent attrition. HILDA Survey questions on income are much more detailed than in most academic surveys, but less detailed than ABS questions. The small biases in HILDA Survey results on income, and the extent to which respondent attrition is related to income, are analysed in Watson and Wooden (2004). It should be pointed out that household incomes, as measured in the HILDA Survey, are somewhat higher than in ABS surveys, and this could be due to a possible over-sampling of higher occupation groups.[2]

Defining income mobility—changes in households' positions in the income distribution

In this section of the Report the focus is on household income mobility. By 'mobility' we mean the extent to which household incomes change *relative to each other*. So the question here is not whether household incomes were rising or falling—in this period of steady economic growth most incomes rose in real terms—but the extent of mobility up and down the distribution. Do most households scarcely change their relative position in the distribution, or is it quite common, over say ten years, to move from low points in the distribution into the top half, and vice-versa? Which groups in society are most and least income mobile, and what are the main determinants of mobility?

To analyse income mobility we shall divide household incomes into deciles; that is equal 10% groupings such that decile 1 is the lowest income group and decile 10 the highest income group. Three years is too short a period to gain a good understanding of income mobility; nevertheless some interesting and perhaps unexpected patterns of change are observable.

Equivalised income—best available measure of material standard of living

To give an overview of income mobility, the measure of income used is *equivalised income*. This measure is preferred because it is the best available measure of a household's material standard of living.[3] Equivalised income is defined as income after taxes and transfers (pensions and benefits) and after adjusting for household size and needs. Clearly, disposable income (i.e. income after taxes and transfers) is a better measure of material living standards than market or pre-government income. Also, a household with, say, four members would clearly be worse off with the same income than a single person household. The obvious adjustment would be to divide income by the number of individuals in the household in order to get household per capita income. But this would make no allowance for economies of scale in larger households (e.g. members do not each need a separate house) or for the fact that children are generally cheaper to keep than adults. So the standard procedure in OECD and academic circles is to construct 'equivalised income' in order to take account of different household needs. In this Report we use the OECD equivalence scale, which is constructed by dividing household disposable income by an equivalence score which allows 1.0 for the first adult in the household, 0.5 for other adults, and 0.3 for children under 15. So a household of two adults and two children would have an equivalence score of 2.1 (1.0 + 0.5 + 0.3 + 0.3). If this household had a combined income of $50,000, it would be attributed an equivalent income of $23,810 ($50,000/2.1). The same equivalent income is then assigned to each household member; the assumption being that all income is pooled and equally shared, giving every member the same standard of living.

Overview of mobility 2001–2003

Table 1 is a transition matrix showing what had happened by 2003 to individuals starting out in different equivalised income deciles in 2001.[4,5] Printed in bold italics along the top left to bottom right diagonal are results for people whose relative income position did not change at all.

Looking along the diagonal it can be seen that in 2003 about one-third of people remained in the

Table 1: What happened by 2003 to individuals starting in different equivalised income deciles (D) in 2001? (%)

Decile in 2003	Decile in 2001									
	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10
D1	*40.6*	22.5	9.1	9.2	5.3	3.8	3.2	2.4	2.8	*1.3
D2	26.8	*35.4*	16.4	8.1	6.5	2.5	*1.6	1.5	*0.5	*0.8
D3	11.6	21.1	*30.5*	13.3	7.0	5.6	3.9	2.3	3.4	*1.3
D4	6.6	10.0	18.6	*22.2*	20.5	7.3	6.1	4.6	1.6	2.5
D5	4.8	4.4	11.0	19.7	*23.7*	16.6	9.3	4.6	3.4	2.4
D6	2.5	2.1	5.2	13.5	16.0	*25.2*	15.0	9.7	6.4	4.8
D7	3.2	1.8	3.3	7.4	9.1	21.4	*25.4*	16.6	7.1	4.8
D8	1.9	*1.5	2.2	3.8	5.1	10.4	22.3	*27.4*	17.0	8.3
D9	*1.1	*1.1	2.2	1.3	4.9	4.6	9.5	21.9	*34.5*	18.9
D10	*1.1	*0.1	1.7	*1.6	1.9	2.6	3.9	9.1	23.2	*54.9*
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Population weighted results.

same decile as in 2001. Most of those who had changed had moved up or down by just one decile. The apparently greater stability of incomes at both the top and bottom ends, relative to the middle, is in some respects misleading. People who start in the top or bottom decile can only subsequently change in one direction, while everyone else can change both ways. Also, most incomes are packed close to the middle of the distribution, so that a smaller percentage change in household income is needed to change deciles in the middle than at either end.

Despite an overall picture of moderate stability, a minority registered large changes in equivalised income.[6] Of those who started in the bottom two deciles in 2001, 8.2% were in the top half of the distribution by 2003. Conversely, among those who started in the top two deciles, 10.0% were in the bottom half of the distribution by 2003.

It is important to realise that many factors can bring about a change in a household's and therefore an individual's position in the equivalised income distribution. Changes in the labour income of the household reference person and/or his/her partner are important, but so too are increases or decreases in the number of earners in a house-

hold, and changes in household composition. So if another household member goes out to work (e.g. a female partner or a teenager), the household's relative income position is likely to improve, whereas if a member stops working, the household's relative income position usually declines.

Decile changes—income mobility of different types of household

Another method of summarising income mobility is to print the percentages of households who moved up or down the distribution by a certain number of deciles.

Table 2 divides households into three age groups: those headed in all three years (2001–2003) by reference persons of prime working age (25–54 inclusive), those headed by reference persons aged under 25, and those headed by persons aged 65 and over.[7,8]

It can be seen that households headed by young people were the most upwardly mobile. It should be remembered that these young people had decided to set up their own households. It is likely to be the case that those who were still living in their parents' home were either earning less, or

Table 2: Income mobility of three types of household 2001–2003 (%)

Change between 2001 and 2003	All households	Prime age households (25–54)	Households with reference person under 25	Households with reference person 65+
Up 5–9 deciles	2.3	2.7	*3.5	*1.5
Up 3–4 deciles	5.8	6.0	*11.1	4.1
Up 1–2 deciles	25.4	27.6	34.2	20.6
No change	35.5	33.5	27.9	42.7
Down 1–2 deciles	25.4	21.2	16.9	24.6
Down 3–4 deciles	6.2	6.8	*6.4	4.2
Down 5–9 deciles	2.3	2.3	*0.0	*2.4
Total	100.0	100.0	100.0	100.0

Notes: Population weighted results. * Estimate not reliable.

Change between 2001 and 2003	Prime age households (25–54)	Couple headed households (25–54)	Households headed by single mothers (25–54)
Up 5–9 deciles	2.7	2.1	*1.4
Up 3–4 deciles	6.0	5.6	*2.9
Up 1–2 deciles	27.6	28.7	31.7
No change	33.5	32.0	40.2
Down 1–2 deciles	21.2	22.5	20.2
Down 3–4 deciles	6.8	7.0	*3.5
Down 5–9 deciles	2.3	2.0	*0.3
Total	100.0	100.0	100.0

Table 3: Mobility in 2001–2003 of prime age couple headed households compared with households headed by single mothers; reference person aged 25–54 (%)

Notes: Population weighted results. * Estimate not reliable.

were students wholly or partly dependent on financial support. Table 2 shows that relatively few of the independent living young people were downwardly mobile and then only by quite small margins. No household in the sample dropped by five or more deciles in the income distribution.

The most income-stable group was elderly households; those with reference persons aged 65 and over. Most of them were living wholly or partly on the old age pension. Few registered very large relative losses in relative income in 2001–2003, although many fell by a decile or two, and even fewer registered relative gains.

Prime age households, about 90% of which have at least one or two members in paid work, show an intermediate level of mobility. On average they are less mobile than younger households but more mobile than retirement age households. However, this average could conceal differences. Two distinct types of prime age households are those headed by couples and those headed by single mothers.[9] Table 3 presents mobility evidence about these households.

Households headed by prime age couples were much more likely than single mother households to move up or down the income distribution by more than two deciles. The main reason for couple households being more mobile is that they have more potential earners, who may enter or leave the labour force, than single mother households. It should be noted that the single mother households started from a much lower base (their median equivalised incomes were less than half those of couple headed households in 2001), but even so rarely achieved much upward mobility.

Discussion—factors associated with upward and downward mobility

There is a large amount of American literature, but little Australian work on the range of factors associated with income mobility (Duncan, 1984; Bane and Ellwood, 1986). Among the factors associated

with upward income mobility (measured by equivalised income), are:

- Getting married/partnered;
- Getting a job;
- Additional household members entering the labour market;
- Being well educated and gaining further education;
- Children leaving home; or
- Getting well after being sick.

Additional factors associated with downward mobility are:

- Women separating from their spouses/partners;
- Becoming unemployed or voluntarily exiting the labour force;
- Having more children; or
- Becoming sick.

Endnotes

1 The most recent published ABS study is Household Income and Income Distribution (see ABS 2005).

2 The HILDA Survey questions on occupation are not completely identical to ABS questions, so, using the ABS data as a benchmark, it is not possible to be certain that the HILDA Survey over samples higher occupation groups, although this seems probable.

3 In principle, a measure of consumption might be preferable, but detailed consumption measures are not available in the HILDA Survey.

4 In this and subsequent articles, reference to 2001 incomes means income received in the 2000–01 financial year, 2002 incomes are incomes received in the 2001–02 financial year, and 2003 incomes are incomes received in the 2002–03 financial year.

5 People with non-positive disposable incomes and with negative private incomes are excluded from analysis. Some people genuinely have such incomes, but generally the data are unreliable.

6 The Pearson correlation between equivalised incomes in 2001 with 2003 was 0.63.

7   In couple households the male partner is deemed the reference person. In single person households the reference person is that person, and in single parent households it is the single parent. No reference person was designated for multi family and group households. Households are only included if they retained the same reference person who remained in the same age group throughout 2001–2003.

8   When an equivalised income measure is used, gender differences in incomes and income mobility are minor, because household incomes are assumed to be equally shared. Hence, gender differences (as distinct from differences by gender of household reference person) are not reported in this article.

9   Households are only included if they retained the same reference person who remained a single mother throughout 2001–2003.

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Short and medium term income poverty

For the purposes of this article, poverty is defined in terms of *low income*. However, the income poverty approach, although widely used in Australia and elsewhere, is probably too narrow. At least three other approaches, which define poverty in terms of multiple dimensions of disadvantage, have attracted interest in Western governmental and policy-making circles. Poverty and disadvantage may be defined in terms of low capabilities (Sen, 1999), or as social exclusion and barriers to participation (European Commission and EUROSTAT, 2000), or as material deprivation/ low consumption (Townsend, 1979). One reason for these multidimensional approaches to poverty is that it is widely recognized that an approach based solely on income has both conceptual and empirical limitations. Conceptually, income provides a household with *potential* command over economic resources. Whether a household actually has an adequate standard of living (however adequate is defined) depends on its actual consumption level; that is, its expenditures plus its consumption of benefits in kind, including public services. Empirically, there are serious difficulties in measuring low incomes. One important problem is that receipt of Government income support payments tends to be under-reported in surveys.[1]

Defining relative income poverty

What do we mean by income poverty—and what cut-off points should be used to determine who is poor? In a developed country like Australia almost any statement about who is poor and how many are poor is bound to be politically sensitive and controversial. Some observers reject any concept of poverty except 'absolute poverty'. To be in absolute poverty means to lack the basics—food, clothing and shelter. Plainly, few people in Western countries live in absolute poverty, so the concept of income poverty now used by most researchers and by some governments and international organizations is one of '*relative poverty*'. A person or a household 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.

It turns out that there is a moderate degree of public consensus in Western countries about the level of income required to avoid relative poverty. Survey evidence regularly confirms that most members of the public believe that if a household has a disposable income under about 50% of the median or typical income, then that household is in poverty (Citro and Michael, 1995). However, it has to be recognized that definitions of relative income poverty are essentially arbitrary, even if based on a degree of public consensus.

For many years OECD and other international bodies defined relative income poverty as having a household income below 50% of median. More recently, the European Union and some member Governments moved to a poverty line set at 60% of median income. In this article we shall mostly (but not exclusively) use the older 50% line, which has been regularly used by Australian researchers. It should be noted, however, that no Australian Government has ever adopted an official poverty line.

Distinguishing between short-term and medium-term relative income poverty

A big advantage of a longitudinal survey like the HILDA Survey is that it enables us to distinguish between individuals and households who experience short-term relative income poverty and those who suffer longer-term poverty. Clearly, medium

Table 1: Household incomes and poverty lines 2001–2003 ($)				
	Household disposable income median	Equivalised income median	Poverty line: 50% of median equivalised income	Poverty line: 60% of median equivalised income
2001	44,760	22,679	11,340	13,607
2002	46,636	23,867	11,934	14,320
2003	47,806	24,724	12,362	14,834
Note: Population weighted results.				

and longer-term poverty matter a great deal more than short-term. Medium and long-term poverty are likely to have more serious negative effects on adults' careers and children's life prospects than short-term poverty.

Almost all previously published results in Australia describe only short-term relative income poverty. Annual poverty rates are usually quite stable, so it is 'natural' to infer that the same people tend to remain poor year after year. But is this true? With three years of data, the HILDA Survey is able to give some preliminary results about the persistence of poverty.

In calculating income poverty rates it is normal to use measures of equivalent income; income adjusted according to household needs. The way in which 'equivalent income' is calculated was explained in the previous article.

Equivalised incomes and relative poverty lines in 2001–2003

As preliminary information, Table 1 shows median household disposable incomes for 2001–2003, and also median equivalised incomes. The final two columns show poverty lines for 2001–2003 set at (i) 50% of median equivalised income and (ii) 60% of median equivalised income. All figures are given in current dollars (not inflation adjusted).

Median equivalent incomes and equivalent incomes rose by about 9% in nominal terms in this period and about 4% in real terms (after adjusting for inflation). So, by definition, the poverty lines rose by the same amount; that is what is implied by using *relative* poverty lines.

Short term relative income poverty and poverty persistence

Table 2 gives annual rates of relative poverty in 2001–2003 and measures of the persistence of poverty.[2,3] The persistence measures show how many people had incomes below the poverty line in none of these years (zero years poor in 2001–2003), how many were poor in just one out of the three years, how many were poor in any two of the three years, and how many in all three years. It should be understood that describing a household as poor in a particular year does not mean that it had a poverty income for the entire twelve months. It means that its total annual disposable income was below the designated relative poverty line.

One key result revealed by the longitudinal data in Part B of Table 2 is that the poverty population is by no means stable. The moderately stable, although somewhat declining, annual rates (shown in Part A) might have suggested that many people remain persistently poor. But the 3-year persistent poverty rates of 3.4% (for the 50% of median poverty line) and 10.7% (for the 60% poverty line) call this into question.

Defining relative poverty as having an income below 50% of median, the HILDA Survey finds that 13.2% of individuals were poor in 2001, 12.2% in 2002 and 11.2% in 2003.[4] If the 60% of median cut-off is used, estimated poverty rates were 21.8% for 2001, 21.6% for 2002 and 21.0% for 2003. On both measures relative poverty declined to a moderate extent, reflecting both a strong economy and the fact that Government pensions and benefits continued to remove many people from poverty. The finding that relative poverty rates are a lot higher if the 60% cut-off is used is partly due to the fact that several Australian Government payments, including the couple old age pension, raise people above the 50% line, but not the 60% line.

Clearly, the most interesting results in Table 2 relate to poverty persistence. Using the 50% of median line, nearly a fifth of the population—

Table 2: Annual relative poverty rates contrasted with measures of the persistence of poverty 2001–2003		
Part A: Annual poverty rates		
	50% poverty line % poor	60% poverty line % poor
2001	13.2	21.8
2002	12.2	21.6
2003	11.2	21.0
Part B: Persistence of poverty		
Number of years poor in 2001–2003	50% poverty line %	60% poverty line %
Never poor	78.6**	68.5**
1 year poor	12.0	12.5
2 years poor	6.0	8.3
All 3 years poor	3.4	10.7
Total	100.0	100.0
Notes: Population weighted results. ** So 21.4% were poor one or more times, using the 50% line, and 31.5% were poor one or more times, if the 60% line is used.		

21.4%—were poor in at least one year in 2001–2003. But 'only' 6.0% were poor in two of the three years, and 3.4% were poor in all three years. If the 60% poverty line is used, it transpires that 31.5% were poor in at least one year, and 10.7% were poor in all three years. Either the two or three year figures might be regarded as reasonable preliminary estimates of *medium-term relative income poverty* in this country.

Both sets of estimates of medium-term poverty could be regarded as misleading in one respect. We do not know when those people who were already poor in 2001 first became poor. Some may have been poor for several years before 2001.[5]

Individuals and households at greater and lesser risk of relative income poverty

Having looked at national averages, let us now consider which groups are at high risk of relative income poverty and which are at low risk. Table 3 shows poverty rates in 2001–2003 for individuals in eight types of household—households headed by working age (25–64) couples without children,[6] those headed by working age couples with children, one person working age male households, one person working age female households, single mother households, elderly couples (over 65), elderly one person male households and elderly one person female households. From now on we will just use the 50% of median income poverty line, which is more commonly used in Australia.

It is clear from Table 3 that poverty rates vary widely among different types of household. Individuals in working age couple households have the lowest poverty rates in the community and form the majority of households. The group with the highest incidence of income poverty is elderly people living alone; most rely on the age pension which is below the 50% poverty line. As is well known, single mothers and their children have high poverty rates. Over a quarter of these households were income poor each year in 2001–2003. Less well known, perhaps, is that working age people living in one person households also have high poverty rates. In 2001–2003, 15–20% of working age men living alone were income poor, as were over 20% of women. For all household types shown in Table 3, except non-partnered elderly men, poverty was lower in 2003 than in 2001.

Table 4 gives income poverty persistence rates for the same types of household. It should be noted that only individuals who remained in the same type of household for all three years are included in the analysis.

The evidence of poverty persistence shows even more starkly how the risk of poverty differs among individuals living in different types of household. Those in couple households are at a low risk of three-year poverty. In 2001–2003 only 0.3% of couples with no children were income poor for all three years, and only 1.2% of those with children were in this situation. Elderly couples were also at low risk of being three-year poor. By contrast, about a quarter of elderly people living alone were persistently poor in this period. Working age women living alone had a three-year poverty rate of 15.0%—over four times the national average of 3.4% (Table 2)—while working age men living

Table 3: Relative income poverty rates in 2001–2003 of individuals in different types of household: 50% of median equivalent income poverty line (%)

| | Working age couple households | | Lone person | | Elderly lone person | | Single mother household | Elderly couple household |
	No children	Children	Men	Women	Men	Women		
2001	7.5	7.9	19.2	25.7	42.5	51.8	26.7	18.3
2002	5.7	6.8	17.0	21.1	42.1	47.2	26.4	17.4
2003	4.8	6.9	15.8	21.7	43.1	49.5	25.7	12.2

Note: Population weighted results.

Table 4: Income poverty persistence in 2001–2003 of individuals in different types of household: 50% of median equivalent income poverty line (%)

| Years poor in 2001–2003 | Working age couple households | | Lone person | | Elderly lone person | | Single mother household | Elderly couple household |
	No children	Children	Men	Women	Men	Women		
0	87.7	87.9	71.5	68.6	39.3	33.4	52.5	67.1
1	7.9	7.5	9.0	9.4	19.2	20.9	24.3	23.0
2	4.1	3.4	9.0	7.1	21.0	13.0	18.0	8.8
3	*0.3	1.2	10.5	15.0	20.3	32.7	5.1	*1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes: Population weighted results. * Estimate not reliable.

alone had a three-year rate of 10.5%. Nearly half (47.5%) of single mothers and their children were poor in at least one year in 2001–2003, 18.0% were poor for two years and 5.1% for all three years. Research on the experiences of single mothers has shown that the reasons why they move in and out of poverty include spending periods in part-time work and shifting between different Government income support payments (Gregory and Klug, 2002).

Child poverty—relative income poverty

Child poverty, especially persistent poverty, is an especially serious concern because of the damage it may do to children's future careers and life prospects. Table 5 gives annual and multi-year poverty rates for children under 15. All children are included regardless of the type of household in which they live.

It used to be true in Australia, as in many other countries, that child poverty rates were higher than the national average. However, the evidence in Table 5 shows that in 2001–2003 both annual rates and the multi-year rates were similar to the national averages given in Table 2. Detailed research by the National Centre for Economic Modelling (NATSEM)[7] has shown that both the system of child support payments introduced in 1989 and changes to family payments in 2001 have reduced child poverty.

Relative income poverty transitions—some preliminary indications

The purpose of this section is to give preliminary evidence about *poverty transitions*—'entries' and 'exits' from poverty.

Research based on longer running panel data in other Western countries has yielded some consistent results about *poverty transitions,* even though international differences in poverty rates and poverty persistence are large (Goodin et al, 1999). These results are likely to be confirmed by HILDA Surveys, but cannot be regarded as completely certain for Australia, yet:

- Most people who become poor soon cease to be poor.
- The longer one has been in poverty, the less the chance of ceasing to be poor.
- People who have been poor before, and then ceased to be poor, are more likely than average to become poor again.

In regard to the first point, consider the HILDA Survey respondents who were not poor in 2001 and then became poor in 2002. What happened to them in 2003? About two thirds (64.8%) were no longer poor, while 35.2% remained poor. But did those who ceased to be poor have incomes only just above the poverty line, or did they move out of poverty by a considerable margin? To answer this question (Table 6) equivalised incomes have been divided into deciles; that is, equal groupings

Table 5: Children under 15: annual relative income poverty rates in 2001–2003 and measures of the persistence of poverty—50% of median income poverty line

	%
Annual poverty rates	
2001	13.6
2002	13.3
2003	11.6
Number of years poor	
0	77.8
1	13.1
2	6.3
3	2.8
Total	100.0

Note: Population weighted results.

of 10%. In interpreting Table 6, it should be remembered that in 2001–2003 the entire first decile was poor, plus a few percent at the bottom the second decile.

Table 6 shows that many in this group escaped poverty by moderate or even fairly large margins. Nearly one fifth (17.0%) now had incomes in the top half of the national distribution, and nearly half (49.3%) were now in deciles 3, 4 or 5; quite well above the poverty line, but still below median income. However, about a third—33.7%—were in the second decile, but just above the 50% of median income poverty line.

Now consider a second group of HILDA Survey respondents; those who were income poor in both 2001 and 2002. The 'exit rate' in 2003 among those who had already been poor for two years was considerably lower than the exit rate of the one-year poor discussed in Table 6 above; 40.6% compared to 64.8%. Table 7 gives the 2003 decile position of the group who exited poverty in 2003.

It can be seen that a majority were only just above the poverty line in 2003; 57.6% were just above the poverty threshold in the second decile of equivalised income. 34.7% were in deciles 3, 4 and 5 combined, and only 7.7% had moved to the top half of the income distribution.

Finally, we consider a third group who were poor in 2001 and not poor in 2002. If HILDA Survey results are similar to results for other Western countries, we expect to find that these individuals are at worse than average risk of falling back into poverty in 2003. In fact 25.3% of them were poor once again in 2003, confirming that they are much more at risk than the rest of the population. Table 8 gives the decile position of these people in both the intermediate year of 2002 when they were not poor, and also in 2003 when some were poor and some not.

Compared with the groups previously portrayed in Tables 6 and 7, this is an intermediate group.

Table 6: Decile position in the equivalised income distribution of individuals who were not poor in 2001, then became poor in 2002, and then became not poor again in 2003 (%)

Decile position in 2003	Among those who exited poverty in 2003
2nd decile (but just above poverty line)	33.7
3rd decile	22.8
4th decile	16.3
5th decile	10.2
Top half—deciles 6–10	17.0
Total	100.0

Note: Population weighted results.

Table 7: Decile position in the equivalised income distribution of individuals who were poor in 2001 and 2002, then became not poor in 2003 (%)

Decile position in 2003	Among those who exited poverty in 2003
2nd decile (but just above poverty line)	57.6
3rd decile	17.9
4th decile	11.7
5th decile	5.1
Top half—deciles 6–10	7.7
Total	100.0

Note: Population weighted results.

Table 8: Decile position in the equivalised income distribution in 2002 and 2003 of individuals who were poor in 2001 and not poor in 2002 (%)

Decile position	2002	2003
Below poverty line	n.a.	25.3
2nd decile (but just above poverty line)	44.3	27.7
3rd decile	20.8	16.7
4th decile	14.6	9.7
5th decile	5.8	6.1
Top half—deciles 6–10	14.5	14.5
Total	100.0	100.0

Note: Population weighted results.

Some escape poverty by a considerable margin in 2002 and 2003, but others appear quite likely to be moving in and out of poverty, at least for the next few years.

Discussion

Clearly, from a public policy standpoint, medium and long-term poverty matter more than short-term. It is also crucial for policy purposes to understand reasons for entry into and exit from poverty. These are precisely the issues that the HILDA Survey will be able to address in detail as the panel survey continues.

Endnotes

1   Even Australian Bureau of Statistics surveys, which have more detailed questions on income support payments than any other source, have experienced the problem; see Siminski et al, 2003. It is clear that the HILDA Survey also under-records income support payments, although detailed analyses of the issue have not yet been undertaken.

2   In all poverty calculations in this article people with non-positive disposable incomes and negative private incomes are excluded. The basis for these exclusions is that, although a few people genuinely have negative or zero incomes, the data are generally not reliable. More generally, households have access to economic resources, including wealth and benefits in kind, which are not adequately reflected in measures of financial year income. While this can affect analysis of the entire poverty population, it is most serious for households reporting zero or negative incomes. Hence their exclusion in the analyses reported here.

3   The full sample for the relevant year is used for calculating annual poverty rates. For calculating rates of persistence of poverty, we use a 'balanced' panel of respondents for whom income data are available for all three years.

