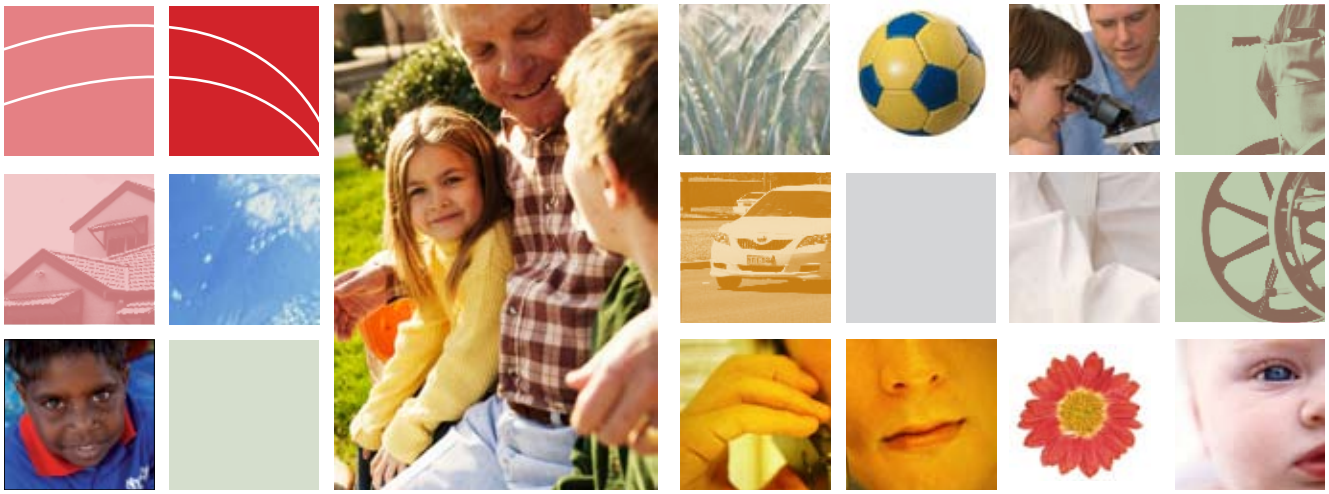
Australian Bureau of Statistics

Australian Social Trends

USING STATISTICS TO PAINT A PICTURE OF AUSTRALIAN SOCIETY



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Contents

Introduction

Australian Social Trends draws on a wide range of data, sourced both from ABS and other agencies, to present a picture of Australian society. This publication aims to inform decision-making, research and discussion on social conditions in Australia. It covers social issues of current and ongoing concern, population groups of interest, and changes in these over time.

The selection of articles aims to address current and perennial social concerns and to provide answers to key social questions. Some topics are revisited as new data become available. The aim of this approach is for each report to remain responsive to contemporary concerns, while accumulating a more comprehensive picture of Australian social conditions over time. For this reason, articles often include cross references to other relevant articles in the current issue, and in previous issues. All articles published since 1994 are available on the ABS web site: abs.gov.au.

Australian Social Trends is structured according to the ABS Wellbeing Framework which identifies areas of social concern, population groups and transactions among people and entities within their social environments (see Measuring Wellbeing: Frameworks for Australian Social Statistics, 2001 - ABS cat. no. 4160.0). The broad areas of social concern are:

- population
- family and community
- health
- education and training
- work
- economic resources
- housing
- crime and justice
- culture and leisure
- other areas - including environment, religion, and transport and communication.

From March 2009, Australian Social Trends will be issued on a quarterly basis after being issued annually from 1994 to 2008. In the course of a year, articles will cover a wide range of the areas of social concern.

The articles focus strongly on people and social concerns. Each article aims to tell a story, providing a sense of the social and historical context in which a particular topic is embedded, moving from the general to the specific, and using statistics to bring light to the issue. Articles aim to balance 'what' analysis (relating the relevant statistical facts surrounding the issue, e.g. number, characteristics, change over time, sex, age and other differences), with 'why' analysis (providing context and explanation by highlighting relevant social changes and events and the chronologies of these). For example, an article on work may examine current labour force participation, how the labour market has changed over time, how different groups of people are affected by social and economic conditions, and how these factors may be linked to observed employment trends.

Future population growth and ageing

Changes in the size, composition and distribution of the population are partly a product of prevailing social and economic conditions. Likewise, the structure and size of the population contribute to the shaping of the economy, society and the broader environment.

The future growth, distribution and age structure of the population are key factors underpinning many analyses of long-term policy issues in Australia. Some of these issues relate to service provision, such as health and aged care. Other policy issues include the population aspects of economic development and environmental sustainability (including climate change and water security).

While we cannot know with any certainty what Australia's future holds in terms of migration, fertility and life expectancy, we can model or project population growth and population change using a range of assumptions. This article illustrates various scenarios.

Australia's population is projected to grow from 21 million in 2006 to between 31 and 43 million in 2056

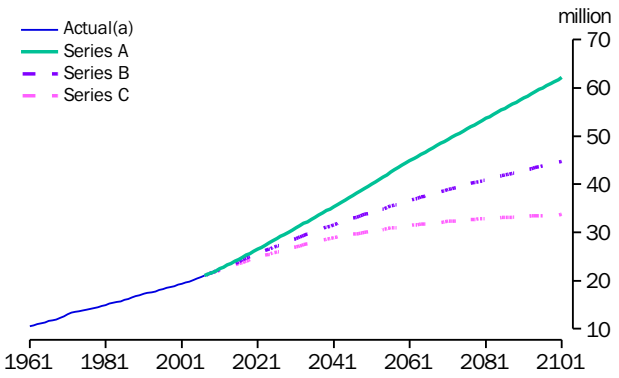
Population growth

From around 21 million people in 2006, Australia's population is projected to grow to between 30.9 million (Series C) and 42.5 (Series A) million people in 2056, and to reach between 33.7 million (Series C) and 62.2 million (Series A) in 2101.

The Series B projection, in which fertility is assumed steady at 1.8 babies per woman, net overseas migration is 180,000 people per year and life expectancy at birth reaches 85 years for boys and 88 for girls, most closely reflects actual recent levels of the components of population change of the main series. Series B projects the population to reach 35.5 million by 2056 and 44.7 million by 2101. This is equivalent to an average growth rate of 1.4% per year from 2007 to 2026, slowing to 0.9% per year from 2027 to 2056, and 0.5% per year for the rest of the century. This compares with an average population growth rate from 1997 to 2007 of 1.3% per year.

Under the Series B assumptions, there will be more births than deaths until the year 2101. However, even at the beginning of next century, population growth would remain clearly positive due to the level of net overseas migration.

Actual and projected population, 1961–2101



a) Estimated resident population

Source: *Australian Historical Population Statistics* (ABS cat. no. 3105.0.65.001), *Population Projections, Australia, 2006 to 2101* (ABS cat. no. 3222.0)

Population projections

This article is based on ABS population projections. These projections span the period 2008 to 2101 for Australia and 2008 to 2056 for the states, territories and regions. The base population for the projections is the estimated resident population at 30 June 2007.

Population projections are not predictions or forecasts. They simply show what would happen to Australia's population if a particular set of assumptions about future levels of fertility, mortality, net overseas migration and, for states and territories, net internal migration, were to hold for the next 50 to 100 years. The assumptions are based on demographic trends, current debate, and possible future scenarios arising from research in Australia and elsewhere.

For simplicity, most analysis presented in this article is limited to three main series which cover three sets of possible future population growth outcomes; high (Series A), medium (Series B) and low (Series C). However, there are a total of 72 series available for use.

Population projection assumptions

	Total fertility rate(a)	*Net overseas migration (b)*	*Life expectancy at birth, males(c)*	*Life expectancy at birth, females(c)*
	Babies per woman	'000	Years	Years
Series A	2.0	220.0	93.9	96.1
Series B	1.8	180.0	85.0	88.0
Series C	1.6	140.0	85.0	88.0

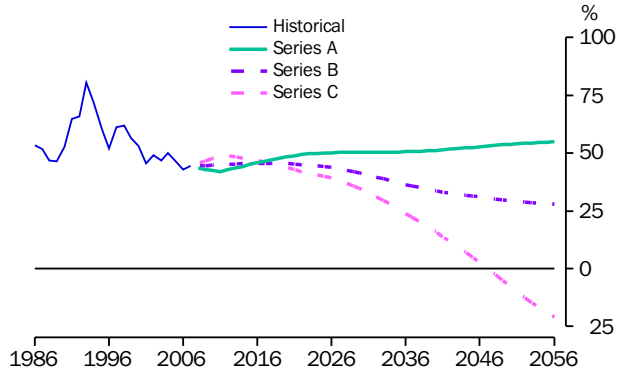
(a) From 2021

(b) From 2010–11 in Series A and C, from 2007–08 in Series B

(c) From 2056

Source: *Population Projections, Australia, 2006 to 2101* (ABS cat. no. 3222.0)

Proportion of population growth from natural increase, 1986–2056



Source: *Australian Historical Population Statistics* (ABS cat. no. 3105.0.65.001), *Population Projections, Australia, 2006 to 2101* (ABS cat. no. 3222.0)

Under the high assumption (Series A), where fertility increases to 2.0 babies per woman, net overseas migration is 220,000 per year and life expectancy at birth reaches 94 years for boys and 96 years for girls, the strong population growth is driven more or less equally by natural increase and migration. By 2056, 55% of the population growth would come from natural increase (the excess of births over deaths) with the remaining 45% coming from net overseas migration.

The low assumption (Series C) has fertility falling to 1.6 babies per woman, net overseas migration at 140,000 per year and life expectancy at birth increasing to 85 years for boys and 88 years for girls. While population growth would continue throughout this century under these assumptions, the growth would be slow and from 2048 would be driven entirely by net overseas migration as natural increase becomes negative.

Population structure and ageing

In addition to the future size of the population, the most profound change that is projected to occur is the ageing of the population. Population ageing is characterised by an upwards shift in the age structure, so the proportion of younger people declines as the proportion of older people increases. The relative increase in the proportion of older people in the population will be accompanied by a sharply increasing number of older people. These changes are important factors weighing on the future provision of income support, health and aged care services as well as having implications for economic growth.[1]

The ageing of the population (already evident in Australia's population structure) is set to continue under all the projection series. The reasons further population ageing is inevitable are to do with the particular shape of the current population structure; the tendency for people to live to older ages; and the fact that fertility and migration can only play a marginal role in limiting the extent of ageing.

Population growth and ageing definitions

In this article the term *older people* refers to those aged 65 years or over, while *working-age* refers to people aged 15 to 64 years.

The *old age dependency ratio* is a measure used to compare the size of the older population to the working age population. It is calculated as the number of people aged 65 years and over (that is, 'old age dependants') divided by the number of people aged 15–64 years, multiplied by 100. While the ratio may oversimplify the implication of dependency – for example, many young adults are dependent on their parents during tertiary study, many people aged 15–64 years are not part of the workforce, many people retire before 65 years of age, while people aged 65 years or over may be self-funded retirees or may continue to work – it provides another measure of the structure of the population.

In 2007, 14.5 million people were aged less than 50 years. Even without increases in life expectancy, 60% (or 8.7 million) of these people will still be alive half a century later (in 2057), but be aged 50 to 99 years. Taking account of the increases in life expectancy assumed in Series B and C, 72% of people aged less than 50 years in 2007 would still be alive in 2056, and 83% would remain alive if life expectancy increased to the levels in Series A.

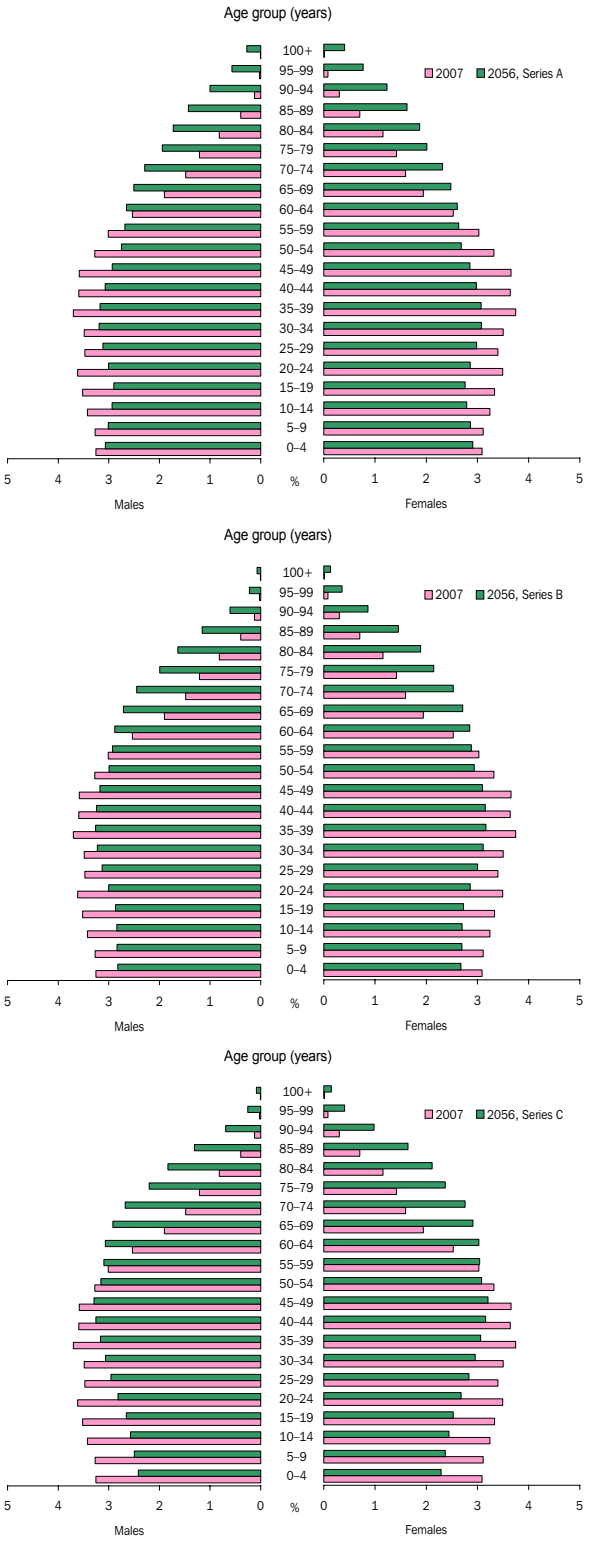
In contrast to the 2007 population age pyramid which shows a relatively wide base and middle with a sharply narrowing top, the 2056 age pyramids each show a relative narrowing of the younger age population and a broadening at the older ages. Series A, B, and C each have significantly greater proportions of people aged 65 years and over ranging from 23% (Series B) to 24% (Series A) in 2056, compared with 13% in 2007. The proportion aged 85 years and over is projected to increase from 1.6% in 2007 to between 4.9% (Series B) and 7.3% (Series A). This is accompanied by the proportion of people aged 15–64 years (sometimes called the working-age population) declining from 67% in 2007 to between 58% (Series A) and 60% (Series B) in 2056. As a consequence, the old age dependency ratio (the ratio of people aged 65 years and over to the working age population) will approximately double from 20% in 2007 to between 38% and 42% (Series B and A respectively). Put another way, for each older person in 2007, there were five working-age people, while in 2056 there will be less than three working-age people for every older person.

...pace of ageing

Far from occurring evenly, the rate at which the populations aged 65 years and over and 85 years and over will grow is projected to accelerate in the short and medium term before declining. This reflects the entry of early baby boomers (born from 1946) into these age groups. In 2007, there were 2.4 million people aged 65–84 years. According to Series B

projection, the number of people this age will grow by an average 2.7% per year to 2011, then accelerate to grow by an average 3.5% per year over the next 11 years to 4.0 million in 2022. Although the rate of growth slows considerably after this period, this age group is still projected to grow to 6.4 million by 2056.

Projected population age and sex structure



Source: *Population Projections, Australia, 2006 to 2101* (ABS cat. no. 3222.0)

The number of people aged 85 years and over is also projected to increase rapidly, going from 344,000 in 2007 to 1.7 million in 2056. The fastest growth in this age group occurs as the early baby boomers enter in the early 2030s.

Such increases in the population aged 85 years and over will be associated with large increases in the number of deaths each year. Deaths are projected to more than double between 2007 and 2056 (from 137,000 in 2007 to 321,000), with the most rapid increase in deaths coming between 2027 and 2037.

Could population ageing be prevented?

Examination of the projections from each of the major series (A, B and C) shows that within these assumptions, population ageing is unavoidable and only the extent of ageing remains uncertain. However, the projections model can also be used to explore the less likely 'what ifs?' of fertility and net overseas migration to demonstrate the levels necessary to markedly reduce the extent of ageing that is projected in each of the main series.

...with higher fertility?

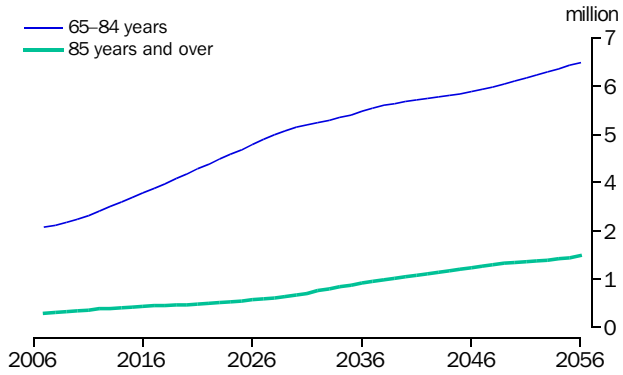
Assuming migration and life expectancy were both held to the medium assumptions in Series B, we can use a range of higher fertility assumptions to see what effect they would have on the age structure of Australia's population.

Increases in Australian fertility to the levels seen in the 1960s or early 1970s, while very effective in growing the population, would be limited in offsetting the increasing old age dependency ratio.

Assuming the total fertility rate increased to, and remained at, 3.0 babies per woman throughout the projection period, there would be 29 older people for every 100 working age people in 2056. While this is lower than the Series B projection of an old age dependency ratio of 38%, it is considerably more than the 2007 level of 20%.

Not surprisingly, high levels of fertility would be very effective in increasing the proportion of children in the population. For example, with a total fertility rate of 3.0 babies per woman, 26% of people would be aged less than 15 years in 2056 compared with 17% in Series B and 19% in 2007. The high birth rate would also increase population growth and lead to Australia having around 49 million people in 2056, 13 million more than the Series B projection.

Projected aged populations: 2007[(a)]–2056, Series B



(a) Data for 2007 is estimated, all other years are projections

Source: *Population Projections, Australia, 2006 to 2101* (ABS cat. no. 3222.0)

...with higher net overseas migration?

Keeping the fertility and life expectancy at the Series B level, big increases in migration can dilute the ageing effect in the population structure by adding large numbers of people who have a younger age profile than the population which they are joining. However, to be effective, the level of migration would produce an inordinately large population. For example, with a net addition of 400,000 migrants per year (almost twice the 2007–08 record level), the old age dependency ratio would be 31%, compared with 38% in Series B and 20% in 2007. The population would grow to 51 million in 2056, an extra 15 million on the Series B projection.

If annual net overseas migration increased to 1 million migrants (almost five times the 2007–08 level), the old age dependency ratio in 2056 would be 24% – closer to the 2007 level of 20%. The result of this would be a population of 91 million people in 2056.

States and territories

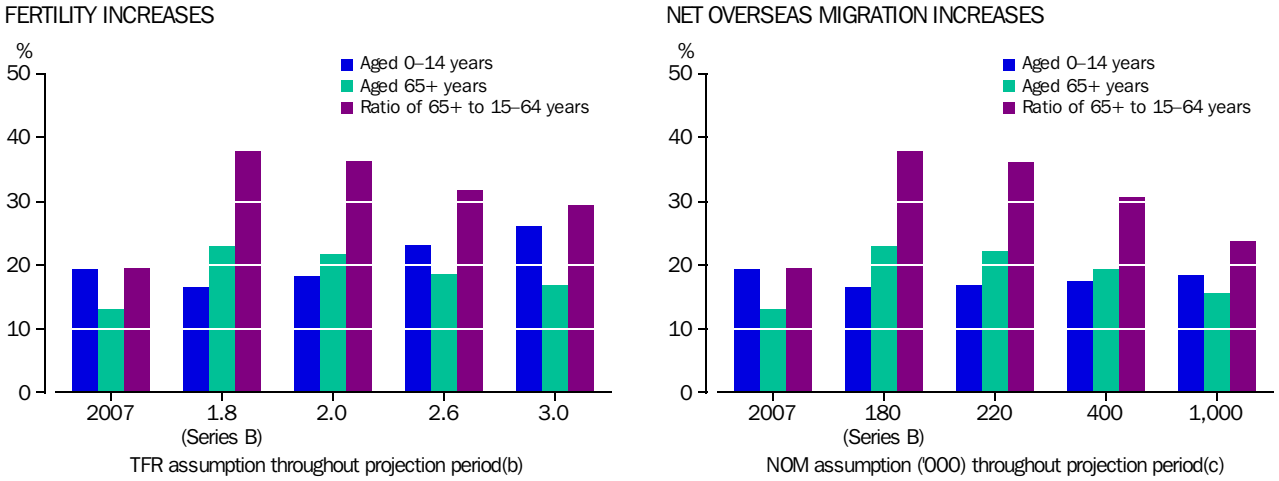
State and territory population projections differ widely in their rates of growth, age structure and size. This is a reflection of different fertility, mortality, net overseas migration levels, and most variably, the level of internal migration.

Under Series B projections (based on a medium level of interstate migration flows), all states and territories would continue population growth throughout the projection period except Tasmania, which levels out in around 2040.