4   Of course, the decline in the poverty rate would appear greater if, as is sometimes done, a fixed or anchored poverty line had been used. For example, it is possible to fix the poverty line at the level for 2001, adjust 2002 and 2003 incomes for inflation, and then show how many people were poor in the latter two years, using the fixed 2001 line. If this is done the poverty rates for 2002 is calculated at 10.9% and the 2003 poverty rate is 9.7%.

5   The problem of missing data prior to a survey starting is known as 'left censoring'. Missing data in later years is known as 'right censoring'. Bane and Ellwood (1986) first developed methods of adjusting estimates of poverty persistence for right censoring.

6   Couples under 25, and also lone persons under 25 living in their own household, are not included because they form a highly diverse group, including full-time and part-time students and young people working either full-time or part-time.

7   See Beer, 2003, and Abello and Harding, 2004.

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Financial stress 2001–2003

The most common approach to defining and measuring poverty is the low income approach (see previous articles). It has been suggested that an alternative approach, or one that could be combined with measures of low income in order to improve measurement of economic well-being, is to assess poverty and disadvantage by measuring 'financial stress'. For example, in 1998 the Australian Bureau of Statistics included questions about financial stress in the Household Expenditure Survey. Respondents were asked whether, *due to shortage of money*, they could not pay utility bills on time, had pawned or sold something, went without meals, were unable to heat their home, asked for financial help from friends or family, or asked for help from a welfare/community organisation. One purpose behind asking these questions is to see if, by combining them with income measures, it is possible to get an improved understanding of who is financially disadvantaged and why. Australian research is still at an exploratory stage. It is interesting to note that the Irish Government has officially adopted what it terms a 'consistent poverty' measure, which combines questions about financial deprivation with measures of low income. However, the Irish measure does not just include measures of financial stress but also a list of measures of 'deprivation' relating to housing and consumer non-durables.

Symptoms of financial stress

In 2001–2003 the HILDA Survey asked the same six questions about financial stress as the ABS, plus a question about inability to pay the mortgage or rent on time. In what follows we first directly report results, and then consider issues relating to the persistence of financial stress and its relation to low income. Results are given for individuals, but it should be noted that there was a moderate incidence of partners in couple households giving contradictory reports in answering these apparently more or less 'factual' questions. Possible reasons for these contradictions are discussed in Breunig et al (2005).

Table 1 indicates that the most commonly reported financial problem was inability to pay utility bills on time. This problem was reported by over 18.8% of respondents in 2001, 16.1% in 2002 and 14.9% in 2003. In trying to deal with their difficulties, about 15% reported turning to their family or friends for help, and about 4% asked for assistance from welfare organisations. Problems reported by around 7–9% of respondents each year were inability to pay the mortgage or rent on time, and about 5% reported the need to pawn or sell something. Rather fewer respondents—but still in the 3–5% range—reported going without meals or being unable to heat the home.

The percentages reporting each of these symptoms of financial stress fell between 2001 and 2002, and then stayed at much the same level in 2003. In 2001 28.5% of respondents reported one or more of the financial problems listed in Table 1. In 2002 this fell to 15.7%, and then in 2003 16.1% reported one or more problems. It should

Table 1: Financial problems due to shortage of money, 2001–2003 (%)			
Did any of the following happen to you because of a shortage of money …	*2001*	*2002*	*2003*
Could not pay electricity, gas or telephone bills on time	18.8	16.1	14.9
Asked for financial help from friends or family	16.6	13.2	14.2
Could not pay the mortgage or rent on time	8.9	7.8	7.1
Pawned or sold something	6.5	4.9	5.1
Asked for help from welfare/community organisations	5.3	3.6	4.0
Went without meals	4.7	3.6	3.8
Was unable to heat home	3.6	2.9	2.7
Note: Population weighted results.			

Table 2: Financial stress of individuals in different types of household, 2003 (%)					
	Single mother household	Couple under 65, no children[a]	Couple under 65, children	Elderly couple (65+)	Elderly non-partnered (65+)
Financial stress	23.8	14.9	12.4	9.1	10.8
No symptoms of stress	76.2	85.1	87.6	90.9	89.2
Total	100.0	100.0	100.0	100.0	100.0

Notes: Population weighted results. [a] Individuals in households in which the reference person was under 65.

be noted that in this period household equivalent incomes rose in real terms by about 4%, which may be one main explanation for the decline in symptoms of financial stress.

Financial stress in different types of household

Table 2 shows the percentage of individuals in five types of household who reported one or more symptoms of financial stress in 2003.

The results in Table 2 are only partly in line with expectations. Single mother households have the highest incidence of income poverty and they also report the highest incidence of financial stress. But results for other types of household are somewhat unexpected. Couple households without children have considerably higher equivalent incomes than couples with children but a slightly higher proportion of them report financial stress.[1] Results for individuals in elderly households are also somewhat surprising. Objectively, single elderly people mostly have incomes, which even when equivalised, are far below the national average. Yet only 10.8% of these individuals report financial

stress; again, a lower figure than for individuals in couple households.

Further research is required to account for these somewhat unexpected results. It is tempting to suggest that many people who experience long periods of low income may adjust to their circumstances and carefully plan to pay their bills. By contrast, people who are somewhat better off may plan less carefully, and in some cases, be caught out by unexpectedly large bills. However, this 'explanation' is entirely speculative and post hoc.

Inability to raise money in an emergency

Another symptom of financial stress is the inability to raise a moderate sum of money to deal with an emergency of the kind created by the need to pay an unexpected bill. Each year the HILDA Survey asks respondents how difficult it would be for them to raise $2000 within a week in order to deal with an emergency. Over half the population (55.9% in 2003 for example) reported that they could 'easily' raise the money, and about another 20% (22.0% in 2003) said they could do it with 'some sacrifices'. Overall, well over two-thirds of

Table 3: Ability to raise $2000 within a week in emergency (lowest quintile of household incomes) (%)			
How hard it would be to raise $2000 in a week …	*2001*	*2002*	*2003*
I could easily raise the money	30.6	38.8	38.5
I could raise the money, but it would involve some sacrifices (e.g. reduced spending, selling a possession)	24.5	21.8	22.3
I would have to do something drastic to raise the money (e.g. selling an important possession)	13.9	11.6	12.7
I don't think I could raise the money	31.1	27.8	26.5
Total	100.0	100.0	100.0

Note: Population weighted results.

Table 4: Method of raising $2000 emergency money (%)			
How would you obtain $2000 in an emergency?	*2001*	*2002*	*2003*
Use savings	57.9	59.7	57.8
Borrow from a relative who lives elsewhere	19.5	20.0	24.0
Borrow from a financial institution or use credit	17.3	16.0	17.1
Sell an asset	16.7	14.7	16.3
Use some other methods to find the money	6.7	6.0	7.7
Borrow from a friend	6.3	6.3	9.1
Borrow from a relative who lives with you	4.5	5.4	6.3

Note: Population weighted results.

people in the top 80% of household incomes reported that they could raise the money easily or with some sacrifices. Table 3 focuses attention just on those in the lowest quintile (20%) of incomes.

In 2001, 31.1% of the lowest income quintile reported an inability to raise $2000, falling to 27.8% in 2002 and 26.5% in 2003. The percentages reporting that they could 'easily raise the money' increased from 30.6% in 2001 to 38.5% in 2003. Again, the evidence of some decline in financial stress is probably due to rising real incomes during this period.

Respondents who said they could somehow raise the money were then asked how they would do it. Table 4 reports the answers of those in the lowest quintile of income.

The most common method of obtaining emergency money was to draw on savings, followed by borrowing from a relative, then borrowing from a financial institution. About 15% said they would sell an asset in order to get the money.

Persistence of financial stress

How persistent is financial stress? Do the same individuals tend to report stress every year, or do most people apparently manage to solve their financial problems?

For present purposes, individuals are regarded as 'financially stressed' if, in a given year, they reported

one or more of the financial problems listed in Table 1. Every year in 2001–2003, 6.5% of respondents reported a problem, 9.5% reported a problem in two of the three years, 14.4% reported a problem once, and 69.6% never reported a problem. So financial stress appears just moderately persistent; somewhat more persistent than income poverty (see previous article).

It is important to record that reports of financial stress are not highly related to income poverty. Only about 23% of those who were poor as measured by the 50% of median income poverty line reported financial problems in 2003. Conversely, many of those who reported financial problems had moderate to high incomes. It is clear that some households mainly have a budgeting or money management problem, or perhaps financial priorities to which they give greater weight than paying regular bills for housing and utilities.

Endnote

1   In 2003 couple households without children had a median equivalent income of $33,879, compared with $24,420 for couple households with children.

Reference

Breunig, R., Cobb-Clark, D. A., Gong, X. and Venn, D., 2005, 'Disagreement in partners' reports of financial difficulty', *IZA Discussion Paper*, No. 1624, June, IZA, Bonn.

Welfare reliance: Do the same people keep depending on income support?

Do the same people rely on Government income support payments as their main source of income every year, or do people move on and off 'welfare' as the need arises?

There has been considerable concern in Australia that increasing numbers of people are heavily dependent on income support payments. The McClure Report (2000) on welfare reform documented a sharp increase and recommended policy changes—some of which have been adopted—to decrease 'welfare reliance' or 'welfare dependence'.

When welfare reliance is under discussion, it is often implicitly assumed that the same families remain on Government payments year after year. This is widely believed to be damaging for the families concerned—they have low incomes and tend to be stigmatized and 'marginalised'. It may be particularly bad for children growing up in homes where welfare and not work may be the norm.

But how valid are assumptions about continuous welfare reliance? After all, it could be the case that,

even though welfare reliance has increased, the people receiving payments keep changing and few remain recipients for long. The HILDA Survey longitudinal data enable us to address this issue directly. Previous research on this topic has used administrative data which gives detailed information about the circumstances of benefit recipients during periods when they are on income support, but no information for other periods (Gregory and Klug, 2002).

What is meant by welfare reliance? The definition used here is that a household is welfare reliant if more than half its gross income (that is, income from all sources) comes from government payments, including income support payments, family tax benefit and child care benefit. This definition of welfare reliance is widely used (for example, in the McClure Report), but it should be understood that households range between zero and a hundred percent welfare reliance. Also, there are stages of the life cycle, notably retirement years, in which total welfare reliance has been the norm and is certainly not stigmatized.

Table 1: Welfare reliance in 2001–2003 (%)

Years welfare reliant	All persons	All children under 15	All prime age households** (25–54)	Prime age male headed households** (25–54)	Retirement age households (65+)	Single mother households**
0	75.5	76.0	86.7	90.4	28.7	35.3
1	5.7	6.3	3.4	2.9	5.5	*11.4
2	5.7	6.1	3.1	2.7	10.8	17.9
3	12.8	11.7	6.8	4.0	55.1	43.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Notes: Population weighted results. **Excluding full time students. * Estimate not reliable.

Persistence of welfare reliance: Individuals and households

The first two columns of results in Table 1 focus on percentages of *individuals* (all persons and all children) living in households which were welfare reliant. Then, in the remaining columns, the focus is on *households*; the aim being to show which types of households were particularly likely to be medium term (three-year) welfare reliant.

At first sight the evidence of medium term welfare reliance looks alarming; 12.8% of all Australian residents and 11.7% of children under 15 were welfare reliant for all three years in 2001–2003. But when we focus on households (rather than individuals), a more differentiated picture emerges. Among households headed by men or women aged 25 to 54—prime working age—'only' 6.8% were welfare reliant for three years, and another 6.5% were reliant for one or two years. And if we narrow it down further and focus on households where the reference person is a prime age male, then only 4.0% were welfare reliant for three years running.

So who is continuously welfare reliant? The answer is single mothers and their children and older retirement age people. A third group is one person working age households; 14.5% were 3-year welfare reliant in 2001–2003. About 43% of single mother households were welfare reliant in all three years, as were 55% of retirement age households. In fact, a more detailed calculation shows that single mother households comprised over half the prime age households with children which were continuously welfare reliant in 2001–2003.

References

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Income mobility at the top end of the distribution

The rich can be defined in terms of wealth (assets) or income. Wealth is covered in a separate section of this Report. The focus here is on high income individuals and their ability or inability to retain high incomes in 2001–2003.

In practice we focus on the top income decile—*individuals* living in households with incomes in the top 10%. Obviously this cut-off point is arbitrary, but the results relating to income mobility would be much the same if we took the top 5% or 20%. In 2003, using the 10% cut-off line, the typical (median) high income person lived in a dual earner couple household, where the couple were in their later forties and had tertiary education. They had a median household income before taxes and transfers of $120,000, and median net worth (2002), mainly in the form of housing equity, of $572,000.

Income mobility of the top decile by equivalent income

Table 1 gives an overview of income mobility at the top end of the distribution by showing how many households never made it into the top 10%, how many did it once, how many twice, and how many managed to stay there three years running. Several measures of income are used. In the first column results are given for the same measure as was used for assessing poverty; equivalised disposable income. As explained in a previous article, this is a very useful measure of a household's material standard of living. Then successive columns give income measures for these same individuals; measures which could be regarded as 'prior' to equivalised income. Column 2 deals with individual labour income which is the main source of income for most people. Column 3 covers

Table 1: Income mobility of the top decile by income 2001–2003 (%)					
Number of years rich in 2001–2003	Equivalised household income	Individual labour income	Household labour income	Household pre-government income	Household disposable income
0	83.1	85.6	83.5	83.2	83.2
1	8.5	4.4	7.4	8.3	8.0
2	3.8	3.1	4.6	3.7	4.2
3	4.6	6.8	4.5	4.8	4.5
Total	100.0	100.0	100.0	100.0	100.0
Note: Population weighted results.					

household labour income—the sum of the earnings of all household members. In column 4, 'household pre-government income' means all income derived from market sources (labour income, asset income, private superannuation etc), plus gifts and bequests. The only income sources omitted here are Government benefits and taxes. Hence, household pre-government income is the best measure of how well households are doing under their own steam; that is, without Government support or intervention. Column 5 relates to household disposable income; that is, household income after taxes and benefits, but not equivalised to adjust for differing household needs.

At some risk of exaggeration, it might be said that it is easy to get into the top decile but hard to stay there. If it was easy to stay (comparatively) well off, then close to 10% would have been at the top of the distribution in all three years. But in fact 16.9% were in the top decile of equivalised incomes at least once in 2001–2003. Only 4.6% managed to stay there every year. As might have been expected, individual labour incomes were somewhat more stable, with 14.4% making it into the top decile at least once and 6.8% doing so every year. Household labour incomes, household pre-government incomes and household disposable incomes were all quite unstable. The result relating to household pre-government incomes in particularly interesting, because this measure gives the best indication of how households would have fared in the absence of Government intervention.

Comparing the income mobility of the top and bottom deciles

In contrast to results for some other Western countries, it appears that Australia's top decile are not a much less volatile group than the bottom decile (Burkhauser and Poupore, 1997). Table 2 directly compares the income mobility of the best and worst off 10% of individuals as measured by equivalent incomes. The household pre-government incomes of these individuals are also given. It should be noted that the 'poverty line' used here differs from the one used in the previous article on poverty; the aim here being to provide an exact comparison between deciles.

Table 2 shows that, in terms of pre-government income, the top decile are somewhat more volatile than the poor.[1] The greater volatility of low or poverty incomes, measured on an equivalised basis, is thus clearly due to Government intervention; that is, Government transfers contribute to moving some people out of poverty.

By international standards Australia appears to be characterized by relatively high volatility at the top end of the distribution. The evidence from other countries which run panel surveys, including Britain, Germany, the Netherlands and the US, suggests broadly similar rates of mobility among the poor as we find in Australia but less mobility at the top end.[2]

In thinking about the reasons for high rates of household income mobility, it is important to remember that changes in income are not solely

Table 2: Comparing the income mobility of top and bottom deciles by income 2001–2003 (%)				
Number of years in top/bottom decile in 2001–2003	Equivalised income		Household pre-government income	
	Top 10%	Bottom 10%	Top 10%	Bottom 10%
0	83.1	80.5	83.2	85.4
1	8.5	11.6	8.3	5.3
2	3.8	5.2	3.7	3.2
3	4.6	2.6	4.8	6.1
Total	100.0	100.0	100.0	100.0
Note: Population weighted results.				

due to changes in market earnings, but also to changes in household composition (e.g. a son or daughter leaves home to get married) and to household members joining or leaving the labour force.

How downwardly mobile are those who drop out of the top 10% by equivalent income?

Do most of the people who drop out of the top decile descend a long way in the income distribution, or do they move only just below the top 10% line? Table 3 shows the decile position in 2003 of individuals who had been in the top decile in 2001.

It can be seen that 54.9% of those who were in the top decile in 2001 remained there in 2003, and another 18.9% were in the 9th decile. On the other hand, 8.3% were now in the bottom half of the income distribution.

The data so far have related to the entire population. This means that people who would be expected to have a large change in income because they went through a major life cycle change (e.g. left the parental home; retired) are included. If we confine the analysis to people in their main earning period (25–54), then a slightly less fluid picture emerges. Table 4 gives results for all prime age people, and then separately for prime age household reference persons.[3]

The evidence in Table 4 still suggests considerable mobility at the top end. In the total population we

found that 4.8% remained in the top decile of household pre-government incomes for all three years, and 4.6% remained in the top decile of equivalised incomes. The figures for prime age people indicate only slightly less volatility: 5.4% remained in the top decile of pre-government incomes and 6.8% in the top decile of equivalised incomes. The picture is much the same if analysis is confined just to household reference persons.

Discussion

An assessment of why high incomes are relatively volatile would require complicated statistical analysis. However, one factor which is indicated is that better off people tend to rely more on asset incomes—incomes from businesses and investments—than less well off people. Asset incomes are much more volatile than labour incomes, so the more reliant a household is on asset income, then the more volatile its annual income is likely to be.

Endnotes

1 In interpreting this comparison, it should be remembered that many individuals and households at the bottom end of the distribution have zero or very low pre-government (mainly market) incomes.

2 Unpublished results calculated from the American Panel Study of Income Dynamics, the British Household Panel Study, the Dutch Socio-Economic Panel and the German Socio-Economic Panel.

3 In couple households the male partner has been designated as the household reference person. In lone parent households the reference person is the lone parent. In one person households it is that person. Multi-family and group households are omitted.

Reference

Burkhauser, R. V. and Poupore, J. G., 1997, 'A cross-national comparison of permanent income inequality in the United States and Germany', *Review of Economics and Statistics*, vol. 79, no. 1, pp. 10–17.

Table 3: Decile position in 2003 of members of the top income decile in 2001 (%)	
Decile position in 2003	Of those in top decile in 2001
Top decile	54.9
9th decile	18.9
6th–8th deciles	17.9
1st–5th deciles (bottom half)	8.3
Total	100.0
Note: Population weighted results.	

Table 4: Income mobility of the top 10% by income 2001–2003: All prime age people and prime age household reference persons (%)				
Number of years in top decile in 2001–2003	All aged 25–54 top 10%		Household reference persons aged 25–54 top 10%	
	Household pre-government income	Equivalised income	Household pre-government income	Equivalised income
0	80.9	77.6	84.0	78.6
1	9.2	10.1	7.7	9.3
2	4.5	5.6	3.7	5.6
3	5.4	6.7	4.6	6.5
Total	100.0	100.0	100.0	100.0
Note: Population weighted results.				

The composition and distribution of household wealth

The wealth module included in the second wave of the HILDA Survey (2002) was the first large scale survey of household wealth conducted since the wartime Census in 1915. The questions covered all main financial assets, including bank accounts, superannuation and shares, and all main non-financial assets, including housing and businesses, together with the main categories of debt. Because this was a household survey, rather than an estimate of national aggregate wealth of the kind published regularly by the Australian Bureau of Statistics, it enables us to focus on *distributional issues* and *cohort differences*; the differing asset portfolios of richer and poorer households and of different age cohorts.

Wealth is difficult to measure in surveys and, even when detailed questions are asked, is invariably somewhat under-reported (Juster, Smith and Stafford, 1999). One reason is that equal probability samples only include small numbers of very rich people who own a high proportion of national wealth (see Table 2 below). In benchmarking the HILDA Survey results against the national accounts published by the ABS, it appears that the HILDA Survey measures captured over 90% of household assets, but only about 82% of debts.

Why does wealth matter? Wealth confers economic security, and this is plainly a very high priority to many people. It enables a household to tide over bad times due to, for example, unemployment or ill-health, when the normal flow of earned income is reduced or cut off entirely. Wealth also enables a household to gain access to credit. So it can borrow either to tide over bad times, or to make investments for the future, for example by paying for education, or buying property, shares or a business. Wealth also directly generates income both in cash and in kind. For example, shares and superannuation

Table 1: Overview: Assets, debts and net worth of households in 2002				
	Means ($'000)	Medians ($'000)	% of total assets or debts	% of households holding assets/debts
Overall assets and debts				
Total assets	473.3	288.0		
Total debts	68.5	10.0		
Net worth (assets minus debts)	404.8	218.6		
Assets in order of value				
Housing and other property	255.0	180.0	53.9	71.0[c]
Pensions/superannuation	75.2	17.0	15.9	77.0
Businesses and farms	44.4	0	9.4	13.1
Equity investments: shares, managed funds	31.3	0	6.6	41.4
Bank accounts	21.4	4.7	4.5	97.3
Cars and other vehicles	19.0	12.0	4.0	87.9
Other assets[a,b]	27.9	0	5.9	47.4
			(100.0)	
Non-financial assets	315.4	204.5	66.6	93.6
Financial assets[b]	157.9	49.5	33.4	99.3
	(473.3)		(100.0)	
Debts in order of value				
Housing and other residential property	51.4	0	75.0	38.7
Businesses and farms	6.8	0	9.9	5.2
HECS (student) debt	1.3	0	1.9	12.7
Credit cards and other plastic	1.1	0	1.6	39.5
Other debts (cars, hire purchase etc)[b]	7.9	0	11.5	36.7
	(68.5)		(100.0)	

Notes: Population weighted results. [a] Other assets include cash investments, trust funds, the cash-in value of life insurance and collectibles. [b] Small adjustments have been made to these three items in order for totals to balance. The reason for what would otherwise be small discrepancies is that the imputations of household wealth omitted 5 components asked on the Person Questionnaire (PQ), if the person in question did not answer the PQ: bank accounts, superannuation, credit card debt, HECS debt and other personal debt. The authors imputed these items but did not constrain the imputation to force the total of all components to equal the previously imputed total asset and total debt values. [c] 71.0% of households owned property, 67.7% owned the home they were living in.

holdings directly generate cash income. Equally valuably, owner occupied housing, or paintings or other collectibles in the home, provide benefits in kind. They contribute to a household's quality of life and standard of living broadly defined. Another key aspect of wealth is that it can provide security and even comfort in one's retirement years.

Overview: Asset portfolios still dominated by housing

Table 1 gives an overview of the wealth of Australian households in the last quarter of 2002; more detailed evidence is given in Headey, Marks and Wooden (2005).[1] The table gives mean and median values of assets and debts, and hence net worth (assets minus debts), and also the percentage contribution which each type of asset and debt makes to total holdings. It should be noted that the medians reported in this table are somewhat unusual. The aim is to describe the wealth of the typical Australian household. So we report the median value of assets and debts of households in 50th (median) percentile of net worth. In other words, we take households whose overall wealth (net worth) is 'typical', and then show their asset and debt levels. Because the distribution of wealth is highly skewed, medians give a better idea of the typical household's wealth than means.

In the last quarter of 2002 the average household had a net worth of approximately $404,800, this being about $473,300 of assets and $68,500 of debts. However, these mean estimates are distorted upwards by inclusion of the rich. The median household had assets of only about $288,000 and a net worth of about $218,600.

As is well known, Australians' asset portfolios are dominated by housing. Housing and other property constitutes over 50% of all household assets and over 60% of the assets of the median household. Over two-thirds of households—67.8%—owned or were buying their own home. Quite a high proportion of Australian households—16.7%—had a stake in other property as well; a holiday home or investment property.

The second largest asset of most households is superannuation, which has become much more widely held, and somewhat more equally distributed in the last fifteen years. Even so, the median household holds superannuation worth only about $17,000. Other holdings of considerable value to some households are business assets and equity investments (shares, managed funds, listed property trusts etc). The median household holds no equities and of course does not own a business. However, the 41% of households who do own equities average about $70,000 worth (median = $15,000), and the average value of businesses (owned by 13% of households) was about $291,000 (median = $80,000). It should be noted, however, that equity investments are understated here, since, in order to avoid double-counting, HILDA Survey

respondents were asked not to include superannuation in their calculation of equity holdings; and of course some superannuation was held in equities. Then, moving towards the bottom of the list of assets, the median household had a car worth about $12,000 and just $4700 in the bank.

Household debt is mainly mortgages. The average property debt is about $51,000. Most households have little or nothing in other forms of debt.

Overall, non-financial assets dwarf financial assets. Most households lack liquidity. They have little cash and little that they can easily cash up, if normal sources of market income are temporarily or permanently cut off, or if emergency expenditures are required. In recent times new financial products have been designed which have made it easier for some households to use non-liquid assets as collateral to obtain cash; reverse mortgages are a clear example.[2] Even so, most households still have to rely primarily on pension and benefit entitlements if their normal flow of income is temporarily or permanently cut off. This is especially clear when one remembers that, until one retires, superannuation is not available and so, while classified as a financial asset, it is not in reality liquid.

Distribution of wealth

In Australia, as in other Western countries, wealth is much more unequally distributed than income. The findings that wealth and income are not very highly correlated, and that wealth inequality is greater than income inequality, are both primarily due to the greater dependence of wealth on age, or rather on *saving* as one ages. Wealth also depends somewhat on inheritance, although contrary to widespread impressions, most wealthy people are 'self-made' rather than being beneficiaries of large inheritances (*Business Review Weekly*, 2004). So wealth accumulates primarily via both voluntary saving and compulsory superannuation, and these savings grow with compound interest as people age. Of course households with higher incomes are able to save more. Income too

Table 2: Shares of total wealth (net worth) by deciles		
	Share (%)	*Median ($'000)*
Wealthiest decile	44.9	1394.3
(wealthiest 5%)	(31.0)	(2511.8)
9th decile	18.2	727.2
8th decile	12.4	498.9
7th decile	9.0	364.7
6th decile	6.5	262.1
5th decile	4.5	181.8
4th decile	2.8	113.6
3rd decile	1.3	54.5
2nd decile	0.4	14.0
Least wealthy decile	Negative	0
Note: Population weighted results.		

Table 3: Age cohorts: net worth of households at the cohort mean and at the 10th, 30th, median, 70th and 90th percentiles ($'000)

Household reference person's age	Net worth: Mean	Net worth: 10th percentile	Net worth: 30th percentile	Net worth: Median (50th)	Net worth: 70th percentile	Net worth: 90th percentile
15–24	28.3	−8.5	0.2	5.0	17.0	89.0
25–34	162.6	0.8	24.3	74.6	159.7	385.0
35–44	340.9	7.0	83.9	204.8	381.0	727.7
45–54	521.3	29.5	183.5	361.7	580.0	1130.1
55–64	671.8	17.1	216.0	422.1	741.5	1508.8
65–74	530.3	19.9	181.0	318.0	538.0	1127.0
75+	348.8	15.3	138.0	244.5	361.3	768.0
Total	404.8	4.2	83.0	218.6	428.0	934.2

Note: Population weighted results.

increases with age but the gradient is nothing like as steep as wealth's compound interest gradient.

A straightforward method of summarising the distribution of wealth is to show the shares owned by each decile (each 10% of households). It is also of interest to highlight the share owned by the wealthiest 5%.

The HILDA Survey data indicate that in 2002 the wealthiest decile owned 44.9% of total household wealth (median holdings = $1,394,400), with the wealthiest 5% owning 31.0% (median = $2,511,800). As mentioned above, it is likely that we somewhat underestimated the assets and national share of the richest households. The least wealthy five deciles own only 8.8% of net worth and the bottom decile actually has negative net worth (debts exceed assets).

Wealth is strongly related to age

As is already clear, wealth is heavily affected by age. In Table 3 couple households are classified by the age of the male partner. In lone parent households the 'reference person' is the lone parent, and in single person households it is of course that person. Similarly to many Australian Government publications, we have divided households into those with reference persons in the 15–24 age cohort, then 25–34, 35–44, 45–54 and so on.

Table 3 gives an overview of differences between and within cohorts by focusing just on net worth. The table shows the mean (average) net worth of each cohort and then the net worth at the mid-point of each quintile; that is, at the 10th, 30th, median, 70th and 90th percentiles of the distribution.

Two contrasting results show through very clearly. The first is the strong dependence of wealth on age; or, really, time spent saving and investing. The second result, which while not contradictory points in a different direction, is that, even within age cohorts there are great disparities in wealth. Let us examine the evidence for each cohort. The poorest cohort is the youngest one (reference person aged 15–24) with a median net worth of just $5000. At the 10th percentile (middle of the poorest quintile) households have negative net worth; their debts exceed their assets by $8500. At the 90th percentile net worth is $89,000. Contrast this quintile's situation with that of the wealthiest cohort, namely the quintile of households whose reference person is aged 55 to 64. Just under 60% of these households are still moving towards retirement and are saving for that period. The rest have quite recently retired and have (presumably) not yet run down their savings by much. In this quintile, median net worth stands at $422,100, but even here there are large disparities, with net worth being only $17,100 at the 10th percentile and $1,508,800 at the 90th percentile. The oldest cohort (reference person 75 and over) contains a generation which was always less well off than younger generations. Furthermore, after retirement people usually run down their savings (although many may be determined to leave substantial bequests to their partners and/or children) with the result that this cohort has a median net worth of $244,500. In this group also disparities are vast, with a net worth at the 10th percentile of $15,300, compared with $768,000 at the 90th percentile.

Endnotes

1 Gender breakdowns are not given because the data refer to households not individuals. So, within households, the same net worth is attributed to male and female members.

2 A typical use of a reverse mortgage would be for an elderly homeowner who owned his/her home outright to obtain funds to boost current cash flow. Normally, the mortgage would not have to be repaid until the home was sold or the owner died.

References

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Attitudes to saving and financial risk

Attitudes to saving, and also to risk, have considerable bearing on a person's current and future prosperity. A willingness to save is plainly necessary in order to accumulate assets. It is also necessary in order to have a comfortable standard of living in retirement. It can be argued that it is desirable to take at least moderate risks in order to prosper. Risk taking normally involves some investment in growth assets—property and equities—rather than only in bank accounts and cash assets.

Savings attitudes by gender and age

In each wave of the HILDA Survey, respondents are asked about both their attitude towards saving and towards financial risk. The question about savings offered five response options ranging from 'don't save: usually spend more than income' to 'save regularly by putting money aside each month' (see Table 1). It should be noted that the phrasing of the question made it unlikely that respondents would regard paying off their mortgage principal as a form of saving, although from an economic standpoint, anything that increases net worth is defined as saving.

It is possible that there is some 'social desirability bias' in answers to questions about saving; that is, because saving is considered a desirable activity rather more people may claim to do it than actually do. However, if we take the results in Table 1 at face value, it appears that just under a quarter of both men and women save regularly, while at the other extreme, over a quarter do not save at all, and spend as much or more than they earn.[1]

About 40% save 'whatever is left over' but have no plan, while 8–9% do not save regular income, but do save out of additional income they receive.

A number of socio-economic characteristics affect the propensity to save. Obviously, people with higher incomes save more regularly than people with lower incomes, and better educated people are somewhat more prone to save than less educated people. Age, however, appears to be a key factor and this is the focus in Table 1. The groups most likely to report regular savings were men and women under 25, followed by those between 25 and 34. Intermediate rates were reported by people aged 35 to 64, and those aged 65 and over reported the lowest rate of regular saving, and were presumably, in many cases, using up their savings during retirement.

The time frame of savings

The finding that young people, especially those under 25, report regular saving is perhaps surprising and is put in perspective by answers to the next HILDA Survey question which asked respondents about their time frame in saving: 'In planning your saving and spending, which of the following time periods is *most* important to you?' Six answer categories were offered, ranging from 'the next week' to 'more than ten years ahead' (see Table 2).

It appears that for many young people the 'planning' of saving and spending relates only to the more or less immediate future—the next week or

Table 1: Attitudes towards saving, 2003 (%)						
Age group	Don't save— spend more than income	Don't save— spend as much as income	Save whatever is left over— no plan	Spend regular income, save other income	Save regularly by putting money aside	Total
Men						
15–24	5.0	16.6	38.7	8.1	31.5	100.0
25–34	4.8	20.9	42.1	6.8	25.3	100.0
35–44	6.9	24.2	38.8	5.7	24.3	100.0
45–55	4.2	20.8	46.0	7.9	21.1	100.0
55–64	6.3	19.6	44.0	9.8	20.4	100.0
65+	6.1	17.2	44.9	13.8	18.0	100.0
Total	5.5	20.1	42.3	8.4	23.7	100.0
Women						
15–24	4.7	18.8	34.6	8.7	33.2	100.0
25–34	6.3	25.3	35.8	6.1	26.5	100.0
35–44	8.5	26.5	36.6	6.6	21.7	100.0
45–55	6.4	21.1	39.8	10.2	22.6	100.0
55–64	7.2	19.2	42.3	10.9	20.3	100.0
65+	3.5	15.4	46.5	12.7	21.9	100.0
Total	6.1	21.5	38.9	9.0	24.5	100.0

Note: Population weighted results.

the next few months. Thus, it seems unlikely that most of the young people who said they saved regularly were saving in order to make a major investment (for example, a mortgage). Middle aged people, and especially those approaching retirement, have a much longer time frame for saving and spending with close to 30% of both men and women saying they were looking either five to ten years ahead, or more than ten years ahead. Then, when people reach retirement, the immediate future again dominates decisions, with just over 50% in the age 65 and over group reporting that they only plan for the next week or the next few months.

Financial risk

In giving results on attitudes to financial risk, the focus is again on gender and age differences. But it is also needs to be remembered that high income and high education levels are also associated with a greater willingness to take risks. HILDA Survey respondents were asked about 'the

Table 2: Time period most important when planning saving, 2003 (%)

Age group	Time period most important when planning saving						
	The next week	The next few months	The next year	The next 2 to 4 years	The next 5 to 10 years	More than 10 years ahead	Total
Men							
15–24	33.9	30.9	14.6	11.5	5.6	3.5	100.0
25–34	25.4	32.8	16.6	12.2	6.7	6.3	100.0
35–44	24.3	27.9	16.1	11.8	12.1	7.8	100.0
45–55	18.6	25.5	14.1	11.5	21.0	9.3	100.0
55–64	18.7	23.5	16.6	13.1	19.2	8.9	100.0
65+	21.9	29.8	20.1	10.9	14.4	3.0	100.0
Total	24.0	28.6	16.2	11.8	12.0	6.5	100.0
Women							
15–24	31.8	30.0	18.0	10.7	7.3	2.3	100.0
25–34	25.0	28.1	20.6	13.7	8.2	4.5	100.0
35–44	24.1	27.4	16.9	10.0	13.5	8.1	100.0
45–55	20.9	23.7	14.4	12.1	16.5	12.4	100.0
55–64	17.2	20.1	19.8	13.5	19.4	10.1	100.0
65+	21.5	30.8	21.3	10.8	11.4	4.2	100.0
Total	23.7	26.9	18.3	11.7	12.4	6.9	100.0

Note: Population weighted results.

Table 3: Attitudes towards financial risk, 2003 (%)

Age group	Attitude towards financial risk					
	Take substantial risks	Take above average risks	Take average risks	Not willing to take any risks	Never have any spare cash	Total
Men						
15–24	2.9	6.8	35.9	34.1	20.3	100.0
25–34	3.1	12.2	35.9	31.5	17.2	100.0
35–44	2.2	11.1	40.4	28.1	18.2	100.0
45–54	1.9	10.6	43.3	27.6	16.6	100.0
55–64	*1.9	7.7	42.4	33.8	14.2	100.0
65+	*0.2	2.7	33.4	50.6	13.1	100.0
Total	2.1	8.9	38.6	33.5	16.9	100.0
Women						
15–24	*1.1	2.9	29.9	44.4	21.7	100.0
25–34	*1.3	4.3	37.9	35.6	21.0	100.0
35–44	*1.0	6.5	34.0	35.8	22.8	100.0
45–54	*0.7	4.0	36.8	39.2	19.4	100.0
55–64	*0.5	*3.2	35.2	42.8	18.3	100.0
65+	*0.2	*0.3	21.6	63.7	14.2	100.0
Total	0.8	3.7	32.7	43.0	19.8	100.0

Notes: Population weighted results. * Estimate not reliable.

amount of risk you are willing to take with your spare cash … that is, cash used for savings or investment'. Four main options were offered, ranging from 'I take substantial risks expecting to earn substantial returns' to 'I am not willing to take any financial risks'. A fifth option was 'I never have any spare cash' (see Table 3).

About 35% of respondents described themselves as willing to take 'average risks', but about 38% said they were 'not willing to take any risks'. Less than 2% were willing to take 'substantial risks', while about 6% said they would take 'above average risks'. Willingness to take risks is highest in the 25–54 age group, declines as retirement approaches, and is lowest in the post-retirement period.

The most interesting result in Table 3 is that women are much more financially risk averse than men. Only 4.5% of women, compared with 11.0% of men, say they are willing to take 'substantial risks' or 'above average' risks, while 43.0% of women, compared with 33.5% of men, say they are 'not willing to take any risks'.

Persistence of saving and risk-taking behaviour

Do people's saving habits stay the same for several years, or do they change quite frequently, perhaps adjusting to changes in their financial situation? Table 4 shows in how many years in 2001–2003 respondents reported particular savings behaviours. The column with zero number of years, gives the percentage that never reported the behaviour in the question in 2001–2003, while the column with 3 years, shows the percentage who reported the same behaviour in all three years.

Table 4 indicates that savings behaviour was moderately consistent in this three-year period. For example, among the 42.1% of men who on at least one occasion said they did not save[2], 12.9% said this at all three interviews, 12.3% at two of the three interviews and 16.9% just once. Regular saving, not surprisingly, was harder to maintain: 9.1%

of men and 10.7% of women reported regular saving in all three interviews, compared to approximately twice those numbers who managed regular saving in one of the three years. The least consistently maintained behaviour was 'spending regular income, while saving other income', but this was probably because 'other income' was not available for all three years.

Table 1, which gave cross-sectional results for 2003, indicated that younger people in the 15–24 and 25–34 age brackets were most likely to report regular monthly saving. The persistence results for different age groups show less clear cut differences.[3] The two youngest groups, and those aged 45–54, most commonly reported regular saving in either two or three years during this period. However, the other age groups were not far behind on the two and three year persistence measures.

Table 5 gives parallel results about the persistence of willingness to take risks.

A fascinating apparent result here, which would need confirmation in further research, is that for most people who do it at all, taking above average or substantial financial risks is something that is done for only a short period of time. While 13.3% of men and 6.8% of women said they took above average or substantial financial risks in one out of three years, only 2.8% of men and 0.6% of women did so in all three years. On the other hand, and not surprisingly, a willingness to take 'average risks' is quite consistently reported by the same respondents in these three years.

Who makes financial decisions in the household?

Finally, respondents were asked who in the household was responsible for three sets of financial decisions: managing day-to-day spending and paying bills, making large household purchases, and savings, investment and borrowing. Table 6 reports answers for respondents who had a partner living with them in the same household.

Table 4: Attitudes towards saving, 2001–2003 (%)					
	Number of years				
	0	1	2	3	Total
Men					
Don't save	57.9	16.9	12.3	12.9	100.0
Save whatever is left over	33.2	26.8	22.4	17.6	100.0
Spend regular income, save other income	79.9	15.4	3.8	0.9	100.0
Save regularly by putting money aside	60.3	18.5	12.0	9.1	100.0
Women					
Don't save	57.9	15.4	11.5	15.2	100.0
Save whatever is left over	37.7	25.4	20.9	15.9	100.0
Spend regular income, save other income	80.5	13.7	4.4	1.4	100.0
Save regularly by putting money aside	59.1	18.3	11.9	10.7	100.0
Note: Population weighted results.					

Table 5: Attitudes towards financial risk, 2001–2003 (%)

| Financial risks | Number of years | | | | |
	0	1	2	3	Total
Men					
Substantial	95.5	3.1	1.0	*0.4	100.0
Above average	83.1	10.2	4.3	2.4	100.0
Average	39.5	22.2	19.0	19.3	100.0
Not willing to take any	47.1	21.8	16.5	14.5	100.0
Never have any spare cash	70.2	14.8	8.7	6.3	100.0
Women					
Substantial	98.2	1.5	*0.3	*0.0	100.0
Above average	92.2	5.3	1.8	0.6	100.0
Average	49.1	19.3	16.5	15.2	100.0
Not willing to take any	35.8	22.7	20.7	20.8	100.0
Never have any spare cash	64.9	16.3	9.9	8.9	100.0

Notes: Population weighted results. * Estimate not reliable.

Table 6: Who makes the financial decisions, 2003 (%)

	Me/ mainly me	Mainly my spouse/ partner	Shared equally between partner and myself	Someone else (living here or elsewhere)	Shared equally among all household members	Total
Men						
Day-to-day spending	22.4	36.8	40.0	*0.2	0.5	100.0
Large household purchases	17.6	6.2	74.7	*0.2	1.2	100.0
Savings, investments and borrowing	23.1	8.6	66.9	*0.3	1.1	100.0
Women						
Day to day spending	43.9	16.5	38.7	*0.3	0.5	100.0
Large household purchases	6.3	16.2	76.3	0.4	0.8	100.0
Savings, investments and borrowing	11.6	19.3	67.9	0.5	0.8	100.0

Notes: Population weighted results. * Estimate not reliable.

Nearly half (43.9%) of the female partners said they were responsible for managing day-to-day spending and paying bills for their household. But, when it came to savings, investment and borrowing, and also large household purchases such as cars and major electrical appliances, it was more common for decisions to be shared equally between partners.

It seemed possible that levels of education might affect involvement in financial decision making, especially in the case of women. However, when it came to making decisions about day-to-day spending, and also about saving and investment, education levels made very little difference. But, for major purchases, women and men with degrees were less likely to leave decisions up to their partner, either making the decisions themselves or together with their partner. Women with Year 12 or lower levels of education were more likely to leave these decisions to their partner.

Endnotes

1 Plainly, the percentage of individuals who save would be estimated as higher if mortgage principal repayments were counted as saving.

2 That is, 100% minus 57.9% who never gave this response equals 42.1%.

3 Results calculated separately; not shown in Table 4.

EMPLOYMENT AND UNEMPLOYMENT/JOBLESSNESS

Labour mobility and movement in and out of unemployment 2001–2003

How mobile is the Australian labour force? Among the working age population do the same people remain in jobs year after year, while others are persistently unemployed? Or is there a high degree of movement in and out of the labour force?

Standard statistical summaries divide the working-aged population into three groups—a percentage who are employed, either full-time or part-time; a percentage unemployed and looking for work; and a third category 'not in the labour force' (and not seeking work). Because the HILDA Survey collects data from the same respondents every year, we are in a position to assess many aspects of labour mobility.

Table 1 provides an overview by showing what had happened by 2002, and then by 2003, to people who started out in different labour force status[1] groups in the HILDA Survey's first year in 2001. Later we focus particularly on the unemployed

and on some of the correlates and causes of unemployment, including education and individual labour force history.

It is clear from Table 1 that just over 90% of those who were employed in 2001 were employed two years later. By contrast, among those classified as unemployed, only 19.7% remained unemployed in 2003. Over half (56.8%) had found a job and close to a quarter (23.5%) had shifted to being 'not in the labour force' (and not seeking work). Of those who were not in the labour force in 2001, 81.3% were still not seeking work two years later, 15.4% had taken a job and 3.3% were unemployed (and seeking work).

Labour mobility of the prime age population

Having provided a population overview, it will be more useful to confine the remaining analysis to persons of prime working age (25–54). The main

Table 1: Labour mobility: what had happened by 2002 and 2003 to those employed, unemployed or not in the labour force in 2001, age 15 and over? (%)

Labour force status 2002 and 2003	Employed 2001		Unemployed 2001		Not in labour force 2001	
	2002	2003	2002	2003	2002	2003
Employed	91.9	90.4	45.5	56.8	11.3	15.4
Unemployed	2.2	1.6	30.0	19.7	3.7	3.3
Not in the labour force	5.9	8.0	24.5	23.5	85.0	81.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Note: Population weighted results.

Table 2: Labour mobility: what had happened by 2002 and 2003 to prime age people, 25–54 years, who were employed, unemployed or not in the labour force in 2001 (%)

Labour force status 2002 and 2003	Employed 2001		Unemployed 2001		Not in labour force 2001	
	2002	2003	2002	2003	2002	2003
Total persons						
Employed	94.0	92.2	48.9	57.5	18.1	24.5
Unemployed	1.8	1.3	27.2	19.4	5.4	5.6
Not in the labour force	4.2	6.4	23.9	23.1	76.4	69.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Men only						
Employed	96.1	95.5	50.8	59.1	18.3	26.2
Unemployed	1.9	1.6	29.0	19.5	7.1	4.8
Not in the labour force	2.0	2.9	20.1	21.4	74.6	69.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Women only						
Employed	91.4	88.2	46.0	55.2	18.1	24.0
Unemployed	1.7	1.0	24.7	19.3	4.9	5.8
Not in the labour force	6.9	10.8	29.3	25.5	77.0	70.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Note: Population weighted results.

issues would be blurred by including people of student age and older people who are mostly retired. Table 2 presents the same data as Table 1, but is confined to the prime age group and shows employment differences between men and women.

Among prime age men, 95.5% of those who had jobs in 2001 were still in work in 2003, and for women the comparable figure was 88.2%. Of the people who had been unemployed in 2001, 57.5% had found jobs by 2003. The relatively high percentage of prime age unemployed who shifted to 'not in the labour force' may be an indicator that there are some 'discouraged workers' (discussed more fully below). The rate of shifting from unemployment to 'not in the labour force' is higher among women (25.5%) than men (21.4%).

Do people find jobs with the working hours they want?

We have seen that a majority of prime age unemployed people find work within one year and rather more do so within two years. But do people who want full-time jobs get them, or do many have to settle for part-time work? And do those who prefer part-time work get what they want? The short answer is that, in these years when the national economy was doing well, many people got what they wanted. Of those unemployed and seeking full-time work in 2001, 39.8% got what they wanted by 2003, while 19.5% had to settle for a part-time job. Of those who wanted part-time work 34.2% had found it by 2003, while 17.5% were in full-time jobs.

There was a degree of gender asymmetry in the extent to which preferences were satisfied. Men who wanted full-time jobs were more likely to get them than women who wanted the same thing, whereas women who wanted to work part-time were more likely to be satisfied than men. So among men who were unemployed and wanted full-time work in 2001, 42.7% had it by 2003, while only 33.8% of women had their preference. But among those who wanted part-time work, 41.9% of women but only 22.5% of men got what they wanted.

Duration of unemployment in 2001–2003

The HILDA Survey data enable us to make a preliminary assessment of the percentage of the prime working age population who are short and medium term unemployed. Table 3 shows the percentage of the total prime age population, and of men and women separately, who never reported being unemployed[2] in 2001–2003, who reported it in any one year out of 2001–2003, in two of the three years, and finally in all three.

Table 3 shows that 92.2% never reported unemployment, which means that 7.8% did so on at least one occasion; 5.9% were unemployed one year out of the three, and 1.4% were unemployed in two out of the three years. Only 0.5% of men

and 0.4% of women were unemployed at the time of the interview in all three years.

There are several reasons for regarding these results on the low persistence rate of unemployment as painting too optimistic a picture. One is that the HILDA Survey so far provides only three years of data. This leads to a problem known as 'left censoring'. That is, it is virtually certain that there are some respondents (it is impossible to say how many) who were unemployed for several years before the HILDA Survey started, who in some cases found jobs in 2001–2003, and in a few cases were still unemployed in 2003. So with only three years of data we cannot yet say how many people suffer long-term unemployment (however long-term is defined). Nor can we say how long typical periods of unemployment last. For example, we cannot infer from the fact that over 50% of prime age people who were unemployed in 2001 had jobs by 2002 (Table 2) that over half of unemployment spells last for less than a year. Again, the problem is that we do not know how long the people in question had been out of work prior to 2001.

Another reason for thinking that the picture given by Table 3 may be too optimistic is that it is known (but hard to quantify) that some people who would prefer paid work become 'discouraged', stop seeking work, and so become classified as not in the labour force. One piece of evidence for this is that far more people move from being classified as unemployed to not in the labour force than move in the opposite direction. If both states were regarded as equally attainable, then one might expect that movement in both directions would be approximately equal. But it is not. For example, of those prime age people who were classified as unemployed in 2001, 23.1% were not in the labour force by 2003 (Table 2). By contrast, only 5.6% had moved from being not in the labour force to being unemployed and seeking work.

A second piece of evidence is that, among those prime age people not currently seeking work, over one quarter say they would prefer to work if they could get a job. And of these over a quarter claim that they stopped searching because the task appeared hopeless. In 2003, for example, 26.6% of

Table 3: Persistence of unemployment: how many prime age persons, age 25–54 years, were never unemployed, one-year, two-year or three-year unemployed during 2001–2003 (%)

Number of years unemployed	Men	Women	Total
0 years	91.7	92.7	92.2
1 year	6.5	5.4	5.9
2 years	1.3	1.5	1.4
3 years	*0.5	*0.4	0.4
Total	100.0	100.0	100.0

Notes: Population weighted results. * Estimate not reliable.

prime age people who were not in the labour force said they would prefer to have a job. Within this group 6.9% said they had given up because they were seen as too old, 2.2% said they lacked the necessary experience, another 2.5% said they had language or ethnic problems which prevented them from working, and about 8–9% gave other reasons for their belief that the task was too daunting.

Human capital and individual employment history as explanations of unemployment

A multivariate model was estimated to try and account for the number of years in which respondents were unemployed in 2001–2003. Within the prime age group, women, older people and better educated people were less likely to have been unemployed for two or three years in this period. Parental employment history made a difference. Other things equal, people whose fathers had been unemployed for six months or more while they were growing up were more likely to be unemployed themselves. Finally, a person's own

employment history was of great importance. Respondents were asked how many years they had been in work since they completed full-time education, how many years they had been unemployed, and how many years not in the labour force. The number of years they had been unemployed in 2001–2003 was very strongly related to their previous history of unemployment, and inversely related to the proportion of the time they had been in paid work.

Endnotes

1   This is labour force status at time of interview and does not capture mobility in between interviews. The best source for accurate measurement of labour force transitions are the ABS Labour Force Surveys: see ABS (2005).

2   Labour force status at time of interview—respondents could have had periods of unemployment between interviews.

Reference

Australian Bureau of Statistics, 2005, *Labour Force, Australia*, ABS Catalogue No. 6202.0, Canberra.