New South Wales maintains the largest share of the population throughout the projection period. However, while the number of people living in New South Wales is projected to increase by 3.3 million to 10.2 million, this increase is matched by Victoria's increase (3.3 million) and exceeded by Queensland's (4.6 million). Queensland is projected to more than double its 2007 population of 4.2 million to 8.7 million by 2056, overtaking Victoria as the second most populous state in 2050. Western Australia is also projected to double its population between 2007 and 2056 (from 2.1 to 4.3 million).

The rapid population growth in Queensland and Western Australia reflects the relatively high rates of migration to these states. Under the medium assumption, total migration (i.e. net overseas migration and net internal migration) is projected to contribute around two-thirds of the population growth for both of these states. Just over half (55%) of the Queensland

Selected indicators of 2007 and 2056 age structure from a range of increased fertility and migration scenarios[(a)]



(a) Using selected total fertility rate (TFR) and net overseas migration (NOM) assumptions and keeping all other assumptions to the Series B assumptions

(b) TFR is assumed to move incrementally toward the target level, reaching it by 2021, then remaining constant

(c) Net overseas migration is assumed to move incrementally toward the target level, reaching it by 2011, then remaining constant

Source: ABS Population Projections

migration is overseas migration, while 91% of Western Australia's is projected to come from overseas migrants.

In contrast to these high growth states, the remaining states and the Northern Territory have their growth held back by negative internal migration.

...capital city growth

Over the past decade, Australia's capital city population has grown slightly faster than the non-capital city population, and this is set to continue under Series B assumptions. As a consequence, the proportion of the population living in the capital cities is projected to increase from 64% in 2007 to 67% in 2056.

Despite an assumed net loss of 34,000 people per year through internal migration (in Series B), Sydney is projected to remain Australia's largest city, growing an average 1.0% per year, to 7.0 million by 2056. Most of this growth will come from net overseas migration.

With smaller internal migration losses than Sydney, Melbourne is projected to grow by an average 1.2% per year to 6.8 million in 2056. Brisbane and Perth are projected to grow the most rapidly (averaging 1.6% per year each) to 4.0 million and 3.4 million respectively, with positive internal migration for Brisbane and neutral internal migration for Perth.

...ageing in and out of the capital cities

Projected age structures within and between states differ widely under the influence of differential rates of migration and natural increase. In 2056, the proportion of children aged 0–14 years in the population is projected to be similar across most jurisdictions at 16%–18%. The exception is the Northern Territory, where higher fertility leads to a projected rate of 20% in Darwin and 24% in the balance of the Northern Territory.

When compared with capital cities, the non-capital city areas typically have significantly higher projected proportions of people aged 65 years and over, as many older people retire to regional coastal areas. This is also reflected in the old age dependency ratio. In the non-capital city areas of New South Wales, Victoria, South Australia and Tasmania, it is projected that by 2056 there will be less than two people of working age for every person aged 65 years and over. In contrast, capital cities such as Sydney, Melbourne, Brisbane and Perth are projected to have considerably younger populations with around three people of working age for every one aged 65 years and

State and territory assumptions

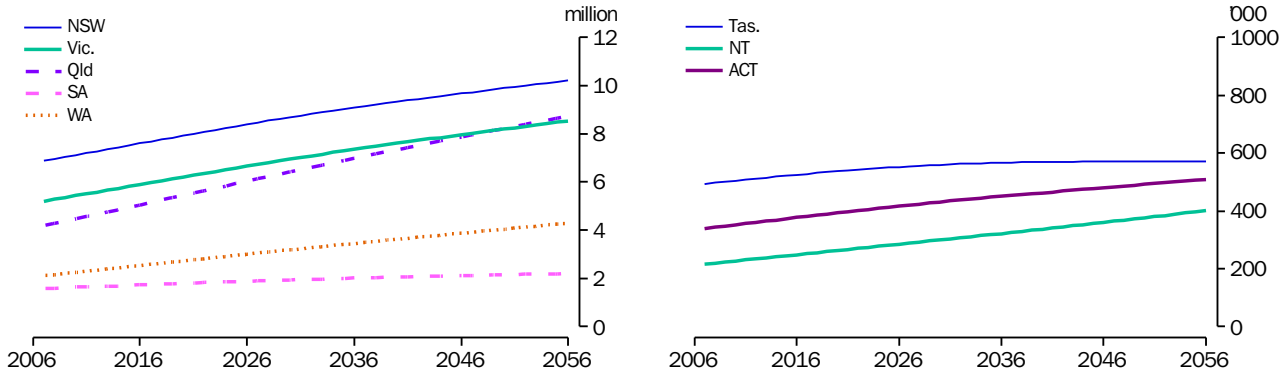
Population projections have been produced for the states and territories that fit within the national projections, in that each component of population change (births, deaths, net overseas migration) sums across the jurisdictions to the Australia level for each of the projection series. For each Australia level assumption, the states and territories each have their own different level (based on the recent differentials across the states and territories) which average to the Australia level. For example, the assumed fertility differential has the Northern Territory with a fertility rate 19% higher than Australia overall while New South Wales is assumed to be 4% lower than nationally.

An additional component of population change for the states and territories is net interstate migration. Interstate migration is inherently volatile because movement between states is unrestricted and economic and lifestyle factors can be strong drivers of population mobility. Using the long term trend of net interstate migration, three assumptions have been made: large, medium and small. Series B uses the medium internal migration assumption.

Finally, within states there are differences in the growth of the capital city and balance of state. The projections for 'part of state' are based on the population growth differentials for the capital city/balance of state trends within each state and the Northern Territory.

Source: *Population Projections, Australia, 2006 to 2101* (ABS cat. no. 3222.0)

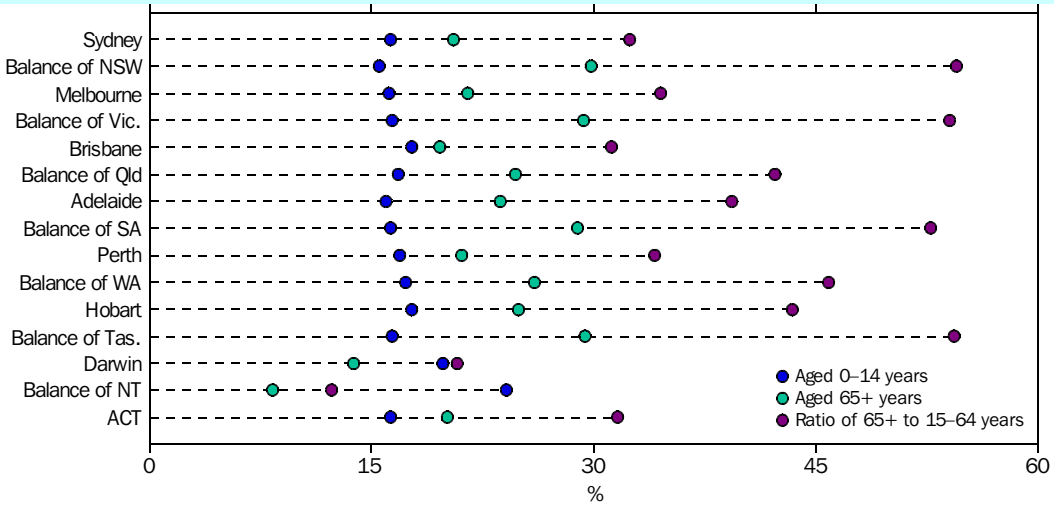
Projected population: states and territories, 2007[(a)]–2056, Series B



(a) Data for 2007 is estimated, all other years are projections

Source: *Population Projections, Australia, 2006 to 2101* (ABS cat. no 3222.0)

Indicators of age structure: capital cities and state balances, Series B — 2056



Source: *Population Projections, Australia, 2006 to 2101* (ABS cat. no. 3222.0)

over. Darwin is projected to remain the youngest city with nearly five people of working age for every older person.

Conclusion

The growth, size and age structure of the population are interlinked with social, economic and environmental conditions. Therefore long-term planning and policy-making can be used to both influence and respond to demographic outcomes. For example, as Australia's population continues to age, there may be an increasing desire by governments to attract migrants to contribute to the labour force. At the same time, there will be a need to plan for infrastructure to accommodate the changing size, composition and distribution of the population.

Endnotes

1 Productivity Commission 2005, Economic Implications of an Ageing Australia, Research Report, Canberra, available at <http://www.pc.gov.au/>

Couples in Australia

Couple relationships provide people with love, companionship, support, and opportunities for having children and raising families. As such, couples are a fundamental building block of society. Changing social attitudes during the late 20th century have led to an increase in de facto and same-sex relationships as well as giving people more freedom to end relationships, start new relationships or remain single.

Partnering

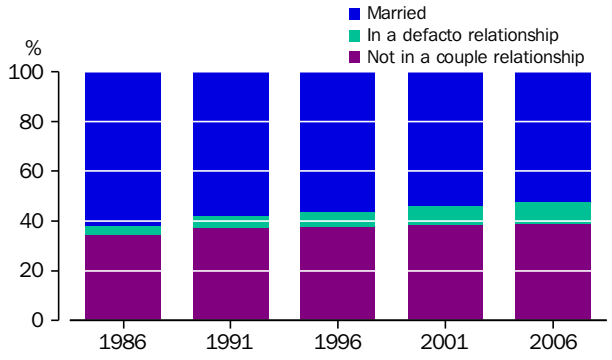
The proportion of adults living with a partner has declined during the last two decades, from 65% in 1986, to 61% in 2006. Factors such as the trend towards partnering at a later age, and the increased financial and social independence of women, may be associated with this decline, as well as legal changes in recent decades which have improved access to divorce.

Consistent with the declining proportion of people in couple relationships has been the fall in the proportion who were in a registered marriage, from 62% in 1986 to 52% in 2006. On the other hand, there has been an increase in the proportion of adults in de facto relationships, which more than doubled from 4% to 9% over the period.

In the 2006 Census, 61% of people aged 18 and over were in a couple relationship, down from 65% in 1986.

The number of people living in a same-sex couple relationship has also increased over the past decade. In 1996, 0.2% of all adults said they were living with a same-sex partner. By 2006, this had increased to 0.4% (to around 50,000 people). However, these figures may be an undercount of the true number of people living in same-sex relationships. Some people may be reluctant to identify as being in a same-sex relationship, while others may not have identified because they didn't know that same-sex relationships would be counted in the census.

People aged 18 years and over: whether in a couple relationship



Source: 1986–2006 Censuses of Population and Housing

Data sources and definitions

This article uses data from the ABS Census of Population and Housing, the ABS Family Transitions and Characteristics Survey and the ABS Marriages Collection.

In this article, *couple relationship* includes only people who usually live with their partner in the same dwelling, including those in registered marriages and de facto relationships.

De facto relationship refers to people living together as a couple who are not registered as married to each other. A de facto relationship may exist between a couple of the opposite sex or of the same-sex.

Registered marriage refers to people in a couple relationship who usually live together and have had their marriage formally registered. In this article, *marriage* is used to refer to a registered marriage only.

Unless otherwise stated, the information in this article relates to people aged 18 years and over.

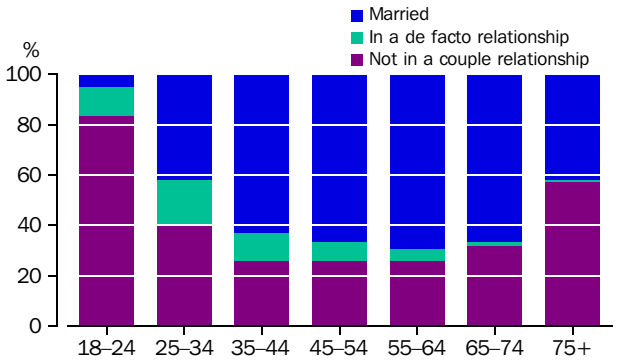
...by age

The proportion of people living in a couple relationship tends to increase with age from young adulthood, reaching a broad plateau around middle age, and declining in older age.

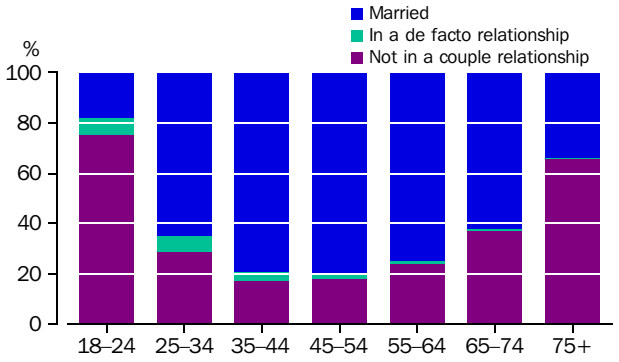
In 2006, younger people (aged 18–24 years) were less likely to be in a couple relationship than in 1986 (16% and 25% respectively). De facto relationships (11%) were more common than marriage (5%) for this age group in 2006 whereas in 1986 marriage (18%) was more common than de facto relationships (7%). Consistent with the trend towards increasing rates of de facto partnering in younger people, those aged 25–34 years had the highest rate of de facto relationships overall (18%) in 2006.

In 2006, people aged 55–64 years were the most likely to be married (69%). There were similar proportions of married people among those aged 45–54 years and 65–74 years (both 66%). However, the proportion of people who are married has declined since 1986 across all age groups, with the exception of those aged 65 and over. The decline in the proportion of married people in age groups under 65 years is partly explained by the increasing proportion of people living in de facto relationships, but more so by the increasing tendency for people to live without a partner.

Relationship status by age group — 2006



Relationship status by age group — 1986



Source: 2006 and 1986 Censuses of Population and Housing

In contrast to younger age groups, in 2006 a higher proportion of people aged 75 and over were married (42%) than in 1986 (34%). This partly reflects longer life expectancy, with an increasing likelihood of living into old age, meaning that spouses are widowed at an older age. However, there is still a big difference in the proportion of men (63%) and women (27%) living in couple relationships in this age group, reflecting the longer life expectancy of women.

Age at marriage, 1985–86 and 2005–06

	Average age difference(a)		*Proportion of all marriages registered(b)*	
Previous marital status	*1985–86*	*2005–06*	*1985–86*	*2005–06*
	Years	*Years*	*%*	*%*
Groom never married, bride never married	2.3	2.0	66.9	68.2
Groom divorced, bride never married	7.6	7.3	9.5	9.4
Bride divorced, groom never married	-1.1	-0.7	8.1	7.7
Both divorced	3.8	3.7	11.1	11.6
Total	2.8	2.6	100.0	100.0

(a) Grooms older than brides

(b) Components do not add to 100% as combinations involving widows or widowers are not presented

Source: ABS Marriages collection

Measuring relationship status

While the five-yearly Census can provide a snapshot of the relationship status of the population at a point in time, it can't tell us about the number or timing of transitions between relationship states. The Family Characteristics and Transitions Survey (FCTS) provides detailed information on these topics. The 2006–07 FCTS estimated that 65% of adults were in a couple relationship, compared with the 2006 Census which found 61% in couples.

The discrepancy is largely due to the different scope used in each collection. The census includes the population living in all dwellings (including non-private dwellings such as nursing homes and prisons) whereas the scope of the FCTS includes private dwellings only.

Partners' characteristics

...age

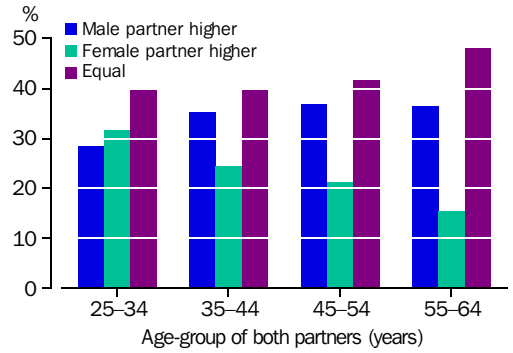
In 2006, around three-quarters (76%) of all couples involved partners aged within five years of each other. In same-sex relationships, the average age difference was 1.5 years, while in opposite-sex relationships, men were on average 2.6 years older than their partners. Among marriages that were registered in 2005–06 the gap was 2.6 years, compared with 2.8 years for marriages registered in 1985–86.

Men who had been married before tended to be much older than their brides. In 2005–06, for marriages occurring between a male divorcee and a never married bride, the groom was, on average, older by 7.3 years. Where the bride was remarrying after a divorce, she was around a year older than her never-married groom.

...education

In 42% of opposite-sex couples, the male partner had the same level of non-school qualification as the female partner. Males had a higher level of qualification in one-third (34%) of couples, with women having a higher qualification in almost one-quarter of cases (24%). This overall picture is, however, strongly influenced by the historical propensity for men to have greater opportunities for non-school education than women. This norm has changed over recent decades as young women have been attaining bachelor degree or higher qualifications at a significantly faster rate than men (although men are still far more likely to gain certificate-level vocational qualifications than women). For more information see *Australian Social Trends 2007*, 'Qualification profile of Australians'. The change is most evident in younger partnerships. For example, among couples where both people were aged 25–34 years, women were slightly more likely to be more qualified than their partner (32% compared with 28%), although having similar levels was still more common (40%).

Couples, partners with highest non-school qualification[a] — 2006



(a) Couples where both partners have no non-school qualifications were categorised as 'equal'

Source: 2006 Census of Population and Housing

...religion

In 2006 most couples (87%) were made up of people who shared the same faith (including no religion) of their partner. This suggests the importance of religious affiliation to partnering, given that by chance alone, the probability of someone partnering someone of the same faith would be much lower.

One factor affecting the high rate of same-faith partnering is the significant proportion of migrants to Australia who arrived as a couple (partners in these couples would be likely to have the same faith). However, even for people who partnered in Australia the tendency to partner someone of the same faith persists, although among some religions more than others. Excluding migrants who arrived in the same year as their overseas-born partner, Christians in a couple were very likely to be partnered to other Christians (85%), a pattern strongly influenced by the population aged 60 years and over where 94% of couples involving a Christian were same-faith relationships. Muslims in couple relationships were also very likely to be partnered to other Muslims (78%).

Buddhists who partnered in Australia were more likely than people of other faiths to have an interfaith partnership. Only 34% of couples involving a Buddhist were same-faith relationships. A higher proportion were 'Buddhist-Christian' couples (40%).

Of the 26% of couples involving at least one person with no religion, over half (52%) were matches where both partners were non-religious, while most of the remainder (46%) were a 'no-religion-Christian' couple.

Couples who shared the same faith were more likely to be in a registered marriage (88%) compared with couples where both partners had no religion (70%) or different faiths (71%).

Couples, partnered with someone of same faith — 2006[a]

	All couples	*People who partnered in Australia(b)*	*In registered marriage(b)*
	%	%	%
Christian	85.5	84.6	88.1
Buddhist	60.5	34.2	83.7
Hindu	81.6	48.7	95.0
Islam	86.7	77.5	95.5
Judaism	67.0	58.0	94.0
No religion	53.8	51.9	69.8

(a) Proportion based on the number of same religion couples, compared with all couples with a person having that religion

(b) Excludes couples where both members were overseas born and had the same year of arrival

Source: 2006 Census of Population and Housing

Couple relationships in law and society

As social attitudes in regard to relationships change, amendments to laws have followed. Changes to family law since the mid 1970s have provided legal recognition of de facto partnerships, reducing the legal and financial need to marry.

Recent developments in this area include the *Family Law Amendment (De Facto Financial Matters and Other Measures) Act 2008,* a Commonwealth Act which allows separating de facto couples to access the Family Law Court to obtain property settlements, therefore giving de facto couples the same access to the Family Law Court as married couples. Additionally, changes to Commonwealth laws such as the *Same-Sex Relationships (Equal Treatment in Commonwealth Laws — General Law Reform) Act 2008* and the *Same-Sex Relationships (Equal Treatment in Commonwealth Laws — Superannuation) Act 2008* give formal recognition to same-sex relationships in Commonwealth legislation, and will give people in same-sex relationships the same access to government entitlements and superannuation benefits as people in opposite-sex couple relationships.

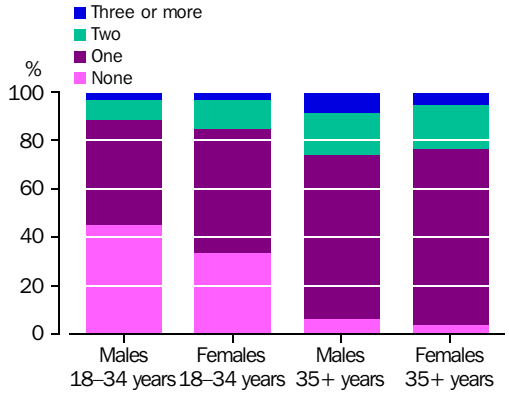
How many relationships have people had?

According to the 2006–07 Family Characteristics and Transitions Survey, 84% of adults had had at least one marriage or de facto relationship. For those aged under 35 years, women were more likely to have had a partner than men (66% and 55% respectively). For people aged 35 years or over, 95% had had at least one marriage or de facto relationship. This included 18% who had two relationships and 7% who had three or more. Although men aged 35 years or over were slightly less likely than women to have ever been in a relationship (94% of men compared with 96% of women) they were more likely to have had three or more relationships (8.4% compared with 4.8% for women).