Job satisfaction

How satisfied are people with the jobs they hold? In every year of the HILDA survey, people who were employed at the time they were interviewed were asked to rate how satisfied they were with their job on a scale of 0 to 10, with 0 being 'totally

dissatisfied' and 10 being 'totally satisfied'. In addition to overall job satisfaction, respondents were also asked to rate how satisfied they were with particular aspects of the job, including the pay, job security, the hours they worked and the

Table 1: Average job satisfaction, 2001 to 2003			
	2001	*2002*	*2003*
Men			
Satisfaction with total pay	6.7	6.7	6.8
Satisfaction with job security	7.5	7.7	7.8
Satisfaction with the work itself	7.6	7.6	7.6
Satisfaction with hours of work	7.0	7.0	7.0
Satisfaction with flexibility to balance work and non-work commitments	7.2	7.3	7.3
Overall job satisfaction	7.5	7.6	7.6
Women			
Satisfaction with total pay	6.7	6.7	6.7
Satisfaction with job security	7.9	8.0	8.1
Satisfaction with the work itself	7.7	7.6	7.6
Satisfaction with hours of work	7.3	7.3	7.3
Satisfaction with flexibility to balance work and non-work commitments	7.6	7.5	7.6
Overall job satisfaction	7.8	7.7	7.8
Total			
Satisfaction with total pay	6.7	6.7	6.8
Satisfaction with job security	7.7	7.8	7.9
Satisfaction with the work itself	7.6	7.6	7.6
Satisfaction with hours of work	7.1	7.1	7.1
Satisfaction with flexibility to balance work and non-work commitments	7.4	7.4	7.5
Overall job satisfaction	7.6	7.6	7.7
Note: Population weighted results.			

flexibility available to balance work and non-work commitments (Table 1).

Overall, most people were quite satisfied with their jobs, with the average job satisfaction in all three years being around 7.6 out of 10. The aspect of their job with which respondents were, on average, most satisfied was job security; an interesting and somewhat unexpected result, given the frequency of academic and media comment about the 'casualisation' of the labour force and the increased insecurity which this has allegedly engendered. (See the later article in this volume: *'Are part-time, casual and other non-standard jobs 'bad' jobs?'*) Aspects of the job with which people were least satisfied (although scores still averaged over 5 on the 0–10 scale) were the pay and the hours they worked. By and large there were few gender differences in job satisfaction, but women—more of whom hold part-time jobs—were more satisfied than men with their ability to balance work and non-work commitments.

Persistence of low job satisfaction

Focusing just on people who were employed in all three years, it transpires that about 6% were dissatisfied with their job in any one year (scores between 0 and 4 on the 0–10 scale), but only 0.6% had a low level of job satisfaction in all three years and 39.2% rated their job satisfaction 8 or higher out of 10 in all three years (Table 2).

Table 2 shows that, while 10.6% of people experienced low job satisfaction in one out of three years, it was very unusual for low job satisfaction to persist for more than one year. Either the person leaves the job that is causing dissatisfaction, or there is some improvement that causes satisfaction to increase. The same can be said for job security—it was rare for feelings of dissatisfaction relating to job security to persist for more than a year. On the other hand, dissatisfaction with total pay, hours of work and job flexibility appear to be on-going problems for some people, with 8.8% experiencing two out of three years of low satisfaction with their pay, and 3.7% of people dissatisfied with their pay in all three years.

What do people with low job satisfaction do about it?

One would expect that people who were dissatisfied with their jobs would be more likely than others to be looking for a new job. Immediately after the questions about job satisfaction, the HILDA Survey respondents were asked whether they had looked for a new job in the last four weeks.

Table 3 shows that people with low levels of satisfaction with their current job were in fact much more likely to be looking for another job. At the time of the 2003 interviews, just over 50% of people who experienced low job satisfaction were searching for a new job, compared to 21% of people with medium levels of job satisfaction and only 7.8% of people with high levels of job satisfaction.

Table 2: Years of low job satisfaction (%)					
	Number of years of low job satisfaction (0–4 on the 0–10 scale)				
	0	*1*	*2*	*3*	*Total*
Men					
Total pay	69.7	18.5	8.5	3.3	100.0
Job security	79.2	13.9	5.1	1.8	100.0
The work itself	85.5	10.8	2.8	0.9	100.0
The hours you work	73.3	17.0	7.0	2.7	100.0
Flexibility to balance work and non work commitments	71.3	17.8	7.7	3.3	100.0
Overall job satisfaction	85.9	10.7	2.7	0.6	100.0
Women					
Total pay	67.2	19.2	9.3	4.3	100.0
Job security	83.5	11.6	3.6	1.3	100.0
The work itself	83.8	11.4	4.0	0.8	100.0
The hours you work	75.1	17.3	5.9	1.6	100.0
Flexibility to balance work and non work commitments	75.5	16.2	6.3	2.0	100.0
Overall job satisfaction	86.8	10.4	2.3	0.6	100.0
Total					
Total pay	68.7	18.8	8.8	3.7	100.0
Job security	81.0	12.9	4.5	1.6	100.0
The work itself	84.8	11.0	3.3	0.9	100.0
The hours you work	74.1	17.1	6.6	2.2	100.0
Flexibility to balance work and non work commitments	73.1	17.1	7.1	2.7	100.0
Overall job satisfaction	86.3	10.6	2.5	0.6	100.0

Note: Population weighted results.

Table 3: Employed people looking for a new job (%)

Satisfaction with current job (0–10 scale)	2001			2002			2003		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Low (0–4)	44.0	45.1	44.5	45.1	46.4	45.6	50.5	51.7	51.0
Medium (5–7)	20.1	24.8	22.0	22.1	22.3	22.2	20.4	22.7	21.3
High (8–10)	8.2	7.3	7.8	6.4	8.3	7.3	7.2	8.6	7.8
Total	14.9	14.8	14.8	14.3	14.9	14.6	14.1	15.0	14.5

Note: Population weighted results.

Table 4: Employment status in 2002 by job satisfaction in 2001 (%)

Job satisfaction in 2001	Employment status in 2002					
	Still working for same employer as last interview	Employee, but different employer since last interview	Employer/self-employed/ unpaid family worker	Unemployed	Not in the labour force	Total
Low (0–4)	49.3	32.7	4.8	5.0	8.2	100.0
Medium (5–7)	71.6	19.5	1.8	2.7	4.4	100.0
High (8–10)	78.6	12.7	1.5	1.7	5.5	100.0
Total	74.2	16.3	1.8	2.3	5.3	100.0

Note: Population weighted results.

Table 5: Average job satisfaction in 2002 by satisfaction in 2001 (%)

Job satisfaction in 2001	Employment status in 2002			
	Still working for same employer as last interview	Employee, but different employer since last interview	Employer/self-employed/unpaid family worker	Total
Low (0–4)	5.2	7.0	*7.4	6.0
Medium (5–7)	6.7	7.2	7.2	6.8
High (8–10)	8.2	8.0	8.1	8.1
Total	7.6	7.5	7.7	7.6

Notes: Population weighted results. * Estimate not reliable.

So people who were dissatisfied were more likely to be looking around, but do they in fact leave their current jobs, or do they stay and somehow adjust and become more satisfied? Focusing on people who were employees in 2001, Table 4 shows their employment status in 2002 by their level of job satisfaction in the previous year.

It transpires that 49.3% of employees with low job satisfaction in 2001 were still working for the same employer in 2002, compared to over 70% among those with medium or high job satisfaction. Of those employees who were dissatisfied with their jobs in 2001, 32.7% had moved on to a different job in 2002 and 4.8% had become self-employed. Further, the proportion of people who were employed in 2001 and either unemployed or not in the labour force in the following year was considerably higher for people who were dissatisfied with their job in 2001.

By 2003, about another 10% of employees who had experienced low satisfaction in 2001 had bailed out, so that only 40.7% still remained. Among these people, 27.7% still had a low level of job satisfaction, 47.4% had medium job satisfaction, and 24.9% now rated their satisfaction with their job as 8 or more out of 10.

The next issue is whether those who changed jobs partly due to dissatisfaction with their previous position enjoyed greater satisfaction in their new jobs (Table 5).

Those who made the change between 2001 and 2002 generally *did* have higher levels of satisfaction than before. They also rated their jobs as more satisfying than those dissatisfied people who remained in the same job.

Among people who reported medium levels of satisfaction with their jobs in 2001 (5–7 on the 0–10 scale), those who changed employers or became self-employed experienced a higher increase in job satisfaction than those who remained in the same job. Among those whose job satisfaction was already high in 2001, it made no difference whether they stayed in the same job, changed employers or became self-employed. Their satisfaction levels remained high anyway.

Multiple job holders: Who are they and how many hours do they work?

An increasingly important group in the labour market is those who hold more than one job. Multiple job holding has been facilitated by the increasing flexibility of the labour market, including reductions in the prevalence of penalty rates for working 'unsocial hours'.

The HILDA Survey found that in each of the three years from 2001 to 2003 approximately 8.5% of employees had more than one job. Women were more likely than men to be in this situation, with around 10% of employed women holding multiple jobs, compared to 7.5% of men.

Who has more than one job?

The proportion of multiple job holders is quite evenly distributed among working age adults. The most common age group in which people hold more than one job is the 35–44 group, which accounts for 23.6% of the total in 2003 (Table 2).

Table 3 shows that people with more than one job are much more likely to be employed on either a permanent or casual basis in their main job than to be self-employed or working on a fixed term contract.[1]

Multiple job holders are predominantly well educated people. A high proportion have post high school qualifications (Table 4) and around 30% have degrees. It is a plausible speculation that many people with less education would like extra work, but lack the skills and qualifications to get it.[2]

Table 5 indicates that approximately 45% of multiple job holders are managers, administrators, professionals or associate professionals in their main job. Female clerical workers ('intermediate' clerical workers) are the main exception to the generalisation that multiple job holders have high qualifications. In fact, 25.3% of women who held multiple jobs were clerical workers in their main job.

Working hours of multiple job holders

Summing the hours worked in all their jobs, Table 6 compares the average number of hours worked per week for people with only one job with those who had more than one job.

Multiple job holders do not work many more hours per week, on average, than people with only one job. The average for men with one job is around 42 hours per week, compared to men with multiple jobs who work 45 hours per week. For women, there is even less difference in hours worked per week; women with only one job work an average of 31 hours per week and women with more than one job work 32.5 hours per week.

Table 7 shows that well over 50% of people who have more than one job work part-time in their main job. This is particularly true for women, with more than 70% working less than 35 hours in their main job.

Men and women who work part-time, including those who hold multiple jobs, do so for different reasons.[3] Among the men only 21.6% explicitly said in 2003 that they prefer part-time work. Among women the majority prefers part-time work, and most give reasons relating to either being available to care for children, or to study.

It seems a fairly plausible inference from the evidence already given that many people, who have been unable to find full-time work, are using their second job to generate what they perceive to be

Table 1: Employed people with more than one job by gender and age (%)			
	2001	*2002*	*2003*
Men	7.6	7.6	7.2
Women	9.2	10.1	10.2
Total	8.3	8.7	8.5
Note: Population weighted results.			

Table 2: People with more than one job—by age group (%)									
Age		*2001*			*2002*			*2003*	
group	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*
15–24	19.1	23.2	21.1	17.6	25.6	21.7	20.1	23.8	22.0
25–34	22.9	20.1	21.5	27.6	22.2	24.9	24.3	16.3	20.1
35–44	25.4	30.0	27.7	22.5	25.4	24.0	23.4	23.7	23.6
45–54	19.9	19.4	19.6	19.1	19.1	19.1	16.9	25.2	21.3
55–64	11.0	7.2	9.1	10.9	7.2	9.0	14.1	9.9	11.9
65+	*1.7	*0.1	*1.0	*2.3	*0.4	*1.4	*1.2	*1.0	*1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Notes: Population weighted results. * Estimate not reliable.									

an adequate (or closer to adequate) income than they could get from one job alone. Table 8 compares the weekly wages/salaries of multiple job holders with single job holders.

It is clear that men who hold multiple jobs earn a great deal more (27% more on average) than men with one job. Women in multiple jobs make about 10% more than women who hold one job. The reason for multiple job holders earning more is primarily that they are predominantly managerial and professional people (see Table 5).

Persistence of having multiple jobs

Do people with multiple jobs continue in this way for several years, or is it usually a temporary arrangement? The short answer is that in most cases it is temporary.

Table 9 shows that 16.4% of respondents were multiple job holders in one or more years in 2001–2003. Within this group more than half (9.0%) had multiple jobs in only one year, 4.4% did it for two years, and only 2.9% (less than a fifth of the group) lasted for three years.

Concluding points

A survey conducted by the U.S. Department of Labor in 2000 found that the main reasons Americans gave for having more than one job were financial. They needed more money to meet household expenses or pay off debts, some wanted to

Table 3: People with more than one job—type of contract in main job (%)								
Contract of employment	2001			2002			2003		
in main job	Men	Women	Total	Men	Women	Total	Men	Women	Total
Fixed term contract	6.9	9.0	7.9	9.8	7.0	8.3	8.8	9.5	9.1
Casual	25.6	37.6	31.5	25.4	43.1	34.5	24.5	36.2	30.6
Permanent	47.0	41.6	44.4	41.6	37.6	39.5	45.9	43.4	44.6
Self-employed/other	20.5	11.8	16.3	23.3	12.2	17.6	20.9	11.0	15.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Population weighted results.

Table 4: People with more than one job—highest level of education (%)								
Education	2001			2002			2003		
level	Men	Women	Total	Men	Women	Total	Men	Women	Total
Degree	29.1	32.1	30.6	28.0	30.7	29.4	28.4	29.8	29.1
Certificate or Diploma	38.7	31.2	35.0	39.4	29.6	34.4	42.7	32.5	37.3
Year 12	12.2	18.5	15.3	14.9	20.4	17.7	12.4	19.0	15.9
Year 11 and below	20.0	18.2	19.1	17.7	19.4	18.5	16.5	18.8	17.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Population weighted results.

Table 5: People with more than one job—occupation in main job (%)								
Occupation	2001			2002			2003		
in main job	Men	Women	Total	Men	Women	Total	Men	Women	Total
Managers and administrators	9.0	*4.9	7.0	8.1	*3.8	5.9	7.1	*2.2	4.5
Professionals	26.1	31.6	28.8	25.9	32.6	29.3	28.3	31.6	30.0
Associate professionals	11.5	7.9	9.8	12.2	9.7	10.9	15.5	8.8	12.0
Tradespersons and related workers	15.5	*2.4	9.1	14.8	*0.3	7.4	9.9	*0.8	5.1
Advanced clerical and service workers	*0.4	6.2	3.2	*0.0	5.7	2.9	*0.9	6.6	3.9
Intermediate clerical workers	10.8	25.3	17.9	10.5	25.3	18.0	7.5	26.2	17.3
Intermediate production and transport workers	10.2	*3.6	7.0	11.6	*4.0	7.7	9.7	*3.4	6.4
Elementary clerical sales and service workers	6.8	11.8	9.2	*6.5	14.6	10.7	10.7	13.9	12.4
Labourers and related workers	9.6	6.3	8.0	10.6	*3.9	7.2	10.2	6.6	8.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes: Population weighted results. * Estimate not reliable.

Table 6: Average working hours per week (hours)

Number of jobs	2001			2002			2003		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
One job	42.8	31.4	37.8	42.6	31.0	38.0	42.3	30.8	37.4
More than one job (all jobs)	45.6	33.5	39.7	45.6	32.3	38.8	45.5	31.8	38.3
Total	43.0	31.6	38.0	42.9	31.1	37.7	42.5	30.9	37.4

Note: Population weighted results.

Table 7: Working hours in main job for people with more than one job (%)

Hours per week in main job	2001			2002			2003		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Less than 35	36.8	70.2	53.2	41.3	73.1	57.6	37.8	74.5	57.2
35–48	45.4	25.9	35.9	39.5	22.1	30.6	42.6	20.7	31.0
48+	17.8	*3.8	10.9	19.2	*4.8	11.9	19.6	*4.8	11.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes: Population weighted results. * Estimate not reliable.

Table 8: Average weekly wage of multiple job holders compared with single job holders in 2003 ($)

Hours per week week in all jobs	Men		Women		Total	
	One job	Multiple jobs	One job	Multiple jobs	One job	Multiple jobs
Less than 35	277.93	526.16	303.27	448.23	295.60	470.05
35–48	831.84	1171.62	728.59	748.93	793.78	960.44
48+	1000.75	1187.32	846.17	864.91	970.11	1087.80
Total	794.44	1005.39	535.12	590.30	682.81	782.95

Note: Population weighted results.

save for the future, and others wanted extra money to buy something special. In the HILDA Survey we have not directly asked multiple job holders why they do it, but the evidence in this Report suggests that many may be financially motivated in the sense that the only way they were able to generate what they regarded as an adequate income was to combine jobs. In this context we have noted that both men and women who hold multiple jobs only work slightly longer hours than single job holders. A second group of multiple job holders combine work with study, and a third group (mainly women) does multiple jobs at hours which enable them to combine work with looking after children.

Table 9: Persistence of multiple jobholding (%)

Number of years with more than one job	Men	Women	Total
0	85.6	80.9	83.6
1	7.6	11.0	9.0
2	4.2	4.8	4.4
3	2.6	3.4	2.9
Total	100.0	100.0	100.0

Note: Population weighted results.

Endnotes

1 The proportion of young multiple job holders (aged 15–24) who are employed on a casual basis is much higher than for other age groups (53.6% of men and 54.8% of women).

2 In 2003, 21.1% of people whose highest level of education was year 11 or below said they would prefer to work more hours, and 30.7% of people who worked part-time (and whose highest level of education was year 11 or below) said they worked part-time because they could not find full-time work.

3 Multiple job holders were not asked why they choose to have more than one job. However, everyone who worked part-time was asked why. Some said they preferred it, others gave reasons relating to child care, study, illness etc … and others said they would have preferred a full-time job.

Reference

U.S. Department of Labor, Bureau of Labor Statistics, 2000, *Issues in Labor Statistics,* 'When one job is not enough', 15 August. http://www.bls.gov/opub/ils/pdf/opbils40.pdf

Long working hours and life satisfaction

During the past two decades there has been a trend towards longer working hours. Labour force surveys indicate that in 1998, 37.7% of employed men and 14.2% of employed women worked 45 hours or more per week, an increase of 3.1% (exactly the same for both men and women) since 1988 (Australian Bureau of Statistics, 2003[1]). Do people who work long hours suffer from low levels of job satisfaction and life satisfaction and high levels of work-family stress? If so, do these problems persist for long periods of time?

In 2003, 31.0% of employed people worked part time (less than 35 hours per week), 46.8% worked 35 to 48 hours per week and 22.3% worked 49 hours or more per week. Men were much more likely to work long hours than women, with 31.3% of men working 49 or more hours per week, compared to only 10.6% of women. Table 1 shows the weekly working hours of people who were employed in all three years (2001 to 2003).

Within the group of people who were employed in all three years 14.2% worked 49 hours per week or more in all three years. This figure was higher for men, with 21.0% working long hours in all 3 years, compared to 4.9% of women.

Is there a difference in the subjective well-being of those people who persistently work long hours, does it affect their happiness with their relationships, their health and so on?

Table 2 compares the subjective well-being of men and women by the number of years (from zero to three) they had worked 49 or more hours per week since their first interview in 2001. Satisfaction levels are rated on a scale of 0 to 10, with 0 being the lowest satisfaction and 10 the highest. General health, mental health and vitality are scores out of 100.

Working long hours for a long period of time does *not* appear to affect overall life satisfaction, overall job satisfaction, general health, mental health or vitality. Men who worked long hours over the last three years were no less satisfied with their relationship with their partner or their children.[2] Females who worked long hours in all three years were no less satisfied with their relationship with their children, and on average their satisfaction with their relationship with their partner was slightly higher.

Not surprisingly, men and women who worked long hours in all three years reported lower levels of satisfaction with the number of hours they worked per week, and also had lower levels of satisfaction with the flexibility to balance work and non-work commitments. It was very common for people who had consistently worked long hours over the past three years to say (in 2003) that they would prefer to work fewer hours, with 59.4% of the men and 66.6% of the women saying they would prefer to work fewer hours.

Distribution of working hours across households

Clearly, the total number of hours worked per week by households depends partly on the number of adults in the household. Table 3 shows average hours worked per household and per prime age adult (25–54) in different types of household.

The mean number of hours worked per week varies from 36.8 hours for lone parent households with children under 15, to 85.6 hours for multi-family households. Taking the mean hours of work per prime-age adult gives a better picture of the distribution of working hours across

Table 1: Working hours—people who were employed from 2001 to 2003 (%)						
Weekly hours of work (all jobs) 2001	Weekly hours of work (all jobs) 2002	Weekly hours of work (all jobs) 2003				
		< 35	35–48	49+	Total	
Less than 35	Less than 35	17.0	3.1	0.6	20.7	
	35–48	1.2	3.1	0.6	4.9	
	49+	*0.2	*0.3	0.4	0.9	
35–48	Less than 35	2.2	1.3	*0.1	3.6	
	35–48	2.2	33.1	3.5	38.8	
	49+	*0.3	2.7	3.8	6.7	
49+	Less than 35	0.4	0.4	*0.2	1.0	
	35–48	0.6	3.1	1.9	5.6	
	49+	0.5	3.2	14.2	17.8	
Total		24.6	50.3	25.1	100.0	

Notes: Population weighted results. * Estimate not reliable.

households. The average weekly hours of work per adult is 40.5; but this figure is lower for households with children under 15, where, presumably, parents would trade off some working hours to take care of their children. Group households also work a relatively low number of hours per adult. The reason is that these households commonly include students who do not work full-time.

Education and long working hours

Do better educated households work longer or shorter hours? For the purposes of Table 4 we have used the education level of the household reference person as the education indicator for the entire household.[3]

There was no clear overall relationship between education and work hours. Across the board, couples and lone parents with children under 15 worked fewer hours than couples and lone parents with no young children. Clearly the demands of child care account for this. Among couples with no young children, there was some tendency for the better educated to work fewer hours; perhaps indicating a preference for leisure rather than more income. Those with less education presumably needed to work more hours in order to generate a desired level of income, or possibly were choosing to invest hours now for higher returns in the future (a human capital investment motivation). Lone parents with children under 15 displayed a different pattern. The better educated worked full-time or close to full-time on average.

Table 2: Subjective well-being in 2003—people who were employed from 2001 to 2003 (mean)					
	Years working more than 48 hours per week				
	0	*1*	*2*	*3*	*Total*
Men					
Overall life satisfaction	7.9	7.8	8.0	7.8	7.9
Overall job satisfaction	7.6	7.6	7.6	7.5	7.6
Satisfaction with hours worked	7.5	7.0	6.7	6.0	7.0
Satisfaction with flexibility to balance work and non work commitments	7.6	7.4	7.1	6.6	7.3
Satisfaction with relationship with partner	8.2	8.1	8.3	8.3	8.2
Satisfaction with relationship with children	8.1	8.3	8.1	8.2	8.1
General health	71.8	73.6	73.7	72.9	72.5
Mental health	76.8	75.9	78.4	77.2	76.9
Vitality	64.8	64.2	64.7	63.7	64.5
Women					
Overall life satisfaction	8.0	7.9	7.8	8.0	8.0
Overall job satisfaction	7.8	7.6	7.7	7.6	7.8
Satisfaction with hours worked	7.6	6.9	6.4	5.5	7.3
Satisfaction with flexibility to balance work and non work commitments	7.8	7.2	6.6	6.1	7.6
Satisfaction with relationship with partner	8.0	7.8	8.2	8.5	8.0
Satisfaction with relationship with children	8.3	8.3	8.5	8.6	8.4
General health	73.2	72.6	73.2	73.0	73.2
Mental health	74.8	73.7	78.1	74.0	74.9
Vitality	61.2	59.6	59.8	57.9	60.8

Note: Population weighted results.

Table 3: Average working hours—by household type (Households where at least one person is employed)		
Household type in 2003	*Mean hours worked per week per household*	*Mean hours worked per week per prime age adult*
Couple family without children under 15	69.8	45.4
Couple family with children under 15	64.1	33.6
Lone parent without children under 15	57.2	51.4
Lone parent with children under 15	36.8	36.0
Other related family without children under 15	56.5	45.2
Lone person	39.2	42.2
Group household	59.4	38.2
Multi-family household	85.6	42.2
Total	59.8	40.5

Note: Population weighted results.

The less well educated took on less work, in part no doubt because the costs of paying for child care would have eaten up a larger proportion of the income they could have earned.

Long working hours—the income generated

Presumably the reason why many people work long hours is to generate higher incomes. In some cases they may need to work long hours in order to generate an income similar to that which more skilled or more fortunate people can earn in fewer hours. Table 5 gives the weekly earnings and the hourly rate of individuals who work long hours, compared with those who work fewer hours. Also given are equivalised disposable household incomes.[4]

Among people who work 49 hours or more per week, average hourly wages are slightly lower than the average for those who work 35 to 48 hours per week. However, by working longer hours, they generate weekly earnings and contribute to household disposable incomes which are higher than found among those who work fewer hours.

Endnotes

1 See the article in the section Work—Paid Work, titled 'Longer Working Hours'.

2 A study of long working hours of fathers by Weston et al (2004) found that links between work hours and aspects of subjective well being varied according to whether fathers were happy with their work hours, and fathers dissatisfied with long working hours did have significantly lower well-being scores.

3 In couple households the male partner is treated as the reference person. In single parent households the reference person is the parent.

4 As explained in Part 2 of this Report, equivalised income may be regarded as the best measure of a household's material standard of living.

References

Australian Bureau of Statistics, 2003, *Australian Social Trends*, ABS Catalogue No. 4102.0, Canberra.

Weston, R., Gray, M., Qu, L., and Stanton, D., 2004, 'Long work hours and the wellbeing of fathers and their families', *Australian Institute of Family Studies* Research Paper No. 35, Melbourne.

Table 4: Average working hours per prime age adult—by household type and education level of household reference person, 2003

| | Highest level of education of household reference person | | | | |
Household type in 2003	Degree	Certificate or diploma	Year 12	Year 11 and below	Total
Couple family without children under 15	48.5	48.4	49.1	50.6	49.0
Couple family with children under 15	34.2	34.8	34.0	37.1	35.0
Lone parent without children under 15	58.5	52.7	*54.0	51.8	53.3
Lone parent with children under 15	40.7	36.0	28.5	34.9	35.9
Lone person	41.3	43.2	40.5	42.8	42.2
Total	41.8	41.8	40.8	44.2	42.2

Notes: Population weighted results. * Estimate not reliable.