Length of relationships

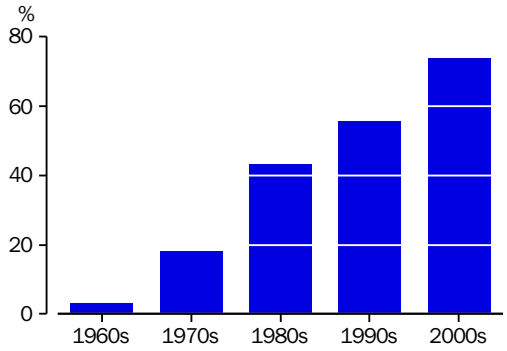
Of the people currently in a live-in relationship, the median length of the relationship was 18 years. However, the duration varied widely

Total number of live-in relationships[(a)] — 2006–07



(a) De facto relationships which later became registered marriages are counted as one relationship
Source: 2006–07 Family Characteristics and Transitions Survey

People who lived together before marriage[(a)], decade of marriage — 2006–07



(a) Currently married people only
Source: 2006–07 Family Characteristics and Transitions Survey

according to age and the number of relationships people had previously had. For example, for people aged 65–74 years who had only ever been in their current relationship, the median time together was 46 years, while for people aged 35–44 years who had had three or more relationships, the median duration of the current relationship was six years.

In 2006–07, around one-third (34%) of people aged 18 years and over said they'd had a live-in relationship that had subsequently ended. For just over half of these people their most recent past relationship was a registered marriage. Past registered marriages tended to have a much longer median duration than past de facto relationships (14 years compared with 2 years). In considering the apparently brief duration of de facto relationships, it should be kept in mind that this median is only for those relationships that have ended – a greater number have gone on to become a registered marriage or remain as long-term partnerships. In addition, where de facto relationships are being used by couples as a step before marriage, those that end before marriage may reduce the number of marriages that would otherwise end in divorce within a short period.

Living together before marriage

Overall, 39% of married people in 2006–07 had lived with their partner before marriage. The propensity to live together before marriage has increased sharply over recent decades as de facto relationships have become an increasingly common precursor to marriage. For example, almost three-quarters (74%) of people who married in the 2000s lived together before marrying. In contrast, just 3% of people who married in the 1960s (and are still married) lived together first.

...expecting to marry?

Almost half of those living in opposite-sex de facto relationships in 2006–07 expected to marry their partner (44%). The proportion expecting to marry noticeably declines with increasing length of relationship beyond ten years. Compared with the median time that currently

Length of live in relationships: 2006–07

		Age group (years)							
	Units	*18–24*	*25–34*	*35–44*	*45–54*	*55–64*	*65–74*	*75 and over*	*Total*
Have a current relationship	%	21.4	64.7	75.4	75.5	76.4	70.5	51.8	64.5
Median length of current relationship	Years	2.3	6.2	13.6	24.2	35.6	45.2	55.0	18.3
Had a previous registered marriage(a)	%	**0.3	5.3	15.3	27.5	28.5	34.7	53.6	20.1
Median length of previous marriage(a)	Years	**1.0	4.0	6.1	10.1	15.0	23.0	39.1	14.0
Had a previous de facto marriage(a)	%	11.0	24.8	21.8	14.2	6.4	3.4	*1.3	14.1
Median length of previous de facto marriage(a)	Years	1.1	2.0	2.1	2.1	3.1	5.1	*5.1	2.0

* estimate has a relative standard error of 25% to 50% and should be used with caution
**estimate has a relative standard error of greater than 50% and is considered too unreliable for general use
(a) Only includes people whose most recent previous live-in relationship was of this type
Source: 2006–07 Family Characteristics and Transitions Survey

People in de facto relationships who expect to marry partner[a] — 2006–07

	Previous marital status			
	Previously married	*Never married*	*Total*	*Total[b]*
Length of relationship (years)	%	%	%	'000
<2	33.2	55.0	50.2	375.5
2–4	48.3	56.7	55.4	425.6
5–9	21.2	57.7	48.4	307.3
10–14	13.0	42.7	31.2	174.6
15–19	18.4	23.3	22.0	95.0
20 and over	8.6	5.7	6.7	97.3
Total (c)	25.6	50.2	43.9	1 500.7

(a) Excludes same-sex couples

(b) All people in opposite-sex de facto couples

(c) Includes not stated

Source: 2006–07 Family Characteristics and Transitions Survey

married people spent living together before marriage (2.0 years), people in de facto relationships expecting to marry will spend significantly longer in the de facto state given the median length of relationship for people intending to marry was 3.0 years.

People in de facto relationships who had been married before were significantly less likely to expect to marry their new partner than people who had never been married. Around one-quarter (26%) of people in a de facto relationship who were separated, divorced or widowed from a previous spouse intended to marry their current partner, compared with 50% of people in a de facto relationship who had never been previously married. Much of this difference was still apparent even after accounting for differences in the length of relationship between the two groups.

Child bearing

As higher rates of de facto relationships emerge, so too a greater proportion of people are having children outside of marriage. In the five years to 2007, close to one-third (32%) of all births have been to unmarried mothers, twice the average rate of the 1980s (16%).

Around 78% of children aged 0–4 years in 2006–07 were the natural children of parents who were either currently married or who were previously married. This was ten percentage points more than the 68% born to married parents in 2002–07, suggesting that some parents got married after the birth of their child(ren). This is also supported by the fact that throughout the 2000s, births of a first child were twice as likely to be to unmarried parents (39%) as births of second or subsequent children (20%).

Wedding trends

Social change over recent decades has had an effect on the age at which people marry, and the type of ceremony they choose. Higher proportions of young people spending longer in education and living in de facto relationships prior to marriage have contributed to an increase in the median age of first marriage of 4 years for both men and women between 1987 and 2007.

Less people are choosing religious ceremonies, with nearly two-thirds of all marriages in 2007 being performed by civil celebrants.

Weddings: key characteristics, 1987 and 2007

	1987	2007
Median age at first marriage		
Men	25.9	29.6
Women	23.8	27.6
% marrying in a civil ceremony	40.3	62.9
No. marriages registered ('000)	114.1	116.3

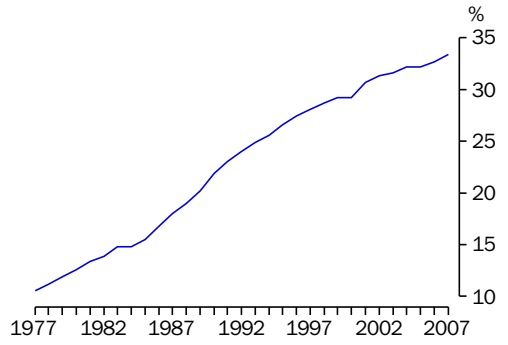
Source: *Marriages, Australia 2007* (ABS cat. no 3306.0.55.001), *Australian Historical Population Statistics 2008* (ABS cat. no. 3105.0.65.001)

In 2006–07, married people aged 25–44 years were twice as likely to have children as people of the same age in de facto relationships (77% and 37% respectively). Some of this difference is due to the fact that people in de facto relationships are more likely to have been in their relationship for a shorter period of time, and therefore have had less time in which to have children. However even after adjusting for this, people in de facto relationships were still much less likely to have dependent children (including those not living with them) than those who were married.

...intending to have children?

Most younger people in childless couple relationships intend to have children, and this intention is not affected by the form of relationship they are in. In 2006–07, 86% of

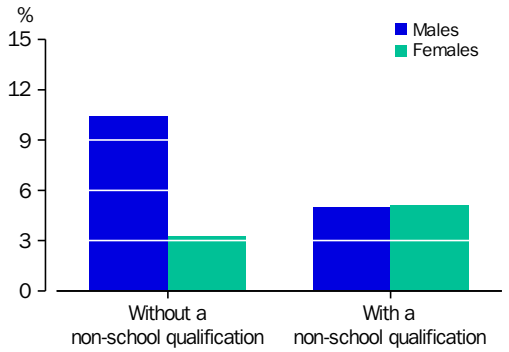
Births registered to unmarried mothers[a]



(a) Include births to mothers aged under 18 years

Source: *Births, Australia* (ABS cat. no. 3301.0)

Never partnered people aged 35–64 years, non-school qualification — 2006–07



Source: 2006–07 Family Characteristics and Transitions Survey

married people aged 18–24 years and 88% of those in a de facto relationship who did not already have children expected to do so. Childless couples aged 25–34 years were less likely to intend to have children (75%) if they were in a de facto relationship than married (85%). Some of the difference may be due to couples who intend to have children using this decision as a reason to get married. Among childless couples aged 35–44 years, the intention to have children was not significantly different between those in registered marriages (32%) and those in de facto relationships (41%).

...childlessness

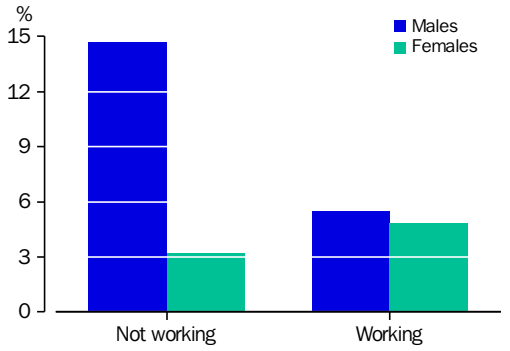
While only 7% of women aged 35–44 years were childless and had never been in a live-in relationship, they accounted for 29% of all childless women of this age. Of those women who had had at least one live-in relationship, some 17% were childless, which was consistent with the expectation of childlessness among the 18–24 year olds in de facto relationships and marriages.

Who doesn't partner?

While the vast majority (95%) of people aged 35–64 years have been in at least one live-in relationship, the proportion of those who have not had a relationship varies by particular characteristics. Men with a lower level of education were more likely to have never partnered (10.4% of men with no non-school qualifications compared with 5.0% for those with non-school qualifications). Women, on the other hand, were more likely to never have had a relationship if they had non-school qualifications (5.1%, compared with 3.3% for those women who did not have any non-school qualifications).

As work and education are related, it is not surprising that different patterns of labour force participation can be seen for those who have and haven't partnered. Men who were not working in 2006–07 were almost three times as likely to have never had a live-in relationship (14.7%) as those who were employed (5.5%). For women, not working is strongly associated with child-rearing so this pattern did not hold – 3.2% of women who weren't working had never been in a live-in relationship, compared with 4.8% for those who were employed.

Never partnered people aged 35–64 years, whether working — 2006–07



Source: 2006–07 Family Characteristics and Transitions Survey

Conclusion

Changes in social attitudes in recent decades have led to greater acceptance of couple relationships outside of registered marriage, such as de facto and same-sex relationships. At the same time, broader social, economic and educational opportunities have become more accessible to most people (particularly women), which has made remaining single a more viable option.

For some people, couple relationships outside of marriage may provide an opportunity to test the suitability of the match before making the commitment of marriage, whereas others may see no need to formalise what is for them a long-term and committed relationship.

Mental health

Mental health may affect a person's ability to interact successfully with their family, friends, work-mates and the broader community. It can cause significant distress and disability, and can lead to isolation of, and discrimination against, those affected.[1]

People with a mental health disorder may not be able to fully participate in the labour force. This has individual impacts in terms of the person's income, social participation and self-esteem, and also has wider economic impacts. The annual cost of mental illness in Australia has been estimated at $20 billion, which includes the cost of lost productivity and labour force participation.[2] In 2003, mental disorders were identified as the leading cause of healthy years of life lost due to disability.[3]

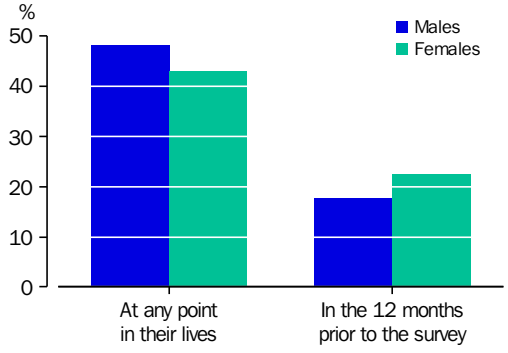
This article focuses on people who had experienced mental illness in the 12 months prior to being surveyed in 2007.

In 2007, almost half (45%) of all Australians had experienced a mental disorder at some point in their lifetime.

Prevalence

In 2007, 45% of Australians aged 16–85 years (or 7.3 million people) had, at some point in their lifetime, experienced at least one of the selected mental disorders (anxiety, mood or substance use disorders). Since relatively many more men than women meet the criteria for a substance use disorder (often alcohol-related) at some stage, men were more likely than women to have had a mental disorder in their lifetime.

Proportion of people aged 16–85 with a mental disorder[(a)] — 2007



(a) Selected mood, anxiety and substance use disorders

Source: *National Survey of Mental Health and Wellbeing: Summary of Results, 2007* (ABS cat. no. 4326.0)

Definitions

A *mental disorder* (or mental illness) is a clinically recognisable set of symptoms or behaviours associated with distress and with interference with personal functions. The selected disorders explored by the 2007 National Survey of Mental Health and Wellbeing (SMHWB) can be separated into three groups: anxiety, mood and substance use disorders.

Anxiety disorders generally involve feelings of tension, distress or nervousness. A person may avoid, or endure with dread, situations which cause these types of feelings. In this article anxiety disorders comprise: panic disorder, agoraphobia, social phobia, generalised anxiety disorder, obsessive-compulsive disorder and post-traumatic stress disorder.

Mood disorders (or affective disorders) involve mood disturbance, or change in affect. Most of these disorders tend to be recurrent and the onset of individual episodes can often be related to stressful events or situations. In this article mood disorders comprise: depressive episode, dysthymia and bipolar affective disorder.

Substance use disorders involve harmful use and/or dependence on alcohol and/or drugs. In this article they comprise: alcohol harmful use, alcohol dependence and drug use disorders.

A *physical condition* may include but is not limited to a medical condition, illness, injury or disability such as: asthma, cancer, stroke (or the effects of stroke), rheumatism or arthritis, diabetes, kidney problems, stomach ulcer, hernia or back or neck problems. For more information see the *National Survey of Mental Health and Wellbeing: Summary of Results, 2007* (ABS cat. no. 4326.0).

Unless otherwise stated, the information in this article relates to people aged 16–85 years and is based on the International Classification of Diseases and Related Health Problems (ICD-10). Some ICD-10 disorder criteria have a 'diagnostic exclusion rule', so that one disorder takes precedence over another. This means that if, for example, a person's symptoms of anxiety are due to the presence of post-traumatic stress disorder, that person will not also be diagnosed with generalised anxiety disorder. All prevalence data presented (including comorbidity data) are subject to the diagnostic exclusion rule.

While this article often separates the discussion of mental disorders by type, some of these people have more than one mental disorder, and this may add to the effects and/or severity that they experience.

This pattern was reversed when looking at mental disorders in the 12 months prior to the survey, when women were more likely than men to have had symptoms of mental illness (22% and 18% respectively). The higher rate of anxiety disorders among women was the main contributor to this differential across all age groups.

Data source

Most of the information in this article comes from the 2007 National Survey of Mental Health and Wellbeing (SMHWB). Measuring the prevalence of mental disorders in the community is a complex task, as such disorders are usually determined through clinical diagnosis. The SMHWB only covered those disorders which could be identified using an interview-based household survey. A modified version of the Composite International Diagnostic Interview was used to diagnose disorders. For more information see the *National Survey of Mental Health and Wellbeing, Users' Guide, 2007* (ABS cat. no. 4327.0).

The SMHWB was also conducted in 1997 but there were differences in the application of the diagnostic criteria in 1997 compared with 2007. Therefore the results are not comparable and 1997 data are not shown in this article. For more information see the *National Survey of Mental Health and Wellbeing, Users' Guide, 2007* (ABS cat. no. 4327.0).

About 60% of the people who were selected in the 2007 SMHWB responded to the survey. The response rate may have been affected by the sensitive topic, the fact that the questions took a relatively long time to answer and the fact that participation in the survey was voluntary. The ABS re-weighted the estimates to minimise possible bias due to non-response. For more information see the *National Survey of Mental Health and Wellbeing: Users' Guide, 2007* (ABS cat. no. 4327.0).

The rates of mental illness were higher for men aged 16–34 years (23%) and women aged 16–24 years (30%) compared with older age groups.

...anxiety disorders

Anxiety disorders generally involve feelings of tension, distress or nervousness. Specific anxiety disorders such as panic disorder, agoraphobia and generalised anxiety disorder have some symptoms in common such as a pounding heart, sweating, trembling, shaking and having difficulty breathing.[4] In 2007, anxiety disorders were the most common mental disorders, affecting 14% of all people aged 16–85 years in the 12 months prior to the survey. Women were more likely to have experienced anxiety disorders than men (18% and 11% respectively). Anxiety disorders were more common in women aged 16–54 years (21%) compared with older women aged 65–85 years (6.3%).

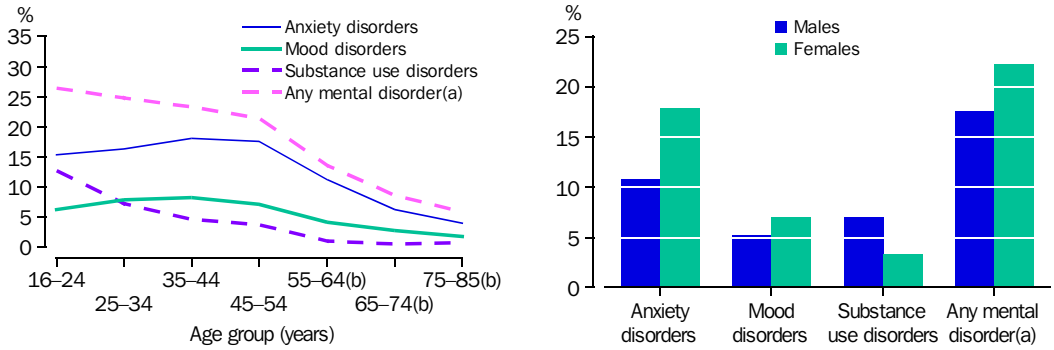
...mood disorders

Mood disorders (also known as affective disorders), such as depression, dysthymia and bipolar affective disorder, affected 6.2% of people aged 16–85 years (7.1% of women and 5.3% of men). The rate was higher for those aged 16–44 years (7.6%) than it was for those aged 55–85 years (3.3%). Depression and dysthymia may involve signs such as a depressed mood, loss of self-confidence and esteem, and reduced energy or activity over a period of at least two weeks. Bipolar disorder involves episodes of mania either alone or together with depressive episodes. Manic episodes may be characterised by less need for sleep, increased activity or restlessness and reckless behaviour.[4]

...substance use disorders

The harmful use of alcohol and other drugs is an issue that has many negative effects for individuals, their families and friends, and the wider community. Substance use disorders, involving harmful use of, or dependency on, alcohol or other drugs, were slightly less prevalent than other types of mental disorders, affecting 5.1% of people aged 16–85 years. Substance use disorders were more common in men (7.0%) than in women (3.3%). Substance use disorders were more likely for those aged 16–24 years (13%) than for other age groups, and were the most prevalent disorders for males of this age (15%).

Prevalence of selected mental disorders in the previous 12 months — 2007



(a) People may have had more than one disorder so components do not add to 'any mental disorder' total

(b) The estimates for substance use disorders for those aged 55–64, 65–74 and 75–85 years, and for mood disorders for those aged 75–85 years, have a relative standard error of 25% to 50% and should be used with caution

Source: *National Survey of Mental Health and Wellbeing: Summary of Results, 2007* (ABS cat. no. 4326.0)

...severity

The symptoms of mental illness may interfere with people's lives in different ways and to different degrees. The severity of mental disorders can be classified as mild, moderate or severe, based on what people said about the impact of symptoms on their home management, social life, ability to work and relationships.

Of all people with a mental disorder in 2007, just over one-fifth (21%) had a severe disorder, one-third (33%) had a moderate disorder and just under half (46%) had a mild disorder.

...comorbidity

People with a mental illness may have more than one disorder at any one time. This is known as comorbidity. The disorders may or may not be from the same group of mental health disorders. For example, a person could have an anxiety disorder such as agoraphobia, together with a substance use disorder such as alcohol dependency. Having multiple mental disorders is associated with greater impairment, higher risk of suicidal behaviour and greater use of health services.[5]

In 2007, 38% of all people with a mental illness (or 1.2 million people) had two or more mental disorders. A mix of mood and anxiety disorders was the most common combination, making up 39% of all comorbidity cases (472,000 people). People with more than one anxiety disorder made up a further 27% (331,000 people).

People with a mental illness are more likely than those without to have physical conditions, such as back or neck pain/problems, asthma or heart trouble, further compounding the difficulties they face.

In 2007, 59% of people with a mental illness also had a physical condition, compared with 48% of those without any mental disorder. After adjusting for age differences in the populations with and without mental illness, the gap between the rates of those with physical conditions further widened (from 11 to 17 percentage points). Comorbidity with physical conditions was most common for people with mood disorders, 64% of whom also had a physical condition.

Social isolation

Relationships are important since they provide people with networks of support. While mental health is related to social isolation, the causal link is hard to establish. People with a mental illness may be unable to participate fully in the community because of the difficulties they face in everyday functioning, while the experience of social isolation may play a role in the onset and development of poor mental health and/or illness.

...contact with family and friends

In 2007, while most people, both with and without a mental illness, said they had contact with their friends at least once a month, people with a mental illness were less likely to have this regular contact (90%) than were people without a mental illness (95%).