Table 5: Long working hours—the income generated, 2003 ($)

| | Hours worked per week | | | |
	Less than 35	35–48	49+	Total
Average hourly wage				
Men	19	21	18	20
Women	18	18	15	18
Total	18	20	17	19
Average weekly wage				
Men	302	842	1,019	808
Women	320	730	849	540
Total	314	800	984	690
Equivalised (annual) household disposable income				
Men	29,329	33,501	38,893	34,486
Women	30,800	37,018	40,075	34,288
Total	30,377	34,870	39,156	34,396

Note: Population weighted results.

Are part-time, casual and other non-standard jobs 'bad' jobs?

The growth of part-time and 'non-standard' employment is part of a trend towards greater labour market flexibility. However, some commentators have claimed that jobs which are both part-time and 'non-standard' are, in a sense, 'bad' jobs (e.g. Burgess and Campbell, 1998; Romeyn, 1992; Watson et al, 2003). Part-time, non-standard jobs are commonly thought to be unsatisfactory and insecure; not jobs people would do if they were not forced to take them for want of better opportunities. It is perhaps also widely believed that part-timers would mostly prefer full-time. What is the basis for these claims? Is it the case that people who hold these jobs feel dissatisfied and insecure, and are not working the hours they prefer?

Forty years ago, when the first national labour force studies were conducted, 90% of Australians who worked for pay did so full-time (Australian Bureau of Statistics, 1986). Most employees also had 'standard jobs', with standard entitlements to a paid vacation and/or paid sick leave.[1] Nowadays many people work part-time; indeed, as every recent OECD Employment Outlook shows, Australia and the Netherlands lead the world in numbers of employees—mainly women—who hold part-time jobs. In this country in 2003, 31.5% of those in employment, and 49.6% of employed women, were part-timers. It is also the case that many of those in paid work no longer have standard entitlements. The Australian Bureau of Statistics defines employees who lack entitlement to both a paid vacation and paid sick leave as casuals (ABS, 2004).

In general, full-time employment tends to be associated with standard entitlements, whereas part-time employment is associated with lacking these entitlements. So, in the HILDA Survey in 2003, 90% of full-time jobs had standard entitlements, whereas 61% of part-time jobs did not. Because a higher proportion of women than men hold part-time jobs, women are more likely to lack standard entitlements.

The trend towards part-time and non-standard work has been labeled the 'casualisation of the labour force'. It has already been noted that concerns about this trend have been expressed by Australian social commentators. The precariousness of modern employment has also become a significant theme in policy debates in the European Union, and in European academic circles where it has become somewhat fashionable to write about 'the risk society', citing evidence about the 'precarity' of employment (Beck, 1986).

In what follows, we use HILDA Survey data for 2001–2003 to address three issues about part-time non-standard employment:

- Are part-time non-standard employees dissatisfied with their jobs?
- Do part-time non-standard employees perceive their jobs as insecure?
- Are part-time non-standard employees working fewer hours than they would prefer? If so, does the situation persist, or do most employees manage to get the hours they want within a year or two?

It is clear that critics of 'the casualisation of the labour force' regard full-time jobs with standard entitlements as the appropriate community benchmark. So, in tackling these issues, we restrict attention to just two groups—full-time standard employees and part-time non-standard employees. If we find that the latter group perceive themselves as being no worse off than standard full-timers, then it will be reasonable to infer that the main concerns expressed about 'casualisation' lack substance (Wooden and Warren, 2004).

Are part-time non-standard jobs dissatisfying?

Each year in the HILDA Survey all employed people are asked:

All things considered, how satisfied are you with your job?

The response scale runs from 0 to 10 scale, where 0 means 'totally dissatisfied' and 10 means 'totally satisfied'. Using the same scale, respondents are also asked about specific aspects of their job, including 'your total pay', 'the work itself (what you do)' and 'the flexibility to balance work and non-work commitments'.

Overall, the evidence indicates that job satisfaction levels are quite high, and they are just as high for part-time non-standard employees as for standard full-timers. Among women, satisfaction with part-time work is particularly strong. The key advantage of part-time work, for men as well as women, is that it allows greater flexibility in balancing work and non-work commitments. Part-timers gave an average satisfaction score of 8.0 on the 0–10 scale for the flexibility of their jobs, whereas full-timers averaged only 7.1. One sub-group stands out as especially satisfied. About 50% of women employees work part-time and, as we shall see, most of them prefer to be part-timers. This sub-group of women preferring part-time employment is the most satisfied in the entire workforce, with an average job satisfaction level of 8.1.

Table 1: Job satisfaction, satisfaction with pay, satisfaction with the work itself; and satisfaction with ability to balance work and non-work commitments (means)				
	Overall job satisfaction (0–10)	Satisfaction with pay (0–10)	Satisfaction with the work itself (0–10)	Balance work and non-work (0–10)
Full-time standard jobs				
Men	7.6	7.0	7.6	7.2
Women	7.7	6.7	7.7	7.1
Total	7.6	6.9	7.6	7.1
Part-time non-standard jobs				
Men	7.6	6.8	7.3	7.9
Women	7.8	7.0	7.4	8.1
Total	7.7	6.9	7.4	8.0
Notes: Population weighted results. On the 0–10 satisfaction scale, 0 means 'totally dissatisfied' and 10 means 'totally satisfied'.				

Job security—are part-time non-standard jobs perceived as insecure?

The next issue is whether part-time non-standard employees feel insecure in their jobs. All employed respondents are asked:

What do you think is the per cent chance that you will lose your job during the next 12 months? (That is, get retrenched or fired or not have your contract renewed.)

It is clear from Table 2, and it is perhaps a surprising result, that non-standard job part-timers feel just about as secure as full-timers. So 60.3% of part-timers compared with 60.4 of full-timers said there was no chance they would lose their job in the next year. On the other hand more part-timers (5.0%) than standard full-timers (3.8%) thought there was a worse than 50% chance that they would be put out of work.

A totally unexpected finding was that women were much less likely than men to see themselves as being at risk of losing their jobs in the next year. This is the subject of a separate article in this volume.

Do people work the hours they prefer? Evidence for 2001

In 2001—the first year the HILDA Survey collected data—respondents who held jobs were asked:

If you could choose the number of hours you work each week, and taking into account how that would affect your income, would you prefer to work fewer hours than you do now, about the same as you do now, or more hours than you do now?

Overall, a small majority of respondents said they were satisfied with their working hours in 2001; satisfied in the sense that they would have chosen to work the same hours as they were actually working at the time. There was a small and not quite statistically significant difference between the percentage of full-time standard employees who were satisfied (54.3%) and the percentage of non-standard part-timers (51.4%).[2]

There were two fairly large and distinct groups of employees who were not satisfied. These were part-timers who wanted more work (42.6% of this group) and full-timers who wanted less work (37.2%). Within the two dissatisfied groups there were important if not unexpected gender differences. Among part-timers, more men (49.8%) than women (38.9%) wanted more work. Among full-timers, more women (42.6%) than men (33.8%) would have preferred less work.

Were mismatches sorted out by 2003?

Clearly, persisting problems are worse than short-term ones. So we now ask whether employees

Table 2: Job security: percentage chance of losing your job in next 12 months? (%)					
	No chance	1–25% chance	26–50% chance	51–100% chance	Total
Full-time standard jobs					
Men	56.4	31.4	8.3	3.9	100.0
Women	67.0	21.9	7.9	3.2	100.0
Total	60.4	27.7	8.1	3.8	100.0
Part-time non-standard jobs					
Men	54.3	27.9	11.3	6.6	100.0
Women	63.2	22.7	10.1	4.1	100.0
Total	60.3	24.5	10.3	5.0	100.0
Note: Population weighted results.					

Table 3: Are people working the hours they want? 2001 results (%)

	Full-time standard jobs			Part-time non-standard jobs		
	Men	Women	Total	Men	Women	Total
Working preferred hours	55.6	52.2	54.3	45.1	54.8	51.4
Prefer fewer hours	33.8	42.6	37.2	5.1	6.3	5.9
Prefer more hours	10.5	5.2	8.5	49.8	38.9	42.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

Note: Population weighted results.

Table 4: Were mismatches sorted out by 2003? Results for main groups who were not working preferred hours in 2001 (%)

	Full-timers preferring fewer hours in 2001			Part-timers preferring more hours in 2001		
Outcome by 2003	Men	Women	Total	Men	Women	Total
Working preferred hours	36.3	39.4	37.6	49.2	51.7	50.7
Prefer fewer hours	58.7	53.2	56.3	17.0	10.3	12.8
Prefer more hours	5.0	7.4	6.0	33.8	38.1	36.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Note: Population weighted results.

whose working hours did not match their preference in 2001 had sorted the problem out and got the hours they wanted by 2003. Table 4 focuses just on the two quite large groups with mismatched hours; part-timers who wanted more work and full-timers who wanted less.

It is plain that part-timers had more success in sorting out their mismatches than full-timers. Just under half the men and women who had wanted more work in 2001 were satisfied with their hours by 2003, while 34.9% of men and 38.7% of women were still short of work. Full-timers who had wanted shorter hours in 2001 had been less successful in meeting their needs two years later. Only 39.8% were satisfied in 2003 (42.5% of women and 37.8% of men), while over half were still anxious to work less. Presumably the reason is that full-time work tends to be less flexible—it may be that not many private sector employers are willing to let employees shift from full-time to part-time—but, whatever the reason, the advantage again seems to be with part-timers.

Concluding points

The main conclusion has to be that there is little evidence in the HILDA Survey to support the view that part-time non-standard jobs are seen as undesirable by the people who actually hold them. Part-timers report the same overall level of job satisfaction as standard full-timers and they feel greater satisfaction with their ability to balance work and non-work (mainly family) commitments. They were just as satisfied as full-timers with their pay, their hours and the intrinsic interest of their work. They felt only slightly less secure in their jobs. It could be that more non-standard part-timers than full-timers were not working the hours they wanted, although the difference in the HILDA Survey was not quite statistically significant.

A much higher proportion of women than men hold part-time jobs, and slightly more hold non-standard jobs. Women in particular find these jobs satisfying.

Endnotes

1   It should be understood that both full-timers and part-timers can have standard entitlements, or can lack them. However, part-timers much more commonly lack them.

2   Not significant at the 5% level.

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Job security

In the past it was not uncommon for employees to work in the same job, or even have the same employer, throughout their career. Nowadays, there is a general perception that people change jobs more frequently, and also have to continuously upgrade their skills. Consequently there have been claims that people feel less secure in their jobs than they have in the past.

In each wave of the HILDA Survey, employees were asked the percentage chance that they would lose their job in the next 12 months. Table 1 shows the average 'percentage chance of losing your job' for male and female employees, by type of employment contract.

For those who were employees at the time of interview in any given year, it appears that job insecurity has been *decreasing* since 2001. The average percentage chance of losing your job in the next 12 months declined from 14.4% in 2001 to 10.6% in 2002 and 10.4% in 2003. A possible reason for this increase in job security may be the improvement in the economic climate and decline in the unemployment rate over the past three years.

In all three years, women reported lower job insecurity than men and, as you would expect, people who were employed on a permanent or ongoing basis reported lower chances of losing their jobs than casual employees and employees on fixed term contracts.

Does job tenure affect job security?

You would expect that people who had been employed in the same job for many years would report lower levels of job insecurity. Table 2 shows the average levels of job insecurity for men and women according to the number of years they had been employed by their current employer.

People who had been in their current job for less than one year reported much higher levels of job insecurity than other employed people, and job insecurity was higher for people who had been with their current employer for less than five years than for people who had been with their employer for five years or more.

Do people who report high levels of job insecurity actually change jobs in the next 12 months?

What happens to people who report high levels of job insecurity? Do they change jobs, become unemployed, drop out of the labour force, or do they remain in their current job? Table 3 shows employment status in 2002 according to their level of job insecurity in 2001 for people who were employees in 2001.

Less than half the employees who reported levels of job insecurity of 80% or more were still working for the same employer 12 months later, compared to over 70% of those who reported levels of job insecurity of less than 40%. By 2003, only

Table 1: Percentage chance of losing your job in the next 12 months by gender and type of employment (means)									
Type of		*2001*			*2002*			*2003*	
employment	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*
Employed on a fixed-term contract	20.0	17.2	18.7	17.5	16.6	17.1	18.1	17.1	17.6
Employed on a casual basis	25.9	18.2	21.5	16.3	12.7	14.2	15.3	11.5	13.2
Employed on a permanent or ongoing basis	12.6	9.1	11.1	9.3	6.8	8.3	9.4	7.1	8.5
Other	*29.3	*34.0	*32.0	10.6	14.4	12.3	*13.5	*12.6	13.0
Total	15.9	12.6	14.4	11.6	9.6	10.6	11.3	9.3	10.4

Notes: Population weighted results. * Estimate not reliable.

Table 2: Percentage chance of losing your job in the next 12 months by gender and years with current employer (means)									
Years with		*2001*			*2002*			*2003*	
current employer	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*
Less than 1 year	24.5	19.5	22.1	15.3	13.6	14.5	14.3	13.0	13.7
1–4 years	14.8	12.1	13.5	11.9	9.6	10.8	11.9	9.7	10.8
5–9 years	11.9	8.9	10.4	9.0	6.5	7.8	8.7	7.9	8.3
10–19 years	11.6	8.9	10.3	9.4	7.2	8.4	7.7	5.5	6.7
20+ years	12.6	6.8	10.6	7.8	5.4	7.0	11.6	4.3	9.2
Total	15.9	12.6	14.4	11.6	9.6	10.6	11.3	9.3	10.4

Note: Population weighted results.

Table 3: Employment status in 2002 by level of job insecurity in 2001 (%)						
	Employment status in 2002					
2001: % chance of losing your job in the next 12 months	Employee, Still working for same employer as last interview	Employee,but different employer since last interview	Employer/self- employed/ unpaid family worker	Unemployed	Not in the labour force	Total
0–10	79.1	12.7	1.8	1.7	4.7	100.0
10–19	74.3	18.0	*1.9	*1.2	4.7	100.0
20–39	71.1	22.5	*1.3	*2.1	*3.1	100.0
40–59	61.4	25.3	*2.6	5.4	5.3	100.0
60–79	62.1	*15.9	*1.3	*3.0	*17.7	100.0
80+	43.8	33.9	*2.4	*4.9	*14.9	100.0
Total	74.4	16.2	1.8	2.2	5.3	100.0
Notes: Population weighted results. * Estimate not reliable.						

32.7% of employees who reported high levels of job insecurity in 2001 were still working for the same employer; 45.4% had changed jobs, 2.7% were self employed, 3.0% were unemployed and 16.2% were not in the labour force at the time of their 2003 interview.

Persistence of job insecurity

Do employees suffer from persistent job insecurity? That is, do the same people suffer high levels of insecurity year after year. Table 4 gives the answer.

It appears that insecurity rarely persists. Taking those people who were employees in all three years, Table 4 shows that 75.3% of employees said the chance of losing their job was less than 50% in all three years, and very few (1.4%) said that the

chance of losing their job was 50% or more in all three years. High job insecurity was reported by 17.2% of employees in one out of three years, and only 6.1% suffered high levels of insecurity in two out of three years.

Table 4: Persistence of job insecurity (%)			
Number of years of high job insecurity (50% or higher chance of losing job)	Men	Women	Total
0 years	73.5	77.4	75.3
1 year	18.3	15.9	17.2
2 years	6.5	5.7	6.1
3 years	1.8	*0.9	1.4
Total	100.0	100.0	100.0
Notes: Population weighted results. * Estimate not reliable.			

Job training

The number of people undertaking job related training has increased considerably over the past decade. Australian Bureau of Statistics (2003) data indicate that the number of Australian employers providing job training to their employees increased from 61% in 1997 to 81% in 2002.

In 2003 a new question about job training was introduced into the HILDA Survey. People who were employees at the time of their interview were asked if they had taken part in any education or training schemes or courses as part of their employment over the last 12 months. If they had taken part in such training, they were also asked what the aim of that training was, and whether they contributed to the cost by paying the course fees, purchasing books or materials, paying for travel or accommodation while attending the course, or taking unpaid time off work to attend the training. Table 1 shows the proportion of employees who had undertaken job training in the 12 months prior to their 2003 interview.

Of employees, 41.6% (41.1% of males and 42.3% of females) reported taking part in some sort of job training during the past 12 months. For both men and women, the age group in which job training was most common was 35 to 44. Most job training was paid for by the employer, with only

Table 1: Proportion of employees who undertook job training in the last 12 months—by gender and age group, 2003 (%)			
Age group	Men	Women	Total
15–24	35.7	34.6	35.2
25–34	42.6	44.8	43.6
35–44	48.5	45.2	47.0
45–54	41.7	44.2	43.0
55–64	30.2	45.1	36.9
65+	*23.6	*38.4	29.2
Total	41.1	42.3	41.6
Notes: Population weighted result. * Estimate not reliable.			

Table 2: Aims of job training—employees who undertook some job training in the 12 months prior to their 2003 interview (%)

Aim of training	Men	Women	Total
To improve your skills in your current job	66.3	73.0	69.5
To maintain professional status and/or meet occupational standards	47.4	48.9	48.1
To develop your skills generally	45.7	51.1	48.2
To prepare you for a job you might do in the future or to facilitate promotion	25.4	24.9	25.2
Because of health and safety concerns	27.2	19.7	23.7
To help you get started in your job	9.2	10.4	9.7
Other	1.4	1.8	1.6

Notes: Population weighted results. Multiple responses were permitted.

Table 3: Contract employment of employees who undertook job training in the 12 months prior to their 2003 interview—by gender and age (%)

	Contract of employment				
	Employed on a fixed contract	Employed on a casual basis	Employed on a permanent or ongoing basis	Other	Total
Men	8.6	9.4	81.5	*0.5	100.0
Women	10.9	16.8	71.8	*0.5	100.0
Total	9.7	12.9	76.9	*0.5	100.0

Notes: Population weighted results. * Estimate not reliable.

Table 4: Education levels of employees who did job training in the 12 months prior to their 2003 interview (%)

	Highest level of education (2003)				
	Degree	Certificate or diploma	Year 12	Year 11 and below	Total
Men	27.8	44.7	11.3	16.3	100.0
Women	36.5	34.7	12.4	16.4	100.0
Total	31.9	40.0	11.8	16.3	100.0

Note: Population weighted results.

22.0% of employees contributing to the cost of their training in any way.

Aims of job training

The most common aim of job training was to improve current job skills. Table 2 indicates that many employees also undertook job training with the aims of maintaining professional status and meeting occupational standards, or to develop skills generally.

Who does job training?

The majority of employees (81.5% of men and 71.8% of women) who had done some job training in the last 12 months were employed on a permanent or ongoing basis, as shown in Table 3. Clearly, employers, who pay for most of the training, are more likely to be willing to fund long-term employees, whose work will continue to benefit them, than short-term employees who may well shift to a new employer.

Education levels of people doing job training

How does a person's previous level of formal education affect his/her opportunities to do job training? The HILDA Survey data show that most people who did job training in 2002 or 2003 had post-high school qualifications (see Table 4).

Overall, job training was most commonly undertaken by people who had certificate or diploma qualifications; 44.7% of men who did some job training had certificate or diploma qualifications and 27.8% had degrees. A higher proportion of women than men (36.5% compared with 27.8%) who undertook job training in the last 12 months had degrees.

Reference

Australian Bureau of Statistics, 2003, *Employer Training Expenditure and Practices, Australia 2001–02*, Catalogue No. 6362.0, Canberra.

Jobless households: Characteristics and persistence

Research initiated by both Professor Bob Gregory and Boyd Hunter of Australian National University and Professor Peter Dawkins of Melbourne Institute has shown that the distribution of work in Australia has become more unequal, and this is one driver of increased earnings inequality (Gregory and Hunter 1995; Dawkins 1996). The evidence points to increasing numbers of households in which one or two members work long hours and, at the other end of the spectrum, increasing numbers of 'jobless households' in which no-one has paid work.

To date, all evidence on jobless households has been cross-sectional; evidence collected at one moment in time. Clearly, even short-term joblessness is a concern, but medium to long-term joblessness is a more serious policy issue, because of the implications for a family's long-term income, wealth, health and mental health. Long-term jobless families probably tend to suffer some degree of social stigma and 'marginalisation'. It also seems likely that children's long-term career chances would be damaged by growing up in jobless households.

In this article a jobless household is defined as one in which no-one was in work for more than 25% of the time in the last financial year.[1] Clearly, other definitions are possible. If we said that *any* paid work done by a household member during the year would lead the household to be defined as working, then the jobless rates would be lower than those given below. On the other hand, if we said that in order for the household to be classified as working, at least one person would need to spend 50% of the year in work, the joblessness estimates would be raised.

The HILDA Survey has now been running for three years and provides the first Australian data on whether household joblessness is usually a short-term phenomenon, or whether it is a persistent problem for many. It is important to note that the cross-sectional estimates of all persons living in a jobless household (including, in this first cut, retired people and others not expected to work) were almost unchanged in 2001–2003. They remained steady at around 20–22%. It might seem obvious or 'natural' to infer from such stable figures that the

same individuals remained in jobless households each year. Is this true, or is it misleading?

As an initial step, Table 1 shows percentages of individuals who never lived in a 'jobless household' in 2001–2003, those who were in a jobless household for just one year out of the three, in two years, and in all three years.

At first reading, the first two columns of Table 1 suggest that the jobless households issue is extremely serious; 14.7% of the entire population and 7.3% of children under 15 were living in jobless households for three consecutive years. These might be regarded as alarmingly high figures, and they also appear to suggest a moderate degree of stability in joblessness. By contrast, if attention is confined to people of prime working age (25–54 inclusive), the percentage in jobless households is lower, although not inconsiderable; 4.4% were in jobless households for all three years and a further 3.9% were jobless in two of the three years.

In order to get a better handle on the issue, we need to switch from individual level analysis to the *household level*. The aim is to focus on households in which there is at least some societal expectation that paid work will be undertaken, and eliminate from further analysis households in which there is generally no expectation of paid work. In the former category are couple households and also single person households in which the reference person is of prime working age. Then we also include households in which the reference person is aged 55 to 64 and not retired.[2] Finally, and more dubiously in terms of societal expectations of work (for further comment and analysis see below), Table 2 includes single mother households where the mother is aged 25 to 54.[3] Excluded from the table, because paid work is not expected, are retirement age households (reference person aged 65 and over) and households headed by full-time students. It should further be understood that the effect of these choices is also to eliminate from consideration many individuals—mainly wives and children—living in households in which someone else—mostly husbands—does paid work.

Table 1: Percentage of individuals living in jobless households in 2001–2003 (%)			
Number of years jobless	Total persons	Children under 15	All prime age (25–54)
0	73.2	77.9	87.6
1	5.6	7.3	4.0
2	5.5	7.5	3.9
3	14.7	7.3	4.4
Total	100.0	100.0	100.0
Note: Population weighted results.			

Table 2: Household joblessness rates in 2001–2003 (%)				
Number of years jobless	Couple households, prime age ref. person (25–54)**	Single person households, prime age (25–54)**	Households with ref. person (55–64) and not retired	Single mother households, mother (25–54)**
0	96.1	79.8	95.2	47.9
1	1.2	3.3	2.5	11.2
2	1.4	4.8	1.4	15.7
3	1.3	12.0	0.9	25.3
Total	100.0	100.0	100.0	100.0
Notes: Population weighted results. The sample Ns relate to households not individuals. **Excluding full-time students.				

Table 3: Joblessness in single mother households (%)	
Number of years jobless	Single mother households —mother (25–54) and youngest child aged (6–15)**
0	64.0
1	*6.2
2–3	29.8
Total	100.0
Notes: Population weighted results. **Excluding households in which the mother is a full time student. * Estimate not reliable.	

The results in Table 2 indicate that only 3.9% of prime age couple households were ever jobless in these three years. By contrast, 59.1% of single mother households were jobless in at least one year and 25.3% were jobless in all three years. The other group with a high jobless rate was single person households of which 12.0% were jobless for all three years; 13.1% of females and 11.4% of males. The results for the remaining group shown in Table 2 are slightly misleading, or at least ambiguous. In households with reference persons aged 55 to 64 and not retired, it is nearly always the case that those persons have work. Otherwise, even if they might prefer to be in work but cannot get a job, they tend to classify themselves as retired (see the later article in this volume on retirement issues).

A key result from Table 2 is that single mother households have a high joblessness rate. In fact over 70% of the children living in three-year jobless households in 2001–2003 appear to have been in single mother households. So, if a major concern is the effect on children of being raised in a jobless household, then it is single mother households that should be the main focus. However, this raises policy issues about whether single mothers should be expected to work. One view is that they should not work and instead concentrate on raising their children. A second view, which could be said to be reflected in the fact that sole parenting benefits normally cut out when children reach 16, is that single mothers should work when the youngest child reaches this age. A third view, reflected in the McClure Report on welfare reform,

is that single mothers should be encouraged to work when their youngest child is six years old and goes to school.

Unfortunately, the sample number is too low to get reliable results for single mother households in which the youngest child is aged under 6, so Table 3 is confined to single mother households in which the youngest child is aged 6 to 15. Even here the sample number (N = 101) is low, but the results may be regarded as indicative.

Because numbers are low, the results for two and three-year jobless households were combined. Clearly, a 2–3 year joblessness rate of 29.8% in these households where children have reached school age is high. It should also be noted that 64.0% were continuously in work.

Concluding point

Overall, the analysis shows the value of longitudinal data for distinguishing between short and medium term rates of joblessness, and for identifying which specific population groups are most at risk of persistent joblessness.

Endnotes

1 Regardless of how many hours they worked.

2 An omitted group are households with reference persons aged 15–24; the number was too low for reliable results.

3 The HILDA Survey sample included a very small number of single mothers who were aged 15 to 24 throughout 2001–2003. They were omitted from the analysis here.