Indicators of social isolation — 2007

		With a mental illness			*Without a mental illness*		
		Male	Female	Total	Male	Female	Total
Contact with family and friends(a)							
Had contact with friends at least once a month	%	89.0	90.6	89.9	94.7	95.9	95.3
Had family could rely on and confide in with a serious problem	%	83.2	86.9	85.3	90.7	92.4	91.5
Living arrangements(a)							
Lone person	%	16.4	13.9	15.0	12.1	13.4	12.7
Separated/divorced/widowed	%	12.2	17.6	15.2	9.5	16.8	13.1
Total population aged 16–85 years	'000	**1 400.1**	**1 797.7**	**3 197.8**	**6 549.7**	**6 267.8**	**12 817.5**
Labour force(b)							
Unemployed people %	%	4.6	3.6	4.0	3.1	2.2	2.7
Employed people %	%	77.3	63.0	69.3	80.5	70.5	75.7
Total population aged 16–65 years	'000	**1 335.7**	**1 700.2**	**3 035.9**	**5 567.5**	**5 192.3**	**10 759.8**

(a) People aged 16–85 years with mental disorders within the previous 12 months
(b) People aged 16–65 years with mental disorders within the previous 12 months

Source: ABS 2007 National Survey of Mental Health and Wellbeing

People with a mental illness were also less likely to feel that they had family that they could rely on, and family that they could confide in with a serious problem, than were those without a mental illness (85% compared with 92%).

...living arrangements

In 2007, people with a mental illness were more likely than others to be living by themselves (15% compared with 13%) or to be separated, divorced or widowed (15% compared with 13%). These rates further diverged when adjusted for the age differences of the two populations.

...work

Employment provides income and therefore affects a person's economic wellbeing, but it also provides an opportunity for social engagement and improved self-esteem. People with a mental illness may find it difficult to get and keep a job.

In 2007, unemployment was slightly higher for those with a mental illness than those without (4.0% compared with 2.7%) and this was true for both men and women. The employment to population ratio was lower for people with a mental illness (69%) than those without (76%). The gap was greater for women than men (8 percentage points compared with 3 percentage points).

Mental health service use

Deinstitutionalisation over recent decades has seen less use of long-stay mental institutions and more use of community mental health services.[6] People with a mental illness may use a variety of services to help meet their need for information, medication, counselling, social intervention or skills training. Social intervention includes help to sort out practical issues, such as money or housing, and help to meet people for support or company. Skills training includes help to improve people's ability to work or care for themselves.

In 2007, nearly two-thirds (65%) of people with a mental disorder had not used services for their mental health problems in the 12 months before the survey. Most (86%) of those people who did not access any services said that they had no need for any type of assistance.

People aged 16–34 years were less likely to have used services for their mental health problems (29%) than people aged 35–54 (41%) or 55–85 years (37%). The most common group of disorders for young people was substance use disorders (often related to alcohol), which were more likely to be mild disorders than the other groups of disorders, and may have therefore contributed to the lower rate of service use.

Mental health services in Australia

In the four years to 2005–06, expenditure on state and territory mental health services as a whole increased by an average of 5.2% per year, to $2.7 billion.

The number of visits to GPs for mental health reasons increased by an average of 3% per year in the four years to 2006–07, to 10.7 million encounters that year, or one in ten of all GP encounters.

The number of Medicare-funded psychiatrist services declined in the five years leading into 2006–07, from about 2.1 million to 2 million. While these were accessed at a rate of 96 services per 1,000 people for Australia, there were distinct geographic differences. The rate of access of services per 1,000 people ranged from 19 in Very Remote areas to 113 in Major Cities.[7]

These geographic differences were also evident in the Medicare-funded mental health services provided by allied health professionals (for psychologists, social workers and occupational therapists) in 2005–06. There were 33 services per 1,000 people in Major Cities, while there were only 22 services per 1,000 people in Remote Areas. This rate dropped to 5 services per 1,000 people in Very Remote areas.

Source: Australian Institute of Health and Welfare (2008), *Mental health services in Australia 2005–06,* pp xi–xii.

Women were more likely than men to have used a service for mental health problems (41% compared with 28%). This is consistent with the fact that women are more likely than men to use health services in general[7] and tend to suffer from different, and more severe, disorders than men. People with two or more mental disorders were more likely to use a service (53%) than people with one disorder only (24%).

Of people with only one disorder, those with a mood disorder were the most likely to use a service for mental health problems (50%), compared with people with an anxiety disorder (22%) or a substance use disorder (11%). These higher rates of service use for people with mood disorders and the lower rates for people with substance-use disorders may be related to the differing severity levels of these types of disorders, since over half of those people with a mood disorder had a severe disorder (51%).

The most common service used was visiting a GP (25%) followed by seeing a psychologist (13%). GP consultation was the most common service used by both sexes, across all ages, types of mental disorders and across Major Cities[8] or other areas.

While men and women with mental disorders were equally likely to use the services of a psychologist for mental health problems, people from Major Cities were almost twice as likely to have used a psychologist (15%) compared with those from other areas (8%). This may be related to reduced access to such services in more remote areas.

People with mental disorders[a] by health services used for mental health problems[b] — 2007

	General practitioner	Psychologist	Other(c)	Total who used services for mental health problems	People who had a need not fully met
	%	%	%	%	%
Sex					
Male	18.0	13.1	15.1	27.5	25.2
Female	29.9	13.2	19.9	40.7	28.9
Age group (years)					
16–34	20.3	11.8	14.7	28.6	26.2
35–54	27.7	16.2	21.0	40.5	30.3
55–85	28.9	8.7	17.6	37.3	22.1
Geography					
Maior Cities of Australia	25.5	15.5	18.6	36.9	29.4
Other areas of Australia	22.9	8.3	16.0	30.8	22.7
Number and type of mental disorders					
Mood disorder only	41.9	*21.0	23.0	49.7	33.5
Anxiety disorder only	12.2	6.5	10.4	22.0	15.8
Substance-use disorder only	*6.9	**4.5	*5.6	*11.1	7.2
One mental disorder only	15.8	8.4	11.3	24.0	16.7
Two or more mental disorders	39.3	21.0	28.3	52.7	44.6
Physical conditions					
Mental disorder(s) with physical condition(s)	27.1	12.7	17.8	37.4	29.3
Total aged 16–85 years	**24.7**	**13.2**	**17.8**	**34.9**	**27.3**

* estimate has a relative standard error of 25% to 50% and should be used with caution
** estimate has a relative standard error of greater than 50% and is considered too unreliable for general use

(a) People aged 16–85 years with mental disorders within the previous 12 months
(b) Health services used within the previous 12 months
(c) Includes consultations with: psychiatrist, mental health nurse, social worker, counsellor, medical specialist, and complementary/alternative therapist

Source: ABS 2007 National Survey of Mental Health and Wellbeing

In 2007, there were about 872,000 people who had a mental health disorder and felt they had an unmet need for assistance (including 288,000 people with a mental illness who did not use services but who felt they had one or more unmet needs).

The most common type of perceived unmet need was for counselling (16% of all people with a mental health disorder), followed by information (14%) and social intervention (12%), includes help to sort out practical issues, such as money or housing, or help to meet people for support or company).

Suicide

Suicide occurs at the rate of about 1 per 10 000 people per year. The 2007 Survey of Mental Health and Wellbeing asked people about suicidal tendencies in the previous 12 months. In 2007, people with a mental illness were much more likely to have had serious thoughts about committing suicide than other people (8.3% compared with less than 0.8%). The rate was highest for people with mood disorders (17%).

Almost three-quarters of people who had had serious thoughts about committing suicide had a mental disorder (72%). Of these people, 77% had an anxiety disorder, 63% had a mood disorder and 34% had a substance use disorder.

Conclusion

Mental illness may have a variety of negative effects upon individuals' lives including, but not limited to, discrimination and social isolation. Mental illness costs billions of dollars a year, including the costs of treatment, lost productivity and lost participation in the labour force, and affects millions of Australians. One in five Australians aged 16–85 years had a mental disorder in 2007 and almost one in two (or 7.3 million people) had experienced a mental disorder at some point in their lives.

Endnotes

1 Australian Institute of Health and Welfare (2008) *Australia's Health 2008*, p. 219.

2 Council of Australian Governments (2006), *National Action Plan on Mental Health 2006–2011*, p. 1.

3 Australian Institute of Health and Welfare (2008), *Australia's Health 2008*, pp. 52–56.

4 World Health Organization, 'International Classification of Diseases', viewed 17 December 2008, <http://www.who.int/classifications/icd/en/>.

5 Australian Bureau of Statistics (2008), 2007 *National Survey of Mental Health and Wellbeing: Summary of Results* (ABS cat. no. 4326.0), p. 21.

6 Senate Community Affairs Committee (2008), *Towards recovery: mental health services in Australia*, p. 8.

7 Australian Bureau of Statistics (2006), *2004–05 National Health Survey: Summary of Results* (ABS cat. no. 4364.0), p. 13.

8 Classified using Remoteness Area, a structure of the Australian Standard Geographical Classification.

Trends in household work

Unpaid household work, including cooking, cleaning, shopping and caring for children, takes up a substantial proportion of people's waking lives. It contributes to the functioning of domestic life, providing goods and services that would otherwise have to be paid for. While it is excluded from most official measures of economic activity, the value of unpaid household work in Australia has been estimated as equivalent to up to half of Gross Domestic Product.[1]

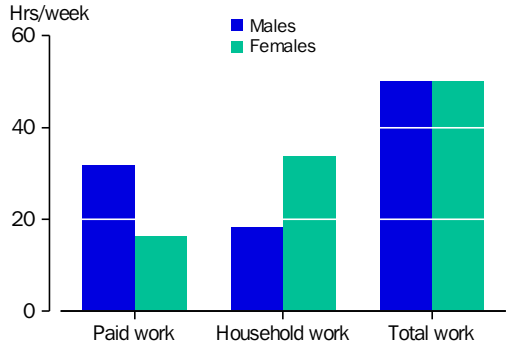
Paid and unpaid work

Over recent decades, economic and social changes have increased opportunities for women to participate in the paid work force. Between 1992 and 2006, the proportion of women who were employed increased from 48% to 55%. This led to an increase in the average time women spent on paid work, by an hour and 45 minutes, to an average of 16 hours and 25 minutes a week. This is much lower than a 'standard' working week due to the number of women who are either not employed or employed part-time.

In 2006, women spent almost twice as much time on household work as men did. The opposite was true of paid work.

While women were assuming a greater role in the workplace, they did not compensate by reducing work around the home. Women spent around the same amount of time on household work (which includes caring for children as well as domestic activities and shopping) in 2006 (an average of 33 hours and 45 minutes a week) as they had in 1992.

Time spent on paid work and household work by sex[(a)] — 2006



(a) Average hours per week by all persons for primary activities

Source: 2006 Time Use Survey

Data sources and definitions

The data in this article are drawn from the ABS Time Use Surveys conducted in 1992 and 2006. The surveys collected information on the time people spent on a range of activities, including household work. People aged 15 years and over participating in the survey kept a diary record of their activities (including their nature, timing and duration) over two specified days of the reference period.

Any activity that respondents described as their 'main activity' at a given time was recorded as a *primary* activity. If it was described as 'something else they were doing at the same time', it was recorded as a *secondary* activity.