References

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Reference Group on Welfare Reform, 2000, *Participation Support for a More Equitable Society,* Final Report, (P. McClure, Chairperson), Department of Family and Community Services, Canberra.

Parental unemployment and divorce and sons' and daughters' employment histories

Are children's own careers affected by major events in their parents' lives—events which occurred when they were growing up? At their first HILDA Survey interview respondents are asked about their parents and family background and their own employment history. Among the questions asked about parents are: 'Was your father unemployed for a total of 6 months or more while you were growing up?' and 'Did your mother and father ever get divorced or separate?' In asking respondents' own employment histories, we asked them to estimate how many years since they left full-time education they had spent in paid work, how many years unemployed, and how many years not in the labour force (and not seeking work; for example, engaged in home duties).

The hypotheses tested in this article are that sons and daughters whose fathers were unemployed are more likely to be out of work themselves, and that a parental split also increases the risk of being out of work. Being 'out of work' is measured as the percentage of time since leaving full-time education, a respondent was *either* unemployed *or* not in the labour force. This measure was preferred to a simple measure of percentage time unemployed, because the distinction between involuntary unemployment and 'not in the labour force' is borderline in some cases, and is especially problematic when only brief information is available about a person's work history.

Table 1 gives separate results for men and women of prime working age (25 to 54). The reason for confining the analysis to respondents of prime working age is to avoid possible confounding effects due to being a student (in the case of younger people) or due to retirement (in the case of older people). The table shows the separate and then combined effects of paternal unemployment and parental separation/divorce on sons' and daughters' own work histories.

The results tell a fairly consistent story, but with one important gender difference. In the case of men, both the experience of growing up with a father who was at least temporarily unemployed, and the experience of going through a parental marriage split, has affected their own work histories. For women, paternal unemployment makes a difference but parental divorce appears not to have a substantial effect.

Men who had experienced neither an unemployed father nor a parental divorce had only been out of paid work for 9.3% of the time since completing full-time education. By contrast, men whose fathers had been unemployed and whose parents had split averaged 18.4% of time out of the work force. However, it appears that paternal unemployment was a more important factor than parental divorce, because, while those who had a father out of work, but parents who did not split up averaged 15.2% of time out of work, those who experienced the opposite pattern spent only 11.7% of time without work.

Clearly, on average, and primarily because of child-rearing responsibilities, women spend more time out of the paid labour force than men. Even so, having had a father out of work affects their careers.[1] Women whose father had been unemployed had spent about 37% of the time since full-time education was completed out of the labour force, compared with 28–30% for women whose fathers had not been unemployed.

It is reasonable to ask whether having had a father out of work is genuinely one of the factors which affect the employment of respondents. It might be the case that the relationships shown in Table 1 are *not* causal, and that respondents' own risk of being unemployed is entirely due to factors related to their own education and training, which just happen to be correlated with whether or not their father was unemployed. To test this possibility it is

Table 1: Impact of father's unemployment and parental divorce/separation on respondents' own work histories (%)		
	Men aged 25–54 time not in work since ending full-time education	*Women aged 25–54 time not in work since ending full-time education*
Father unemployed, parents divorced	18.4	36.7
Father unemployed, parents not divorced	15.2	37.3
Father not unemployed, parents divorced	11.7	30.4
Father not unemployed, parents not divorced	9.3	28.0
Note: Population weighted results.		

necessary to use multivariate statistical techniques rather than straightforward tables. In additional regression analyses (not shown here) it has been found that the results in Table 1 still hold, even taking account of (net of) age, education and parental occupational status. There is, indeed, a small inverse relationship between having an unemployed father and one's own level of education, but even so the former factor has an independent and statistically significant effect on respondents'

own time out of work.[2] For men the effect of parental divorce also remains significant, even after other factors are taken into account.

Endnotes

1 The HILDA Survey did not ask whether mothers had been unemployed.

2 The regression coefficient for 'father unemployed' was significant at the 1% level in the equations for both men and women.

Who gets fired and why do women get fired less than men?

An interesting if gloomy question put every year to all HILDA Survey respondents who are employees is:

> I would like to ask you about your employment prospects over the next 12 months. What do you think is the per cent chance that you will lose your job during the next 12 months? By loss of job I mean getting fired, being laid off or retrenched, being made redundant, or having your contract not renewed.

Table 1 shows how many respondents thought their chance of being fired was nil, how many thought 1–25%, 26–50%, 51–75%, 76–99% ... and how many thought it was 100% certain.

At the extremes 55.9% of respondents thought there was no chance of losing their job, while 3.2% thought it was 100% certain. Overall, 7.7% of respondents thought they were more likely than not to lose their job in the next year; that is, they thought the probability was over 50%. But women *appeared* to be less pessimistic than men—6.8% of women compared with 8.6% of men thought the chances of being fired were over 50%.

Are these predictions accurate? In other words, do people who think they are likely to be fired actually get fired, while those who think their jobs are secure actually retain them? In the HILDA Survey in 2002, we asked these same respondents whether they had in fact been fired from the job they held the previous year. Table 2 matches predictions to outcomes.

It transpired that respondents' predictions of their own fate were in the right direction but were much too pessimistic. People who believed they were more at risk were correct. Among those who thought they had more than a 50/50 chance of being fired, just 10.0% were.[1] Among those who thought the odds were under 50%, 2.7% lost their jobs. The overall Pearson correlation between respondents' own estimates of the probability of job loss and actual loss was a modest 0.15, and it was almost exactly the same for men and women.[2] In other words, men and

women were about equally good (or bad) at predicting whether they would be fired.

A striking and puzzling finding is that women, who are more optimistic about their job security than men, turn out to be right. They are in reality less likely to be fired. In the twelve months following the 2001 interviews, only 2.0% of women compared to 4.4% of men were fired. In other words, on the raw figures, men were twice as much at risk.

Another intriguing and complicated result revealed by Table 2 is that, although both genders

Table 1: What chance of losing your job in the next 12 months? 2001 responses (%)

Percentage chance of losing job	Men	Women	Total
Nil	50.7	61.4	55.9
1–25%	29.1	22.4	25.8
26–50%	11.7	9.3	10.5
51–75%	2.6	1.7	2.2
76–99%	2.6	2.0	2.3
100% certain	3.4	3.1	3.2
Total	100.0	100.0	100.0

Note: Population weighted results.

Table 2: Are employees able to predict whether they will be fired? Matching 2002 outcomes with 2001 predictions

Predicted probability of being fired	Men % who were fired	Women % who were fired	Total % who were fired
Nil	1.9	1.0	1.5
1–25%	5.0	1.4	3.5
26–50%	7.7	5.9	6.9
51–75%	11.6	6.8	9.6
76–99%	17.1	5.4	11.5
100% certain	11.5	6.6	9.2
Mean	4.4	2.0	3.2

Note: Population weighted results.

were overly pessimistic about their job security, women in fact achieved better outcomes relative to their own predictions than men did. Take the women who thought they were 100% certain to be fired; only 6.6% were. This compares with an 11.5% dismissal rate among men who thought they were certain to go.

So gender appears to be one variable which affects whether one is fired or not; and for some reason women are less at risk. But what are the other factors that make a difference? And does the apparent gender gap disappear when one takes account of other factors which might affect job loss, including working in a declining industry, or a declining region, or working for the private sector rather than the public sector?

To answer these questions it is necessary to estimate a multivariate model in which one tries to simultaneously take account of a wide range of factors which might influence job loss.[3] A number of variables which it was thought might affect this outcome appeared not to do so, including educational attainment, the industry one was in, and being a part-time or casual employee. The variables which *increased* the probability of being fired to a statistically significant extent ($p<0.05$) were:

- Employees' own estimates of their probability of being fired in the next 12 months
- Working in the private sector rather than the public sector.

The two variables which significantly *decreased* the probability of being fired were:

- Years of experience with one's current employer
- Being female.

So it transpires that women are less likely than men to be fired, even netting out the effects of many other variables which might affect the outcome. In fact, netting out these other effects, our statistical model would have 'predicted' that in 2002 women had a one third lower chance of being fired than men; approximately a 2% risk, compared with 3% for men.[4] This 'predicted' gap is narrower than the actual gap described earlier—on the raw figures men were more than twice as much at risk—but it is still very substantial.

There is still a puzzle, however. Women's greater job security could not be solely due to being female. There must be some more intelligible explanation. For example, it is possible that, at any given job level, women are somewhat more competent, or perhaps less likely to cause trouble at work than men. This in turn could be due to what economists call a 'selection effect'; about

85% of working age men are in paid employment, compared to about two-thirds of women. So it could be that, while even quite incompetent men work, the least competent women stay out of the labour force. Another possibility is that employers —mainly men—are less comfortable or otherwise less willing to fire female than male employees.

The other variables which significantly affect the probability of being fired are of some interest. Employees' estimates of their own risk were the best single predictor. So even though their estimates were far too pessimistic, they were still the best predictor available. The second strongest predictor was years of experience with one's current employer. Plainly employers are unwilling to sack their longest serving staff. Finally, and no surprise, private sector employees were more at risk than those in the public sector.

So the main finding of interest here is that women think their jobs are relatively secure and they are right. As far as we know, this is a new finding in the Australian context. Why the finding holds is a puzzle which certainly requires further investigation.

Endnotes

1   A check was made to see if those who thought they would be fired in 2002, but were not, were later fired in 2003. Basically this was not what occurred, although those who felt highly at risk in 2001 were just slightly more likely than other people to be fired in 2003.

2   Pearson correlations run between +1 and −1. Correlations approaching +1 mean that higher scores on one variable are strongly associated with higher scores on the other variable. Correlations approaching −1 mean that higher scores on one variable are associated with lower scores on the other. Correlations around zero mean that there is no relationship between scores on the two variables.

3   A marginal effects probit model was estimated. The outcome (dependent) variable was 'job loss in 2002' (1 = yes, 0 = no). The predictor variables on the right hand side of the equation were all measured in 2001. They were: female, age, age squared, university degree (reference variable = year 12 education), diploma, less than year 12 education, wage, occupational status, industry classification (10 categories with agriculture, forestry and fisheries omitted as a reference variable), remoteness of region (4 categories with 'city' omitted as a reference variable), part-time employee (reference variable—full-time employee), casual employee, works from home, works for a labour hire firm, years of experience in current occupation, years of experience with current employer, and own percentage estimate of the probability of being fired in the next 12 months. The pseudo R squared for this model was 13.7%.

4   This prediction comes from the probit marginal effects model described in footnote 3, but with the last variable (respondents' own estimates of the probability of being fired) omitted. The pseudo R squared for this model was 8.4%.

Retirement plans and satisfaction

In 2003 the HILDA Survey included a special module of questions on retirement; a module which will be re-run every few years. The people questioned were those aged 45 and over, who were either already retired or approaching retirement in the next twenty years. The module dealt with key policy and lifestyle issues, including:

- At what age have people entered retirement during the last twenty years or so?
- Do many people ease gently into retirement by 'partly retiring' via shorter working hours or a transition job?
- What proportion retire voluntarily and what proportion are pressured to leave?
- How satisfied are retired people with their standard of living and with their lives generally?
- At what age do people still in the workforce expect to retire, and what age would they choose to retire?
- What proportion expect to rely on the age pension and what proportion expect to be self-funding?

As is well known, the age of retirement has been falling in Australia, as it has in nearly all Western countries. Table 1 gives the self-reported retirement status of respondents aged 55 and over in 2003.

The HILDA Survey data indicate that, among people in their late fifties (55–59), 31.5% were already retired, 11.9% were 'partly retired', 54.9% were not retired at all, and 1.7% said the question was irrelevant because they had never done paid work. By their early sixties a majority were retired—58.3% of the total population were completely retired (but only 50.1% of men), and 15.3% of the total (17.7% of men) were partly retired. Among those over 65, 86.5% were fully retired and another 5.0% partly retired.

The Australian Government has set the objective of trying to induce people to retire later and is introducing changes to superannuation to provide incentives for continued work. When people aged 45 and over were asked when they *expected* to retire, 40.4% said by the age of 60 and 77.5% by

age 65. However, more would *choose* to retire earlier if they could afford to do so, 66.0% would choose to retire by 60 and 81.7% by 65.

What does 'partly retired' mean—and what do people do?

'Part-retirement' or 'semi-retirement' are fashionable terms, but what do they mean?

Respondents over the age of 45 who said they were 'partly retired' were asked 'In what sense do you consider yourself to be *partly* retired?' The options shown in Table 2 were not mutually exclusive.

Of those who claimed to be partly retired, 45.4% said they worked fewer hours than before, 41.3% said they worked only casually or occasionally, 22.7% said they worked in a less demanding job and 19.0% said they now worked for themselves. Voluntary work or charity work was done by 17.0%.

Many retirements are partly involuntary

Not all retirements are entirely voluntary. HILDA Survey respondents were asked:

> *Thinking back to the time you (partly/completely) retired, was that something you* wanted *to do, or something you felt you were* forced *or* pressured *to do?*

In response to this, 53.1% said it was voluntary, 36.0% said they were forced or pressured, and 10.9% said a bit of both. In the case of those who were pressured, 42.2% said they had received medical advice or had health reasons for retiring or partly retiring and 41.0% said that some pressure or a lot of pressure came from their employer; 16.7% had received some pressure or a lot of pressure from their partner and 9.7% felt some pressure from other family members.

A follow-up question confirmed that ill-health is a major reason for many retirements. Faced with a wide range of options 25.2% gave their own health problems as an important reason and 6.3% mentioned the ill-health of their partner or other family members.

Table 1: Retirement status of Australian residents by gender and age (%)									
Retirement	Men			Women			Total		
status	55–59	60–64	65+	55–59	60–64	65+	55–59	60–64	65+
Completely retired	24.4	50.1	87.8	38.6	67.0	85.4	31.5	58.3	86.5
Partly retired	10.8	17.7	6.7	12.9	12.8	3.5	11.9	15.3	5.0
Not retired	64.7	32.1	5.2	45.1	13.8	1.9	54.9	23.2	3.4
Not relevant—never worked	*0.0	*0.2	*0.3	*3.5	6.4	9.2	*1.7	3.2	5.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes: Population weighted results. * Estimate not reliable.

Satisfaction in retirement

Contrary perhaps to stereotype, it seems that a majority of retirees are well satisfied with their situation. Most said they 'enjoyed being retired' and were 'well adjusted to the changes following retirement'. Once they had retired, they did not feel that people respected them less than before. The financial situation of retired people—or rather their perceptions of the situation—were not unfavourable; 51.9% said they had about the same standard of living as when they were working, 21.0% saw themselves as better off, and 27.1% said they were worse off.

Self-funding in retirement?

A Government policy objective for some years has been to encourage people to be self-funding in retirement. At present about 68% of retired people receive a full old age pension and another 15% get a part-pension. HILDA Survey respondents aged 45 and over who were not yet retired were asked what they expected to be their main source of retirement income. A pension was nominated by 63.7% and 31.9% nominated a private funding source (private superannuation, an annuity, savings or a business income). When asked whether they expected their retirement income to be enough to maintain their current standard of living, 64.4% thought their retirement income would be sufficient, 7.8% thought it would be

Table 2: What do people who are partly retired do? (%)			
In what sense are you partly retired?	*Men*	*Women*	*Total*
Work fewer hours	44.0	46.7	45.4
Work only casually/ occasionally	41.0	41.6	41.3
Work in less demanding job/fewer responsibilities	22.7	22.6	22.7
Work for myself	26.2	12.3	19.0
Do voluntary/charity work	15.8	18.2	17.0
Work more from home	15.4	11.1	13.2
Completely different line of work	10.8	*6.3	8.5

Notes: Population weighted results. Percentages do not sum to 100 because multiple responses were allowed. * Estimate not reliable.

more than enough, and 27.8% thought they would be worse off.

It is important to remember that the HILDA Survey is here reporting perceptions. On retirement and many other matters, people tend to optimism. The HILDA Survey of Wealth in 2002 makes it appear doubtful that over 60% will have sufficient savings to be mainly self-funding when they retire.[1]

Endnote

1 A report on this issue has been submitted to the Department of Family and Community Services and may be published later in 2005.

LIFE SATISFACTION AND WELL-BEING

4

Well-being: Life satisfaction and stress—can they be measured in surveys?

Both the Australian Government Treasury and the Australian Bureau of Statistics have recognised the importance of measuring and reporting on human well-being broadly defined, rather than focusing solely on economic gains and losses. Both organisations have recently adopted a 'well-being framework' for assessing national progress (ABS, 2001; Parkinson, 2004).

Well-being can be defined in many ways, but most observers treat it as at least partly a subjective, psychological concept. We want to know whether people believe and feel that their lives are improving.

This section of the Report is primarily about two psychological variables central to the concept of well-being, namely life satisfaction and stress. Like many previous surveys in psychology, and more recently in economics, the HILDA Survey measures life satisfaction and stress using straightforward-looking questions to be answered on standard survey scales. Clearly, if it can be done, it is valuable to know which sections of the community are relatively satisfied, which are stressed, and why.

However, it might be doubted whether apparently complicated concepts like life satisfaction (loosely happiness) and stress can be measured validly in surveys. The purpose of this introduction is to examine the evidence about whether a reasonable degree of confidence can be placed in measures like those used in the HILDA Survey. In social science terminology this involves asking whether the measures are reasonably 'reliable' and 'valid'.[1] Some standard tests of reliability and validity are presented below.

HILDA Survey questions: Reliability

The annual question about life satisfaction in the HILDA Survey follows a series of satisfaction questions about different aspects or domains of life ('the home you live in', 'your financial situation' etc) and is phrased as follows:

All things considered, how satisfied are you with your life? Again, pick a number between 0 and 10 to indicate how satisfied you are.

On the 0–10 scale, 0 was marked 'totally dissatisfied' and 10 was marked 'totally satisfied'. Stress is measured on similarly straightforward scales. For example, work–family stress is measured by thirteen questions on the lines of:

Because of the requirements of my job, my family time is less enjoyable and more pressured.

These questions are answered on a 1–7 scale where 1 means 'strongly disagree' and 7 means 'strongly agree'.

A first issue is whether answers to questions like these are reliable, *or* whether they are so affected by transient moods that answers vary a lot from day to day, and so have little value as indicators of overall satisfaction with life. At an aggregate level, it is clear that the HILDA Survey data show stable levels of life satisfaction (see Table 1a). Australians gave average ratings of 8.0 on the life satisfaction scale in 2001, 7.9 in 2002 and 8.0 in 2003. There was no significant difference between men and women in their average scores or in stability levels.

But could this aggregate stability mask large changes at the individual level, so that quite different sets of people reported high satisfaction

Table 1a: Aggregate stability—life satisfaction, 2001–2003 (0–10 scale)			
	Men	*Women*	*Total*
Life satisfaction 2001	7.9	8.0	8.0
Life satisfaction 2002	7.9	7.9	7.9
Life satisfaction 2003	7.9	8.0	8.0
Note: Population weighted results.			

Table 1b: Individual level stability—life satisfaction 2001–2002 and 2001–2003 (%)					
	Score did not change	*Changed +/– 1 point*	*Changed +/–2 points*	*Changed more than +/– points*	*Total*
Life satisfaction 2001–2002	37.4	38.4	15.0	9.2	100.0
Life satisfaction 2001–2003	36.5	39.3	15.2	9.0	100.0
Note: Population weighted results.					

levels in 2001, 2002 and 2003? In practice this is not what happened. In 2002, 37.4% of respondents gave exactly the same answer on the 0–10 scale as they had given in 2001, another 38.4% gave answers which were only one point higher or lower and another 15.0% shifted by only +2 or –2 points. This left only 9.2% shifting by over +2 or under –2 (see Table 1b). Furthermore, there was considerable stability between 2001 and 2003, although as common sense would suggest, more people had changed. By 2003, 36.5% had the same scores as in 2001, and only 9.0% had changed by more than +2 or –2. It may be noted that there were no differences in the stability of men's and women's ratings.[2]

The stability of life satisfaction scores indicates that they are not so subject to transient moods as to be unreliable. Similar results are found for the HILDA Survey measures of stress: financial stress, job stress, parenting stress, and work–family stress. The most common way to report on the stability of survey measures is to give year-on-year correlations. Correlations range from +1 to –1, with a correlation of +1 meaning that no-one changed from one year to the next, –1 meaning that scores were reversed, and 0 meaning that scores in the second year bore no relation to scores in the first year. As Table 2 shows, the Pearson correlation between life satisfaction scores in 2001 and 2002 was 0.54, and the correlation for 2001–2003 was 0.52.[3] Comparable over-time correlations are reported for satisfaction with 'your financial situation', for jobs and for health. On the stress side, over-time correlations are given

for financial stress, job stress, parenting stress and work–family stress.

There is a moderately high degree of stability in regard to all these satisfactions and stresses. Correlations are mostly in the range 0.50 to 0.65, which (as we have seen) is consistent with most people remaining at the same or adjacent points on the survey scales. Of course, in a 12 month period, and even more a two-year period, one would expect substantial minorities to experience major changes in their lives and their satisfaction and stress levels to change by large margins. A point also explored in more detail later in the Report, but already clear from Table 2, is that job satisfactions and stresses appear less stable than satisfaction and stress in other domains of life.

Satisfaction and stress: Validity issues

Validity is more difficult to assess than reliability. One widely used external validity test of life satisfaction measures is to ask spouses and other close family members to rate the life satisfaction of respondents who have already rated themselves. This has not been done in the HILDA Survey but has in other life satisfaction surveys. The answers of spouses in particular correlate highly with respondents' own answers (Diener et al, 1999).

The HILDA Survey data provide some evidence of construct validity. One would expect that employed people who reported high levels of life satisfaction would generally report low levels of work–family stress, and vice-versa. If little or no relationship were found between the two measures, there would be reason to doubt the validity of one or both. Table 3 is based on dividing employed respondents into quintiles of (a) life satisfaction and (b) work–family stress. Quintiles are equal size groups of 20%, with quintile 1 (Q1) being the group with the lowest scores.

It can be seen that there is a just a moderate inverse relationship between life satisfaction and work–family stress. For example, we find that of those in the highest quintile of life satisfaction (column Q5 in Table 3), 37.6% were in the lowest quintile of work–family stress, and another 19.6% were in the second lowest quintile. Similarly, of those in the bottom quintile of life satisfaction,

Table 2: Stability of satisfaction and stress: Over-time correlations for 2001–2002 and 2001–2003		
	2001–2002	*2001–2003*
Life satisfaction	0.54	0.52
Financial satisfaction	0.59	0.53
Job satisfaction	0.46	0.37
Health satisfaction	0.65	0.60
Financial stress	0.62	0.58
Parenting stress	0.62	0.58
Work–family stress	0.65	0.59
Note: Population weighted results		

Table 3: Satisfaction and stress are different concepts: quintile (Q) distributions in 2003 (%)					
Work–family stress	*Life satisfaction*				
	Q1	*Q2*	*Q3*	*Q4*	*Q5*
Q1	8.4	14.4	17.9	28.8	37.6
Q2	14.4	19.7	24.5	21.3	19.6
Q3	14.2	23.7	22.3	22.4	15.1
Q4	23.2	22.5	19.8	16.7	15.9
Q5	39.7	19.8	15.5	10.8	11.8
Total	100.0	100.0	100.0	100.0	100.0
Note: Population weighted results.					

39.7% were in the quintile reporting the highest level of work–family stress, and another 23.2% were in the second highest stress quintile. In 2003 the Pearson correlation between life satisfaction and work–family stress was −0.34.

It may seem puzzling that survey respondents are able to give reasonably reliable and valid answers about matters as seemingly complicated as their levels of life satisfaction and stress. One reason is that most people report that they think about such matters every day (Dalkey, 1973). So all they have to do, when asked in a survey, is report what is in short-term memory, or at least it can quickly be retrieved from longer term memory. A basic rule of survey research is that one can only validly ask questions for which answers can be quickly accessed by short-term memory. Psychologists have many times confirmed that judgments about life satisfaction and also about marriage satisfaction, job satisfaction and stress are readily accessible.

Life satisfaction and stress are separate dimensions, not opposites

A point which cannot readily be demonstrated with the HILDA Survey data, but which is important, is that life satisfaction and stress are *not* the same thing. That is, they are not just opposite ends of the same dimension or continuum, with satisfaction being the positive or favourable end and stress being the negative or adverse end. Psychologists who have specialised in research on life satisfaction (or 'subjective well-being') have repeatedly shown that, although life satisfaction and stress are inversely related, there is a significant minority of people who are both quite satisfied with life and quite stressed (anxious), and another significant minority who are dissatisfied but not stressed (Diener et al, 1999). This being so, it is important to do separate analyses of the determinants of life satisfaction and stress, and ask which groups in the community are most and least satisfied, and which groups are most and least stressed.

Issues relating to life satisfaction and stress

It appears, then, that the HILDA Survey measures of life satisfaction and stress meet the usual tests of reliability and validity applied to survey measures of attitudes. This enables us to tackle substantive issues with reasonable confidence in the results. Among the issues which the HILDA Survey data cover are:

- Which groups in society report high levels of life satisfaction and which report moderate or low levels?

- Which groups report high, moderate and low levels of financial stress, job stress, parenting stress and work–family stress?

- How persistent were satisfaction and stress levels during the three years in which the HILDA Survey has so far collected data? That is, was it the case that more or less the same people remain highly satisfied with their lives for all three years, while others were dissatisfied? What was the picture for stress?

- What are the main determinants of life satisfaction and of stress? For example, how important is life satisfaction to have an interesting job, or a happy marriage, a high income, or high wealth holdings?

- How do major life events like getting married and losing one's job affect life satisfaction and stress?

The main topics covered on the *satisfaction* side are: life satisfaction, satisfaction with 'your financial situation', job satisfaction, satisfaction with one's partner and family life, satisfaction with health and with 'the amount of free time you have'. In regard to stress, the HILDA Survey and this volume deal briefly with financial stress, job stress, parenting stress and work–family stress.

Endnotes

1   Reliability means consistency and repeatability (e.g. test-retest reliability; e.g. do survey respondents give approximately the same answers if the same questions are repeated 4 weeks apart?). Validity issues relate to whether one is measuring the intended concept and not something else. In practice, validity is sometimes assessed by examining whether a proposed measure of a concept can be externally validated; that is by using evidence from alternative sources ('external validity)'. Another test is whether the measure correlates in expected ways with accepted measures of related constructs ('construct validity').

2   The Pearson correlation between men's 2001 and 2003 ratings was 0.52, and for women the correlation was 0.51.

3   It has become usual in the life satisfaction literature to report Pearson correlations, although strictly speaking Pearson correlations require interval or ratio scale measurement and, plainly, a 0–10 scale is only an ordinal scale.

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Life satisfaction and satisfaction with one's main relationship

This article focuses on overall life satisfaction and the specific aspect of life which, for many, has the greatest impact on life satisfaction, namely satisfaction with one's main relationship.

Table 1 reports on the life satisfaction of Australians in 2001–2003. As noted in the previous article, satisfaction is measured on a 0 to 10 scale, with higher scores indicating higher levels of satisfaction.

It is clear that, for the population as a whole, life satisfaction has been unchanged over the last three years, with average levels remaining at about eight on the 0–10 scale. Men and women in the 35 to 44 age group had the lowest average life satisfaction (7.7 out of 10), while older people reported the highest levels, with an average of around 8.5 each year.

Aspects of life satisfaction

As well as being asked about overall life satisfaction, respondents were asked to rate other aspects of their life, such as satisfaction with the home they live in, their financial situation and their employment opportunities. Table 2 gives the results.

The aspects of life people felt most satisfied with were the 'local' ones: their own homes, their neighbourhood and how safe they felt. (However, slightly contradicting this last result, satisfaction was relatively low with 'feeling part of your local community'.) The aspects which occasioned least satisfaction (although average scores were still over five on the 0–10 scale) were 'your financial situation' and 'the amount of free time you have'.

There were hardly any differences in the satisfaction levels of men and women. Also, average scores for most aspects of life scarcely changed in these three years. The largest change in fact was in satisfaction with 'your financial situation', which increased from 6.1 in 2001 and 2002 to 6.4 in 2003.

Does low satisfaction persist?

If people are dissatisfied with things like their home, their community, their financial situation, or life in general does the dissatisfaction persist for several years, or are problems usually solved within a year? Table 3 addresses this issue.

Nearly half the people (47.9%) who were interviewed reported high levels of overall life satisfaction (8 or more out of 10) in all three interviews. While

Table 1: Satisfaction by gender and age, 2001–2003 (means)

Age group	2001			2002			2003		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
15–24	8.0	8.0	8.0	7.9	8.0	7.9	8.1	8.0	8.1
25–34	7.7	7.8	7.7	7.6	7.7	7.7	7.8	7.9	7.9
35–44	7.6	7.8	7.7	7.5	7.7	7.6	7.6	7.8	7.7
45–54	7.9	8.0	7.9	7.7	7.8	7.7	7.7	7.8	7.8
55–64	8.0	8.1	8.1	7.9	8.1	8.0	8.0	8.1	8.0
65+	8.4	8.5	8.5	8.4	8.4	8.4	8.4	8.6	8.5
Total	7.9	8.0	7.9	7.8	7.9	7.9	7.9	8.0	8.0

Note: Population weighted results.

Table 2: Aspects of life satisfaction (means)

Satisfaction with …	2001			2002			2003		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
The home in which you live	8.0	8.1	8.1	8.0	8.0	8.0	8.0	8.0	8.0
Employment opportunities	6.7	6.7	6.7	6.8	6.7	6.8	7.0	6.8	6.9
Your financial situation	6.1	6.2	6.1	6.0	6.1	6.1	6.4	6.4	6.4
How safe you feel	8.0	7.8	7.9	8.0	7.8	7.9	8.1	8.0	8.0
Feeling part of local community	6.6	6.7	6.6	6.6	6.7	6.6	6.6	6.8	6.7
Your health	7.4	7.4	7.4	7.4	7.3	7.4	7.5	7.4	7.4
Your neighbourhood	8.0	8.0	8.0	7.9	7.9	7.9	7.9	8.0	8.0
Amount of free time you have	6.7	6.7	6.7	6.6	6.6	6.6	6.7	6.6	6.7

Note: Population weighted results.

the proportion of people reporting levels of life satisfaction of less than 5 out of 10 in any one year was around 7%, the proportion who reported low levels of life satisfaction in three consecutive years was only 0.3%. Of those interviewed in all three years 93% did not report a life satisfaction level under 5 in any wave, 5.2% reported low life satisfaction in one out of the three years, and only 1.5% had low life satisfaction in two of the three years.

So, in general, the HILDA Survey data indicate that low levels of life satisfaction do not persist for several years. This also appears to be true of some specific aspects of life. Table 3 shows that problems causing dissatisfaction with 'the home you live in', 'your neighbourhood', and 'how safe you feel' rarely persist for a long period of time, with less than 1% of respondents reporting dissatisfaction with these things in all three years.

Table 3: Years of low life satisfaction (%)

	Number of years of low satisfaction			
	0	*1*	*2*	*3*
Men				
The home in which you live	87.5	9.5	2.2	0.8
Employment opportunities	73.5	15.8	7.4	3.3
Your financial situation	63.5	17.8	10.7	7.9
How safe you feel	89.8	7.8	1.7	0.6
Feeling part of local community	69.6	17.4	9.3	3.7
Your health	84.2	8.3	4.5	3.0
Your neighbourhood	89.8	7.6	2.0	0.7
Amount of free time you have	61.5	21.0	10.8	6.8
Overall life satisfaction	92.5	5.5	1.6	*0.3
Women				
The home in which you live	86.3	10.1	2.9	0.7
Employment opportunities	72.1	17.7	6.6	3.6
Your financial situation	63.7	18.6	10.6	7.1
How safe you feel	86.3	10.1	2.7	0.8
Feeling part of local community	70.7	17.9	8.0	3.4
Your health	83.2	9.6	4.2	3.0
Your neighbourhood	88.4	8.2	2.7	0.7
Amount of free time you have	59.6	20.7	12.5	7.1
Overall life satisfaction	93.4	4.8	1.4	*0.4
Total				
The home in which you live	86.9	9.8	2.6	0.7
Employment opportunities	72.8	16.7	7.0	3.5
Your financial situation	63.6	18.2	10.7	7.5
How safe you feel	88.1	8.9	2.3	0.7
Feeling part of local community	70.2	17.7	8.7	3.5
Your health	83.7	8.9	4.4	3.0
Your neighbourhood	89.1	7.9	2.4	0.7
Amount of free time you have	60.5	20.9	11.7	7.0
Overall life satisfaction	93.0	5.2	1.5	0.3

Notes: Population weighted results. * Estimate not reliable.

Table 4: Satisfaction with relationship with partner by gender and age (means)

Age	2001			2002			2003		
group	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*
15–24	8.5	8.3	8.3	8.1	8.6	8.3	8.0	8.2	8.1
25–34	8.5	8.4	8.4	8.4	8.4	8.4	8.3	8.3	8.3
35–44	8.3	8.1	8.2	8.1	8.0	8.0	8.0	7.7	7.8
45–54	8.6	8.3	8.4	8.3	8.1	8.2	8.1	7.9	8.0
55–64	9.0	8.6	8.8	9.0	8.5	8.7	8.7	8.3	8.5
65+	9.2	9.1	9.2	9.1	9.1	9.1	8.9	8.8	8.9
Total	8.6	8.4	8.5	8.5	8.3	8.4	8.3	8.1	8.2

Note: Population weighted results.

On the other hand, problems relating to dissatisfaction with 'your financial situation' and 'the amount of free time you have' seem to be more difficult to solve. Of the respondents reporting dissatisfaction with their financial situation, 18.2% of respondents reported dissatisfaction in one of three years, and 7.5% were dissatisfied in all three years. Lack of free time is also an ongoing problem, with 20.9% of people saying they were dissatisfied in one year and 7.0% in all three years.

Satisfaction with one's main relationship

Respondents were asked to rate their satisfaction with their relationship with their partner on the same 0 to 10 scale (Table 4).

Most people reported high levels of satisfaction with their relationship, with at least 75% each year

rating it eight or higher on the scale. Men aged 35 and upwards generally reported slightly higher levels of relationship satisfaction than women. Among the under 35s there were no consistent gender differences.

Relationship satisfaction does *not* follow a linear pattern through life. It is relatively high among the under 35s, lowest (although still high on average) among those 35–54, and highest among the over 65s. In other words, it seems to be lowest in the main child-rearing years, and highest after children have left home. It would clearly also be the case that many unsatisfactory marriages have split up by the time people are older, leaving mainly satisfactory ones of the kind recorded by older age groups in Table 4.

Table 5: Relationship satisfaction by age of youngest child (means)

Age of youngest child in the household	2001			2002			2003		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Less than 5 years	8.5	8.1	8.3	8.4	8.2	8.3	8.4	8.1	8.2
5 to 9 years	8.4	8.0	8.2	8.0	7.8	7.9	8.2	7.7	7.9
10 to 14 years	8.4	8.0	8.2	8.4	8.2	8.3	8.1	7.6	7.8
No children under 15	8.7	8.6	8.7	8.6	8.5	8.6	8.4	8.3	8.3
Total	8.6	8.4	8.5	8.5	8.4	8.4	8.3	8.1	8.2

Note: Population weighted results.

Table 6: Relationship issues, 2003 (%)

	Scale				
	1	2	3	4	5
How good is your relationship compared to most? (1 = Poor, 5 = Excellent)					
Men	1.3	1.8	10.1	36.6	50.1
Women	1.6	3.0	13.1	37.3	45.0
How often do you wish that you had not married/got into this relationship? (1 = Never, 5 = Very often)					
Men	68.2	21.5	6.0	3.0	1.3
Women	61.7	23.4	8.4	4.5	2.0
To what extent has your relationship met your original expectations? (1 = Hardly at all, 5 = Completely)					
Men	1.7	3.4	13.6	41.4	39.9
Women	2.7	6.3	17.6	41.0	32.4
How much do you love your spouse/partner? (1 = Not much, 5 = Very, Very Much)					
Men	0.7	0.9	5.2	21.3	71.9
Women	1.3	1.8	6.8	21.9	68.2
How many problems are there in your relationship? (1 = Not many, 5 = Very many)					
Men	60.7	18.0	12.8	6.6	1.9
Women	56.8	16.6	15.1	8.8	2.8
How well does your spouse/partner meet your needs? (1 = Poor, 5 = Excellent)					
Men	1.4	3.2	12.1	38.4	44.7
Women	2.7	5.6	16.2	40.7	34.8

Note: Population weighted results.

Impact of children on satisfaction with main relationship

Table 5 explores the impact of children on relationships in a little more detail. The evidence is that partners with no children under 15 in their household report the highest levels of relationship satisfaction. Women with children between 5 and 14 years old reported the lowest levels of satisfaction, although average scores are still around 8 out of 10.

In 2003, a new set of questions about relationships was added to the HILDA Survey self-completion questionnaire. The results in Table 6 strongly confirm that men see their relationships in a more positive light than women.

Although most women, as well as men, gave answers indicating that their relationship was in good shape, the women were considerably more likely than the men to report that their relationship had not met their original expectations and did not fully meet their needs.

Relationship satisfaction over time

Finally, Table 7 shows the link between how long people have been together and their level of satisfaction with their relationship. The duration of relationships is calculated from the time couples started living together, so for married people it is the time they lived together before marriage, plus the duration of the marriage.

It is clear that relationships which have recently started are not felt to be as satisfying as well established relationships. However, with the current data it is *not* possible to determine the extent to which the link between the duration of relationships and satisfaction is due to people becoming closer as time passes, *or* due to unsatisfactory relationships ending and, in general, being replaced by more satisfactory ones. Both factors may be at work. What can be said is that the relationship satisfaction is lowest for people who have lived together for less than a year, particularly men. It is highest for those who have lived with their spouse or partner for 20 years or more.

Table 7: Relationship satisfaction by time living with partner/spouse, 0–10 scale (means)			
Duration of current relationship	Men	Women	Total
Less than 1 year	7.0	7.7	7.3
1 to 4 years	8.3	8.1	8.2
5 to 9 years	8.4	8.1	8.3
10 to 19 years	8.3	8.1	8.2
20+ years	8.8	8.4	8.6
Total	8.5	8.2	8.4

Note: Population weighted results.

Does money buy happiness? No, but wealth matters more than income

The Easterlin Paradox

Common sense might say that people who are better off financially are almost bound to be happier. But research has never strongly confirmed this. The accepted view in both psychology and economics is that economic circumstances have only a small although statistically significant effect on happiness. Economists usually quote Richard A. Easterlin's famous 1974 paper, 'Does economic growth improve the human lot?' The Easterlin Paradox states that better off people are slightly more satisfied with their lives than less well off people, but only for status reasons. That is, they get some satisfaction from feeling *relatively* better off than their fellow citizens. However, economic growth does *not* increase human happiness to the extent that it has the effect of making everyone absolutely better off and no-one relatively better off. To put it another way, the Easterlin Paradox claims that people are no happier if their living standards improve, but they are still only keeping up with the Jones's. Easterlin cited American surveys of happiness over the last fifty years to show that, while economic growth has proceeded apace, average happiness levels have remained unchanged.

Why include wealth, as well as income?

An important limitation is that Easterlin's results are entirely based on the relationship between income and self-reported happiness or life satisfaction. Ideally, what is needed is a more detailed understanding of the relationship between happiness and *material standard of living*. Income is certainly not the only, and might not be the best indicator of material standard of living. Wealth (and consumption) may also be important. Wealth confers economic security; a capacity to tide over bad times, at least for a while. It may also be the best available indicator of what economists call 'permanent' or long term income.

Wealth matters more to life satisfaction

The HILDA Survey wealth data, collected in 2002, suggest that wealth actually matter more to life satisfaction than income. On the horizontal axis of Figure 1, households have been divided into

quintiles (20% groups) in terms of (a) income and (b) wealth (net worth; assets minus debts). The vertical axis shows the average (mean) life satisfaction score of each income quintile and each wealth quintile. Life satisfaction is measured on a 0 to 10 scale where zero means that a person is 'totally dissatisfied' with his/her life and 10 means 'totally satisfied'.

Life satisfaction clearly rises more strongly with household wealth than it does with income. The association between life satisfaction and income is quite flat. It should be noted that the finding that wealth apparently matters more to life satisfaction than income still holds when multivariate statistical analysis is undertaken, holding constant variables like gender, age, education, marital status and employment status, which also affect life satisfaction. Further, results very similar to these Australian results have been found for other Western countries (Headey et al, 2004).

Impact of wealth on satisfaction with all material aspects of life

Household wealth also appears to have significant effects on satisfaction with specific aspects of life. Table 1 gives a range of satisfaction scores, with respondents again grouped into quintiles of net worth.

Net worth is positively related to all these satisfaction scores, but the ones most strongly affected are those most closely related to material standard of living. People in wealthier households are substantially more satisfied with their homes, their employment opportunities and their financial situation than people in poorer households. The smallest difference between wealthier and poorer people relates to 'the amount of free time you have'. Doubtless many well-off people feel time pressured.

Conclusion

It seems clear that wealth and income combined have a greater impact on life satisfaction than income by itself. However, it remains true that the

Figure 1: Life satisfaction by household income and wealth (net worth) (means)

Note: Population weighted results.

impact is quite modest. Statistical extrapolations indicate that very large increases in wealth and income would be required to produce the same increases in life satisfaction as are typically recorded by people who get married, or who find a job after being unemployed (Headey et al, 2004). Furthermore, it may be that only relative increases in wealth, like relative increases in income, produce happiness gains.

References

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Headey, B. W., Muffels, R. J. A. and Wooden, M., 2004, 'Money does not buy happiness—or does it? A reassessment based on the combined effects of wealth, income and consumption', 6th Annual Conference of the German Socio-Economic Panel Study Users.

Table 1: Life satisfaction by household net worth, 2002 (means)

Satisfaction with …	Quintile of household net worth					
	< 20	20–39	40–59	60–79	80–100	Total
The home in which you live	7.3	7.7	8.2	8.2	8.4	8.0
Employment opportunities	6.1	6.7	6.8	7.0	7.3	6.8
Your financial situation	4.9	5.7	6.1	6.5	7.2	6.1
How safe you feel	7.6	7.8	8.0	8.0	8.2	7.9
Feeling part of local community	6.1	6.4	6.8	6.9	7.0	6.6
Your health	7.1	7.2	7.3	7.5	7.7	7.4
Your neighbourhood	7.5	7.7	8.1	8.1	8.2	7.9
Amount of free time you have	6.5	6.4	6.8	6.7	6.8	6.6

Note: Population weighted results.

Who lacks adequate social capital and how persistent is the problem?

An increasingly common view in both Government and the social sciences is that *social capital* is a vital resource which needs to be assessed along with human capital (education, cognitive skills) and financial capital (assets, debts) in considering the adequacy of the capabilities and skills which individuals have or lack for living and working effectively in a modern society and economy. The Harvard University political scientist, Robert D. Putnam, has done much to alert Governments and social scientists to the importance of social capital (Putnam, 2000). In Australia, the Centre for Mental Health Research at the Australian National University has raised awareness of the benefits of adequate social capital and social networks (Henderson et al, 1981).

Most measures of social capital are essentially measures of social networks, although measures of neighbourhood quality and safety are sometimes also included. One's social networks range from intimate attachments to spouse and family, through friendship and social support networks, to acquaintances (including neighbours) whom one may be able to rely on for relatively minor assistance like borrowing household items and keeping an eye on the house while one is away on holiday (Henderson et al, 1981).

In this article the focus is on analyzing deficits in social capital, and assessing what proportion of the community, and of specific groups, appear to lack adequate social capital.

The HILDA Survey assesses social capital with three sets of measures intended to capture different aspects of the concept. The first set of mea-

sures—'lives alone (and no partner)', 'not satisfied with partner', and 'not satisfied with other relatives'—are intended to measure the availability or lack of availability of close, intimate and live-in relationships. The second set of measures—the social networks index and the neighbourliness index—assesses availability of friendship and social support. Finally, an index we labeled 'run-down neighbourhood' assesses the extent to which the neighbourhoods in which respondents live are perceived by them as having high levels of noise and derelict or run-down conditions.

Availability of close/intimate and live-in relationships

The 'lives alone' (and no partner) measure is intended to identify individuals who potentially lack an intimate relationship because they live on their own and do not have a partner. The 'not satisfied with partner' measure is based on a question asking 'How satisfied are you with your relationship with your partner?' This question was put to all married and partnered respondents and was answered on a 0 to 10 scale where 0 meant 'totally dissatisfied' and 10 meant 'totally satisfied'. Respondents who answered 5 or less on the scale were classified as 'not satisfied'. The index measuring 'not satisfied with other relatives' is based on responses to seven other questions, all on the same 0 to 10 scale, about satisfaction with relationships with children, parents etc. Like the previous measure, this one is split so that those whose average rating on the seven questions was 5 or less are recorded as 'not satisfied'.

Table 1 gives results for the total population, then separately for men and women. Results are also given for a number of groups who, it was hypothesized, might be at higher than average risk of lacking close relationships. These groups were the elderly (aged 65 and over), single mothers, single (and never married) individuals, separated and divorced people, disabled people[1], and those born in non-English speaking (NESB) countries.

In 2003 just under 11% of the population were both living alone and had no current partner. Another 11.4% were dissatisfied with their partner. These two groups of people appear most at risk of lacking adequate close relationships. It is important to acknowledge, however, that the HILDA Survey measures are just indicators and that it is certainly possible that some of the apparently 'at risk' individuals, if directly asked, might have reported that they had one or more close relationships and that these were enough to meet their emotional needs.

Table 1: Availability of close, intimate and live-in relationships, 2003 (%)			
	Lives alone	Not satisfied with partner	Not satisfied with other relatives
Men	10.4	10.3	10.2
Women	11.2	12.5	10.4
Elderly	27.5	7.8	6.2
Single mothers	n.a.	n.a.	18.8
Singles	26.7	n.a.	22.9
Separated/divorced	48.4	n.a.	24.2
Disabled	19.6	11.5	13.0
NESB	10.8	13.9	8.9
Total	10.8	11.4	10.6
Note: Population weighted results.			

The evidence about lack of satisfaction with 'other relatives' (parents, children etc) may be regarded as being of particular importance for those groups in the community who live alone, or are unpartnered, or both. Five groups stand out in this regard. Elderly people, single mothers, singles,[2] separated or divorced individuals and disabled people all have much higher than average rates of dissatisfaction with 'other relatives'. The results in Table 1 indicate that single mothers, singles and separated/divorced people are especially prone not to get on well with their relatives.[3]

It is also worth recording that there are only very weak negative correlations between the HILDA Survey measures of social capital and measures of income and occupational status.[4]

Social support networks and neighbourhood quality

The HILDA Survey social networks index comprises ten items asking 'how much support you get from other people?' Typical items are, 'I often need help from other people but can't get it' and 'there is someone who can cheer me up when I am down'. These items are answered on a 1 to 7 scale where 1 means 'strongly disagree' and 7 means 'strongly agree'. Also included is a separate neighbourliness index which comprises two questions: 'how common are the following things in your local neighbourhood—neighbours helping each other out?' and 'neighbours doing things together? These items are answered on a 5 point scale running from 'never happens' to 'very common'. Finally, we include a 'run-down neighbourhood' index based on eight questions asked on the same 1–7 scale. Sample items are: 'people being hostile and aggressive', 'vandalism and deliberate damage to property' and 'homes and gardens in bad condition'.

For presentation in Table 2, all three indices have been split at their mid-point, so that those whose answers indicate that they have an inadequate or poor social network, those who have unhelpful neighbours, and those who live in a run-down neighbourhood are distinguished from those whose circumstances are more favourable.

More men than women (11.8% compared to 9.8%) report inadequate social networks; a result which replicates much previous research indicating that women are more effective networkers (Rubin, 1983). However, although the difference is statistically significant, it is not substantively large.[5] More serious is the finding that single mothers, separated /divorced people and disabled people report poor networks; recall that the same groups lacked close relationships.[6] However, two other potentially 'at risk' groups—the elderly and NESB respondents— report social networks of the same quality as the rest of the population.

Over a third of respondents did *not* perceive their neighbours as helpful or as 'doing things together'. Given that far fewer report weak social networks, it follows that many people are able to find adequate networks without having to rely on people in the local neighbourhood. Plainly, the development of rapid transport and telecommunications mean that people are no longer as dependent on locals as they used to be.

Table 2 indicates that the large majority of Australians do not see their neighbourhood as run-down or noisy. However, single mothers, singles, separated/divorced people and the disabled are more likely than others to perceive neighbourhood problems.

The persistence of low levels of social capital—do the same people report low levels of capital in 2001, 2002 and 2003?

The results in Tables 1 and 2 relate just to 2003. But how many of the respondents who reported deficits in social capital in that year reported the same problems in 2001 and 2002 as well? Clearly, medium term deficits (i.e. three year deficits) are more serious—they imply a greater loss of well-being—than deficits perceived at just one point in time. Table 3 covers all six measures of social capital and shows how many respondents reported particular deficits in all three years.

It can be seen that the two most persistent deficits are 'living alone' and 'unhelpful neighbours'. Fairly high proportions of the elderly, singles, separated/ divorced people and the disabled lived on their own for all three years, and around a fifth of respondents consistently saw their neighbours as unhelpful and rarely getting together. The other deficits prove to be quite transient—perhaps surprisingly so—for most of the population. For example, about 9% said they were not satisfied with their partner in 2001 but only 2.5% also reported dissatisfaction in 2002 and 2003. Only a small proportion of these individuals changed partners between 2001 and 2003; the

Table 2: Social support and neighbourhood quality, 2003 (%)			
	Poor social network	Unhelpful neighbours	Run-down neighbourhood
Men	11.8	35.9	4.0
Women	9.8	35.0	4.1
Elderly	10.8	38.7	2.4
Single mothers	15.3	35.1	6.2
Singles	11.1	31.2	5.6
Separated/divorced	18.6	31.7	5.6
Disabled	15.3	36.4	5.1
NESB	11.5	27.2	3.9
Total	10.8	34.1	4.1

Note: Population weighted results.

Table 3: Social capital deficits—percentages experiencing deficits for 3 years running, 2001–2003 (%)						
	Lives alone	Not satisfied with partner	Not satisfied with other relatives	Poor social network	Unhelpful neighbours	Run-down neighbourhood
Men	7.3	2.0	2.7	2.7	18.8	0.9
Women	9.5	2.9	2.4	2.3	21.3	1.0
Elderly	23.8	1.6	1.5	2.1	23.9	0.8
Single mothers	n.a.	n.a.	5.5	4.2	19.1	1.3
Singles	15.1	n.a.	6.2	2.8	14.6	1.2
Separated/divorced	34.5	n.a.	6.0	6.5	16.8	1.4
Disabled	15.8	2.7	3.3	4.0	21.2	1.6
NESB	7.0	3.5	1.3	2.3	11.0	*0.7
Total	8.4	2.5	2.5	2.5	20.1	1.0

Notes: Population weighted results. * Estimate not reliable.

large majority solved or no longer perceived a problem. The inference that most people solve their problems also applies in regard to the evidence about dissatisfaction with 'other relatives', poor social networks and run-down neighbourhoods.

There are, however, exceptions to this generalisation. Specifically, nearly 4% of single mothers and also of disabled people, and 6.5% of divorced/separated people, reported poor social networks in all three years. Overall, the evidence indicates that these are the three groups in Australia most lacking in social capital.[7]

Endnotes

1 Defined as people with a long-term health condition which has lasted or is likely to last for 6 months or more.

2 It was hypothesized that young singles might be disproportionately dissatisfied with 'other relatives'. In fact, however, 20.2% of under 25s reported dissatisfaction with other relatives, compared with 27.6% of those 25 and over.

3 The number of single fathers in the sample in 2003 (N = 79) is too small for results to be statistically reliable. However, if one were to accept the evidence, it appears that single fathers are about as dissatisfied with 'other relatives' as single mothers, 18.1% reported low satisfaction.

4 Correlations are in the range 0 to –0.06. The only exception is the correlation of –0.10 between (equivalent) income and living alone (unpartnered).

5 Statistically significant at the 1% level.

6 Poor networks were reported by 14.5% of single fathers; a similar result as for single mothers. However, single fathers were less likely than average to report 'unhelpful neighbours' (29.1%) and living in a 'run-down neighbourhood' (2.0%). Recall, however, that the sample is too small (N = 79) for results to be reliable.

7 As in other articles, we have not reported on indigenous Australians as a separate group, because of concerns about the adequacy of the HILDA Survey sample.

References

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Putnam, R. D., 2000, *Bowling Alone: The Collapse and Revival of American Community*, Simon & Schuster, New York.

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Physical and mental health

Every year the HILDA Survey respondents are asked to complete the SF-36 Health Survey (Ware et al, 2000). This 36 item questionnaire is intended to measure health outcomes (functioning and well-being) 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. It is widely regarded as one of the most valid instrument of its type available. However, it should be understood that, because answers are provided by the public and not by practitioners, the SF-36 cannot be used to diagnose specific physical or mental health problems. Validation tests have shown that SF-36 scores correlate highly with practitioner assessments, but such correlations do *not* mean that physical and mental health problems can be assumed for individuals with low scores. Another way of making this point is that the SF-36 works well as a screening instrument, but specific assessments by a medical practitioner are required for diagnoses to be made.

The Australian Bureau of Statistics has conducted both general health and mental health studies. Of particular relevance to the HILDA Survey results are the National Survey of Mental Health and Wellbeing of Adults conducted in 1997 and the National Health Survey of 2001 (ABS, 1997; ABS, 2001). The former included a short version—the SF-12—of the mental health scale in the SF-36.

So far as we know, there are no established norms for the SF-36 for Australian respondents, although a small sample validation study of an Australian version of the instrument has been done in NSW (Sanson-Fisher and Perkins, 1998). The HILDA Survey results for the general health and mental health scales used in this article are roughly in line with American norms. Mean scores are very close indeed (Ware et al, 2000).[1] However, the HILDA Survey mental health scale scores have a higher standard deviation than the American scores.

General health scale

General health and mental health scores ranging from 0–100 (0 means poor health and well-being,

and 100 means good health and well-being) are calculated on the basis of client responses. Table 1 provides an overview of HILDA Survey results on general health and Table 2 deals with mental health.

Men's general health declined in a straightforward linear way with age.[2] Scores decreased from 76 (on the 0–100 scale) for men aged between 15 and 24 down to 59 for men over the age of 65. For women over 25, general health scores also declined with age, but young women between 15 and 24 had lower scores than those aged 25 to 44. Women in the former group were alone in having lower scores than men of the same age.

Mental health

Table 2 shows that, on average, mental health scores were higher for men and women aged over 65 than for younger people, and that men in all age groups had higher mental health scores then women, with women aged between 15 and 24 having the lowest scores of all. Unlike general health, the correlation between mental health and age is positive (for both men and women) not negative. In other words, mental health improves a little with age, in part because people with poor mental health die younger.[3]

Income and health

How is income related to health? In Table 3 respondents have been grouped into quintiles (equal 20% groupings) of equivalised disposable income.[4]

It is clear that men and women in households with the lowest incomes rate lower in terms of general health. In 2003, men in the lowest household income quintile had average health scores of 61.1, while men in households with the highest household incomes had scores of 73.3. For women, the average score for general health in 2003 was 62.8 in low income households, compared to 75.0 for women in households with the highest quintile of incomes. In general, people in higher income households have better access to medical services (and are able to afford private health insurance)

Table 1: General health—by gender and age, 0–100 scale (means)						
Age	2001		2002		2003	
group	Men	Women	Men	Women	Men	Women
15–24	76.0	71.1	75.7	71.5	76.3	70.1
25–34	73.9	74.8	73.5	74.5	73.1	74.5
35–44	71.5	72.2	70.7	72.9	71.2	72.3
45–54	68.3	69.0	67.3	67.7	66.7	66.9
55–64	62.6	65.0	60.8	64.9	62.2	64.2
65+	58.7	61.6	59.3	61.6	59.8	61.4
Total	69.5	69.6	68.8	69.4	69.0	68.8
Note: Population weighted results.						

and this may lead to better health. However, it may also be the case that causation partly runs the other way round; that is, having better health contributes to a capacity to earn more income.

Table 4 relates to mental health, which is also lowest for men and women in the lowest quintile of income. However, the overall correlation between mental health and income is quite weak.[5]

Employment status and health

People who were employed, either full-time or part-time, had higher scores for general health and mental health than unemployed people, as shown in Tables 5 and 6. Those who were not in the labour force and not marginally attached had the lowest averages for general health. (In these tables analysis is confined to people of prime working age, i.e. 25 to 54.)

General and mental health were lower for those who were unemployed than for people who had a job, as Tables 5 and 6 clearly show. A plausible hypothesis derived from this result is that the longer one remains unemployed, the worse is the effect on health (see Table 7).

Table 7 shows that for men, being unemployed for three months or more does have an impact. The average general health score for men who had been unemployed for less than three months was 66.5, but for men who were unemployed for a period longer than three months but less than 6 months it was considerably lower at 60.9. Then the average score for men who had been unemployed over a year was 41.0. Men's mental health scores also declined in a linear way with length of unemployment. Among women, differences in general health by length of unemployment were less strong but still discernible.[6]

It should be noted that the causal relationship between unemployment and health may not be all in the same direction. It may be that good health

Table 2: Mental health—by gender and age, 0–100 scale (means)						
Age	2001		2002		2003	
group	Men	Women	Men	Women	Men	Women
15–24	73.7	69.6	75.3	71.0	75.1	69.7
25–34	74.4	72.1	74.7	72.0	75.3	73.5
35–44	73.4	71.5	74.6	72.4	74.5	72.6
45–54	75.6	73.5	75.5	72.4	75.2	73.0
55–64	75.2	73.7	75.6	74.7	75.5	74.7
65+	76.9	75.8	77.5	75.3	77.9	75.3
Total	74.8	72.6	75.4	72.8	75.5	73.0
Note: Population weighted results.						

Table 3: General health—by gender and quintile of equivalised household disposable income (means)						
Quintile of	2001		2002		2003	
equivalised income	Men	Women	Men	Women	Men	Women
1	60.4	62.7	60.2	63.9	61.1	62.8
2	67.5	67.7	67.1	67.7	66.9	66.6
3	70.5	71.3	69.7	70.1	70.1	69.5
4	73.2	73.0	71.2	72.1	71.1	71.5
5	73.1	74.6	74.0	75.0	73.3	75.0
Total	69.4	69.7	68.9	69.6	68.9	68.9
Note: Population weighted results.						

Table 4: Mental health—by gender and quintile of equivalised household disposable income (means)						
Quintile of equivalised	2001		2002		2003	
household income	Men	Women	Men	Women	Men	Women
1	70.5	69.7	71.4	70.8	72.0	69.7
2	74.5	72.4	75.4	71.2	74.7	72.7
3	74.7	71.8	76.2	73.3	76.2	73.4
4	76.1	73.9	75.8	73.6	76.3	74.6
5	76.8	75.0	77.8	75.7	77.6	76.7
Total	74.8	72.6	75.5	72.8	75.5	73.2
Note: Population weighted results.						

makes one more likely to be employed (the so-called 'healthy worker effect') and poor health makes unemployment more likely, as well as vice-versa.[7] This issue has been the topic of much research, the best of it using panel data. On balance, the evidence indicates that protracted unemployment, or repeated spells of unemployment, mainly causes poor physical and mental health, rather than the other way round (Saunders and Taylor, 2002[8]). People who are unemployed for one spell often fully recover, but long term or repeated unemployment has a 'scarring effect' (Lucas et al, 2004).

Occupation and health

It is widely thought that some occupations are more stressful than others, so one might expect to find significant differences in the health scores of people in different occupational groups (see Table 8).

Table 8 shows that there was in fact little variation in general health scores among occupations, with the average health scores for all occupations falling within the range of 69.1 to 78.0 out of 100. In general, men who were intermediate clerical workers or tradespersons had the highest health scores, while general health was lower for men who were labourers or production and transport workers. For women, professionals were the healthiest, and labourers had the lowest average scores. Table 9 gives parallel results for mental health.

The variation in mental health scores between occupations was also very small. Managers and administrators had average scores that were slightly higher than average, while elementary clerical workers and labourers had lower averages.

Table 5: General health—by gender and employment status, age 25–54 (means)

Employment status	2001		2002		2003	
	Men	Women	Men	Women	Men	Women
Employed full-time	73.2	74.2	73.0	74.2	73.1	74.6
Employed part-time	72.2	74.2	71.9	73.0	66.6	73.6
Unemployed, looking for full-time work	71.4	72.2	67.3	66.9	70.7	65.7
Unemployed, looking for part-time work	58.1	65.5	456.8	65.7	48.2	68.2
Not in the labour force, marginally attached	65.1	69.5	58.3	68.1	57.2	66.4
Not in the labour force, not marginally attached	46.4	66.0	42.7	66.9	44.3	65.5
Total	71.3	72.1	70.7	71.7	70.4	71.4

Note: Population weighted results.

Table 6: Mental health—by gender and employment status, age 25–54 (means)

Employment status	2001		2002		2003	
	Men	Women	Men	Women	Men	Women
Employed full-time	73.2	74.2	76.6	73.7	77.1	74.7
Employed part-time	72.2	74.2	74.2	73.6	76.2	74.0
Unemployed, looking for full-time work	71.4	72.2	67.4	68.8	66.3	64.6
Unemployed, looking for part-time work	58.1	65.5	60.8	65.6	72.2	68.3
Not in the labour force, marginally attached	65.1	69.5	65.8	67.0	71.0	68.2
Not in the labour force, not marginally attached	46.4	66.0	57.8	69.7	72.7	72.6
Total	71.3	72.1	74.8	72.1	75.4	72.9

Note: Population weighted results.

Table 7: General health and mental health—by length of time unemployed, 2003 (means)

Time unemployed	General health			Mental health		
	Men	Women	Total	Men	Women	Total
Less than 3 months	66.5	59.9	62.3	62.3	59.2	60.5
3 months to less than 6 months	60.9	62.0	60.6	60.6	55.3	57.2
6 months to less than 1 year	62.1	58.0	60.0	60.0	59.6	59.1
1 year or more	41.0	*55.5	46.0	46.0	*59.8	52.2
Total	61.0	59.6	60.0	60.0	58.6	58.7

Notes: Population weighted results. * Estimate not reliable.

Table 8: General health—by gender and occupation (means)

Occupation	2001		2002		2003	
	Men	Women	Men	Women	Men	Women
Managers and administrators	74.2	78.0	74.3	77.0	73.2	73.4
Professionals	73.2	74.9	72.5	75.3	73.5	74.6
Associate professionals	73.7	74.6	73.0	75.0	72.7	73.4
Tradespersons and related workers	74.1	73.8	74.1	71.8	73.7	71.1
Advanced clerical and service workers	70.0	72.7	78.4	74.1	73.0	72.7
Intermediate clerical workers	74.5	72.9	74.5	72.6	74.6	72.9
Intermediate production and transport workers	72.4	70.5	71.2	69.3	71.9	74.7
Elementary clerical sales and service workers	70.5	72.5	73.4	72.9	72.7	72.0
Labourers and related workers	72.3	71.3	71.7	69.1	70.2	70.7
Total	73.3	73.6	73.1	73.6	72.9	73.1

Note: Population weighted results.

Table 9: Mental health—by gender and occupation (means)

Occupation	2001		2002		2003	
	Men	Women	Men	Women	Men	Women
Managers and administrators	78.7	77.6	78.9	76.6	78.0	74.8
Professionals	75.9	75.1	76.5	75.2	77.0	76.2
Associate professionals	76.0	74.1	77.0	74.3	77.2	74.8
Tradespersons and related workers	76.4	71.6	76.5	73.4	78.6	70.9
Advanced clerical and service workers	77.5	74.4	80.1	77.6	78.5	74.9
Intermediate clerical workers	76.9	72.8	78.9	73.2	76.9	73.6
Intermediate production and transport workers	75.9	71.2	75.5	69.0	76.7	72.7
Elementary clerical sales and service workers	72.4	72.8	76.0	72.3	75.4	73.5
Labourers and related workers	74.0	69.9	75.7	70.7	73.6	71.9
Total	76.0	73.6	76.8	73.9	77.0	74.4

Note: Population weighted results.

Table 10: Persistence of general health problems by gender and age, 2001–2003 (%)

Age group	Number of years with general health lower than 50 out of 100				
	0	1	2	3	Total
Men					
15–24	84.5	8.7	4.5	*2.2	100.0
25–34	83.3	8.0	4.7	4.0	100.0
35–44	76.5	9.9	6.8	6.7	100.0
45–54	71.1	13.4	6.5	9.0	100.0
55–64	64.9	8.4	8.1	18.6	100.0
65+	59.6	14.5	8.9	17.1	100.0
Total	73.5	10.7	6.6	9.2	100.0
Women					
15–24	73.5	13.7	7.4	5.4	100.0
25–34	79.8	11.3	4.5	4.4	100.0
35–44	78.7	10.5	5.7	5.0	100.0
45–54	70.2	12.7	7.4	9.7	100.0
55–64	70.4	9.3	7.5	12.8	100.0
65+	62.6	11.9	10.1	15.4	100.0
Total	72.9	11.6	7.0	8.6	100.0

Notes: Population weighted results. * Estimate not reliable.

Table 11: Persistence of mental health problems by gender and age (%)					
Age group	Number of years with mental health lower than 50 out of 100				
	0	*1*	*2*	*3*	*Total*
Men					
15–24	80.2	13.4	*4.4	*2.0	100.0
25–34	85.3	9.4	3.7	*1.6	100.0
35–44	82.9	10.0	4.6	2.5	100.0
45–54	84.5	9.1	3.6	2.7	100.0
55–64	82.8	10.5	*3.8	*2.9	100.0
65+	88.7	6.9	*2.0	*2.4	100.0
Total	84.2	9.7	3.7	2.4	100.0
Women					
15–24	74.7	16.7	5.4	*3.2	100.0
25–34	78.7	14.1	5.2	*2.0	100.0
35–44	79.1	11.5	6.0	3.4	100.0
45–54	80.7	11.4	5.0	2.9	100.0
55–64	81.5	11.4	5.1	*2.0	100.0
65+	84.7	11.0	2.6	*1.7	100.0
Total	80.0	12.5	4.9	2.6	100.0

Notes: Population weighted results. * Estimate not reliable.

Persistence of health problems

Do the same people tend to have health problems year after year, or are health issues usually transient? Table 10 gives results for general health and Table 11 for mental health.

As might be expected, the persistence of general health problems depends strongly on how old one is. Only 2.2% of men aged between 15 and 24 had general health scores in the 0–50 range for all three years, while among men over 55, more than 17% had low levels of general health in all three years. Among women aged between 15 and 44, the proportion who had low heath scores in all three years was around 5%, but among women between 55 and 64 it was 12.8%, and in the over 65+ age group the corresponding figure was 15.4%.

As Table 11 indicates, results for mental health follow a quite different pattern.

First, it is clear that mental health problems were much less persistent—more likely to be transient—than general health problems. Secondly, unlike general health, the persistence of mental health problems was not related in a linear way to age. There were also interesting gender differences. Women aged 35–44, followed by those aged 15–24, were the groups most likely to experience persistent problems; considerably more than older women. Among men it was the 45–54 and 55–64 groups who reported the most persistent problems.

Endnotes

1 The HILDA Survey means in 2003 were 69 for general health and 74 for mental health. The American means are both about 2 points higher.

2 The Pearson correlation between general health and age is approximately –0.27 for men and –0.19 for women.

3 The Pearson correlation in 2003 was 0.06.

4 The rationale for using this variable as the best available single measure of material standard of living is explained in Part 2 of this Report.

5 The Pearson correlation is approximately 0.1.

6 This difference between men and women has been found in all three waves of the HILDA Survey.

7 The impact of employment/unemployment on health is sometimes referred to as the 'social causation effect' to contrast it with the 'healthy worker effect' mentioned above.

8 See especially chapters 10 and 11.

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What have people been doing for the last three years?

At each annual interview HILDA Survey respondents fill in a calendar for every month of the last financial year. The evidence tells us what percentage of their time has been spent in paid work, what percentage they were unemployed and actively seeking work, and what percentage they were 'not in the labour force'. These three time uses are mutually exclusive, so the figures must add to 100%. In addition, respondents also tell us the amount of time they have spent in education (either full-time or part-time), but this can be on top of paid work, and so cannot be included in totals adding to 100%.

So what have people been doing for the last three years? In this article we confine attention to a group of main interest—men and women aged 25 to 54, who are of prime working age and, in many cases, face real choices between working, not working and getting more education.

Time uses of working age men and women

In aggregate, prime age men spent 88% of their time in work in 2001–2003, 4% unemployed (and seeking work) and 8% 'not in the labour force'. Women spent 69% of time working, 4% unemployed and 27% 'not in the labour force'. As an additional activity, the men spent 8% of time in education and the women 9%.

It would be a mistake, however, to imagine that the same people do the same things every year. Among men, 95% were in work at some stage during the three years; 18% spent some time unemployed and looking for work, and 21% spent some time 'not in the labour force'. These last two estimates are both, perhaps, higher than expected.

Women's time uses are of course somewhat different, partly because of the demands of child-rearing. But, even so, 83% had spent some time in paid work, 16% had been unemployed, and 40% had spent time 'not in the labour force'.

Adult education a major activity

A further interesting and perhaps surprising finding is that 24% of prime age men and 26% of prime age women spent some time in education. 'Adult education', broadly defined, has become a major activity of a substantial section of the labour force.

Figure 1: Time spent employed, unemployed or not in the labour force—prime age men and women, 25–54, 2001–2003

Note: Population weighted results.

APPENDIX 1: SAMPLING VARIABILITY

Appendix 1: Sampling variability

Introduction

The estimates in this Report are based on information obtained from the members of a sample of Australian households. Therefore, the estimates are subject to sampling variability and may differ from the figures that would have been produced if information had been collected for all households. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied because only a sample of households was included. There are about two chances in three that the sample estimate will differ by less than one SE from the figure that would have been obtained if all households had been included, and about 19 chances in 20 that the difference will be less than two SEs. Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate.

In line with the practice adopted by the Australian Bureau of Statistics, only estimates with RSEs of 25% or less are considered reliable for most purposes. Estimates with RSEs greater than 25% but less than or equal to 50% indicate they are subject to high SEs and should be used with caution. Estimates with RSEs of greater than 50% are considered too unreliable for general use and should only be used to aggregate with other estimates to provide derived estimates with RSEs of 25% or less.

Lack of space and resources does not allow for the separate indication of the SE of all the estimates in this Report. So estimates that are considered unreliable and should be used with caution have been annotated with an asterisk, using a threshold rule. A threshold rule specifies the minimum number of units that must contribute to the value of a cell. Where the number of units contributing to the value of a cell is less than a pre-specified threshold value, the estimate is preceded by an asterisk to indicate that it should be used with caution. In the tables in this Report, the pre-specified threshold value is 20.

One advantage of using a threshold rule is that it is easy to apply. However, a disadvantage is that it is not a precise method for determining the reliability of estimates, whereas the calculation of SEs is.

An evaluation was conducted to assess how well the threshold rule performed against the calculation of SEs in determining unreliable estimates. In general, the threshold rule performs reasonably well for most estimates in this Report, except for income and wealth estimates.

RSEs are provided in this appendix for selected key tables for comparison to the threshold rule. The RSEs have been derived using the grouped jackknife method.

RSEs for selected key tables

Part 1—Households and family life

Table A1 shows the RSEs for Table 1 in Part 1. Bold table entries indicate RSEs greater than 25% and figures preceded by an asterisk indicate that the number of units contributing to the value in this cell is less than 20.

As can be seen from the table, most estimates considered unreliable due to RSEs greater than 25% have also been identified using the threshold rule. However, there were a couple of estimates with RSEs greater than 25% that were not identified using the threshold rule and there were a couple of estimates with acceptable RSEs that were annotated with an asterisk because the number of units contributing to the values of these cells was less than 20.

Part 2—Incomes and wealth

Table A2 shows the RSEs for Table 1 in Part 2. Bold table entries indicate RSEs greater than 25% and figures preceded by an asterisk indicate that the number of units contributing to the value in this cell is less than 20.

This table shows that more than half of the estimates that are considered unreliable, that is estimates that have RSEs greater than 25%, were *not* identified

Table A1: Relative standard errors (%) for changes in marital status, 2001 to 2003							
	Marital status in 2003						
Marital status in 2001	Legally married	De facto	Separated	Divorced	Widowed	Never married	Total
Legally married	0.4	**26.4**	13.4	20.5	8.6	n.a.	0.0
De facto	12.0	2.8	*28.5	20.4	*49.1	12.8	0.0
Separated	*23.5	18.0	3.9	9.2	*50.1	n.a.	0.0
Divorced	*23.4	**25.1**	*77.1	2.1	*26.2	n.a.	0.0
Widowed	*68.9	*69.8	*0.0	*48.4	0.4	n.a.	0.0
Never married	16.5	6.4	*54.4	*75.1	*59.0	1.3	0.0
Total	1.3	4.0	5.6	4.1	4.7	1.9	0.0
Note: *number of units contributing to the value of this cell is less than 20. n.a. not applicable							

Table A2: Relative standard errors (%) for income mobility, 2001 to 2003										
Decile	Decile in 2001									
in 2003	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10
D1	6.8	8.8	18.0	14.3	18.4	**36.8**	20.3	**30.1**	24.1	*53.7
D2	14.3	6.3	14.0	15.1	22.8	**26.3**	*44.5	25.0	*39.4	*48.5
D3	9.0	10.0	8.8	11.3	13.9	22.2	21.8	18.3	22.0	*31.6
D4	13.2	16.9	9.4	10.6	7.5	15.9	19.4	22.6	24.6	26.1
D5	21.0	16.5	20.0	12.2	8.4	11.1	13.2	15.4	19.9	19.6
D6	21.5	**36.7**	13.6	11.3	11.7	8.7	8.5	10.3	13.0	20.2
D7	**28.1**	**29.7**	**32.8**	20.7	10.9	11.8	11.0	10.2	17.0	21.6
D8	45.4	*51.3	35.9	22.3	24.7	9.6	12.1	7.1	9.3	16.1
D9	*45.8	*43.8	32.6	**27.9**	18.1	21.6	17.3	7.2	4.5	7.4
D10	*38.6	*100.4	27.8	*37.5	33.3	20.8	**38.8**	18.6	6.3	2.7

Note: * number of units contributing to the value of this cell is less than 20.

using the threshold rule of 20. The current threshold rule does not perform well for income and wealth estimates and can be misleading when used to determine the reliability of estimates. It should also be noted, however, that only three estimates in the table have RSEs over 50%, which is the less conservative of the two conventional cut-off points applied by the ABS.

As implied above, an alternative would be to raise the threshold; to use a higher threshold level or rule for income and wealth estimates. Figure A1 shows a scatter plot of the RSEs of the income mobility estimates from Table A2 against the number of respondents.

In setting a new threshold there is a trade-off between the error rate of not identifying all unreliable estimates and the error rate of falsely identifying estimates as unreliable when in fact they have acceptable RSEs. For example, based on the scatter plot, the threshold for income estimates could be raised to 50. The error rate of not identi-fying all estimates with RSEs greater than 25% would be 1% and the error rate of falsely identify-ing estimates as unreliable when in fact they have RSEs of 25% or less would be 10%.

In any case, the threshold rule of 20 has been applied throughout the tables in this Report, for ease and consistency. However, based on the find-ings of this evaluation, readers should be aware of the limitations of the threshold rule when determin-ing the reliability of income and wealth estimates.

Part 3—Employment and unemployment/joblessness

Table A3 shows the RSEs for Table 1 in Part 3.

The RSEs for this table are all 25% or less and the number of contributors in each cell is 20 or more. The estimates in this table should be considered reliable for most purposes.

Figure A1: Income mobility relative standard errors against number of respondents

Table A3: Relative standard errors (%) for labour mobility, 2001–2002 and 2001–2003

| Labour force status | Employed 2001 | | Unemployed 2001 | | Not in the labour force 2001 | |
2002 and 2003	2002	2003	2002	2003	2002	2003
Employed	0.5	0.4	6.1	5.5	6.3	4.0
Unemployed	9.0	11.9	10.2	12.0	8.1	12.0
Not in the labour force	5.7	4.6	7.6	8.8	0.8	0.7

Part 4—Life satisfaction and well-being

Tables A4 and A5 show the RSEs for Tables 1a and 1b in Part 4.

The RSEs for these tables are all 25% or less and the number of contributors in each cell is 20 or more. The estimates in these tables should be considered reliable for most purposes.

Table A4: Relative standard errors (%) for life satisfaction, 2001 to 2003

Life satisfaction	Men	Women	Total
2001	0.3	0.3	0.2
2002	0.3	0.2	0.2
2003	0.2	0.2	0.2

Table A5: Relative standard errors (%) for change in life satisfaction, 2001–2002 and 2001–2003

Life satisfaction	Score did not change	Changed +/–1 point	Changed +/–2 points	Changed more than +/–2 points
2001–2002	1.2	1.4	2.4	3.1
2001–2003	1.2	1.1	1.5	2.9