In this article *household work* refers to unpaid domestic, child care and purchasing activities. *Domestic activities* include cooking, cleaning, laundry, grounds and animal care, home maintenance, and household management (e.g. paying bills and organising budgets). *Child care activities* include caring for, playing with and helping children. *Purchasing activities* include shopping for goods and services, enquiring about purchases, organising and paying for the purchase of goods and services, as well as associated travel. There may be a recreational component to some of these activities, for example shopping, gardening, or walking the dog. However, we have treated these activities as part of household work for the purposes of this article.

Voluntary work and other unpaid caring activities such as caring for adults with a disability or long-term health condition were included in the Time Use Survey but for the purposes of this article are not included. These topics have been featured in other *Australian Social Trends* articles and ABS publications. For further information see *Australian Social Trends 2008*, 'Voluntary Work', pp. 42–45 and *A Profile of Carers in Australia 2008* (ABS cat. no. 4448.0).

Paid work includes the time spent on a person's main job and other jobs, as well as work breaks, looking for work, and communication and travel time associated with employment related activities.

Over the same period, men took on more household work. Between 1992 and 2006, the average time men spent on household work rose by an hour and 25 minutes to 18 hours and 20 minutes a week. The time men spent in paid work remained steady at an average of around 31 hours and 50 minutes a week.

In 2006 women still did around two-thirds of household work, while men did two-thirds of paid work. In terms of total workload, both men and women spent an average of 50 hours and 10 minutes a week in a combination of paid work and household work.[2] This represents an increase since 1992 of around two hours a week for both men and women (or around four days over the course of a year).

Along with more time spent on paid work and household work, men and women also spent more time sleeping in 2006 compared with 1992. The extra time spent working and sleeping came at the expense of time spent on outdoor sports and general free time.

Still a case of men's work and women's work?

Although different gender roles are apparent in the division of household work (with women doing most of the indoor tasks and men dominating the outdoor activities) there is evidence that these roles have become less rigid in recent years. In 2006 men were spending more time on traditionally 'female' domestic activities such as cooking and laundry than in 1992, and less time on outdoor activities such as lawn mowing, and home maintenance.

As women, on average, increased the time spent in paid work between 1992 and 2006, the average time spent on domestic activities by women declined, particularly laundry and ironing, and other housework such as cleaning. However, this was partly offset by an increase in time spent on household management activities such as paying bills. Women also spent more time on other household work such as child care, so that the time spent on household work overall did not change significantly.

One change in time use patterns is an increase in the time both mothers and fathers spend caring for children as a primary activity. While differences in the way activities were coded between the 1992 and 2006 surveys may explain some of the increase in time spent playing, reading and talking with children, there was also an increase in the amount of time mothers and fathers spent minding children and travel time associated with caring for children.[3]

As people often look after children at the same time as doing other activities, to get a complete picture of time spent caring for children both primary and secondary activities need to be considered. Taking secondary activities into account shows that in 2006 mothers spent an

Measuring time spent on household work

Data from the Time Use Survey can be analysed in terms of the total time recorded for an activity divided by the number of people who recorded time for that activity (*participant average*), or the total time for an activity divided by the total population or a sub-group of the population (*all person average*).

The *participant average* provides an accurate estimate of the time individuals actually spent doing an activity on an average day and is useful for comparing activities (e.g. overall time spent on paid work by people who were at work compared with household work by people who did household work). However, it does not account for people who usually do the activity (e.g. paid work), but happened to complete the time use diary on days they didn't do it (e.g. when on leave from work).

By taking account of all people, including those who did not record time for an activity, the *all person average* provides an alternative estimate of average time that can be used to compare groups in the population, and assess time use patterns over a longer period such as a week. For these reasons, the analysis in this article is based on all person averages.

Time spent on household work by sex[(a)(b)] — 1992 and 2006

	1992		*2006*		*Time use ratio(b)*	
	Males	*Females*	*Males*	*Females*	1992	2006
	hrs and mins/week	*hrs and mins/week*	*hrs and mins/week*	*hrs and mins/week*	no.	no.
Domestic activities	11:19	21:14	11:19	20:04	1.9	1.8
Food preparation and clean up	2:48	8:17	3:23	8:03	3.0	2.4
Laundry and clothes care	0:28	3:58	0:35	3:23	8.5	5.8
Other housework	1:03	4:54	1:10	3:51	4.7	3.3
Grounds and animal care	3:30	2:34	2:41	2:27	0.7	0.9
Home maintenance	2:20	0:28	1:38	0:21	0.2	0.2
Household management	0:21	0:28	0:49	1:10	1.3	1.4
Child care	1:38	5:43	2:34	6:53	3.5	2.7
Purchasing goods and services	3:58	6:25	4:26	6:46	1.6	1.5
Total household work	**16:55**	**33:22**	**18:19**	**33:43**	**2.0**	**1.8**
Paid work	**31:16**	**14:42**	**31:51**	**16:27**	**0.5**	**0.5**

(a) Average hours and minutes per week by all persons for primary activities. The differences from figures quoted in the text are due to rounding

(b) Ratio of average time spent by women on an activity to the average time spent by men

Source: ABS Time Use Survey, 1992 and 2006

average of 55 hours and 20 minutes a week on child care activities, and fathers 26 hours and 10 minutes (both relatively steady since 1992).

...but shared differently than in the past

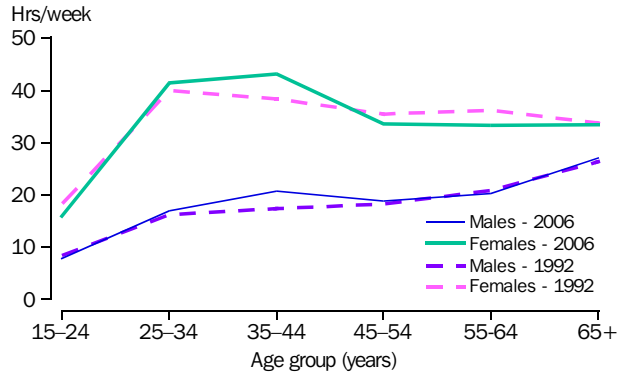
While men are doing slightly more household work than in the past, in 2006 women still did around 1.8 times as much as men (compared with twice as much in 1992). Although women are spending less time cleaning and doing laundry, they still spent almost six times as long on laundry as men in 2006, and more than three times as long on other housework such as cleaning. Women also spent almost two and a half times as long on food preparation and clean up, despite men doing more of the cooking than in the past.

While men are taking on a greater role with respect to child care than in the past, women on average spent more than two and a half times as long caring for children as men did in 2006. There were also differences in the type of child care activities parents did, with fathers spending a greater proportion of their child care time on play activities (41% compared with 25% for mothers), and mothers spending more of their time on physical and emotional care activities (43%, compared with 27% for fathers).

In 2006, home maintenance was the only area of household work on which men spent considerably more time than women, despite men having cut back in this area since 1992.

Overall, people are spending less time cleaning or maintaining their homes, and less time looking after their gardens than in the past. While this may imply that people are giving lower priority to housework and maintenance, it's likely that people are also finding more time-efficient ways to do the domestic duties, including the increasing use of labour saving devices such as dishwashers and dryers.

Time spent on household work by sex and age group[(a)] — 1992 and 2006



(a) Average hours per week by all persons for primary activities

Source: ABS Time Use Survey, 1992 and 2006

It may also be that people are paying others to do things they previously did themselves, such as cleaning and mowing lawns. Although there is no comparable data for 1992, in 2006, 10% of households paid for dry cleaning, ironing or laundry services, 9% paid for domestic cleaning services, and more than a quarter of households either paid for lawn or gardening services (13%) or had grounds maintained by a body corporate (13%).

Household work across the life course

The amount of time people devote to household work (i.e. domestic activities, caring for children and shopping) can vary throughout different stages of the life course. For women, time spent on household work tends to be greatest during the peak child-rearing period from 25 to 44 years. In 2006, women in this age group with children aged under 15 years spent around 53 hours a week on household work (the average for all women aged 25–44 years was 42 hours per week). This compared with 16 hours for all women aged 15–24 years, and around 33 hours and 30 minutes a week for those aged 45 years and over.

For men, time spent on household work increases with age. In 2006, men aged 15–24 years spent an average of just under eight hours per week on household work, compared with between 17 and 21 hours for those aged 25–64 years, and 27 hours a week for men aged 65 years and over.

The mix of household activities also varies over the life course. For example, the proportion of men and women who care for children, and the time they spend doing so, peaks among those aged 25–44 years.

In contrast to child care activities, both participation in and time spent on domestic activities tends to increase with age for men and women. Older men and women, for example, spend much more time cooking and gardening in their retirement years. Men also spend more time shopping as they get older. This may reflect changes in time use as a result of being widowed, or caring for a partner in older age. In other cases, people may see gardening or preparing meals as an enjoyable way to spend the additional time available in retirement.

...changes over time

While there was little change in the overall pattern of household work across the age groups from 1992 to 2006, there were shifts among some age groups for particular activities. For example, people aged 15–24 years were less likely to engage in domestic activities in 2006 than in 1992.

There was also a fall in the time women aged 35–64 years spent on domestic activities, particularly laundry and other housework such as cleaning. However, in terms of time spent on household work overall, this fall was offset by an increase in the proportion of women aged 35–44 years who engaged in child care activities, and in the time that these women spent caring for children. These time use patterns were also evident, though to a lesser degree, among men aged 35–44 years.

The impact of life course transitions on household work

Changing from one living arrangement to another can also influence the amount and type of household work people do.

...moving out of home

Not surprisingly, moving out of the parental home is associated with an increase in time spent doing household work. In 2006, men aged 20–49 years who were living alone or in group households spent significantly more time on domestic activities such as cooking, and more time shopping, than those living with parents.

The impact of moving out was not as dramatic for women because women living in the parental home spend much more time on household work than men. Women aged 20–49 years living alone or in group households spent more time doing domestic activities and shopping compared with those living at home.

...moving in with a partner

The transition from living alone or in a group household to moving in with a partner increases the amount of time women spend on household work.[4] In 2006, women aged 20–49 years in couple households without children did almost six hours more household work a week than those living alone or in group households. In contrast, moving in with a partner did not significantly affect the amount of time men spent on household work.

Women living with partners spent considerably more time on domestic activities including cooking, laundry and other housework such as cleaning, compared with those living alone or in group houses.

...becoming a parent

While having children aged under 15 years increases the volume of household work for both men and women, the additional work is largely taken up by women.[5]

In 2006, mothers aged 20–49 years in couple relationships did 29 hours more household work per week than those without children. While much of this was due to the time mothers spent on child care activities, they also spent an extra seven hours a week on domestic activities.

Fathers aged 20–49 years in couple families spent roughly the same amount of time on domestic activities, and less time shopping, compared with those without children. However, fathers spent nine hours a week on average caring for children.

Time spent on household work by sex and selected living arrangements[(a)(b)] — 2006

	Time spent on activity: hours and mins/week			
Living arrangements	*Domestic activities*	*Child care activities*	*Purchasing activities*	*Total household work*
Males				
Living at home with parents	5:22	*0:14	3:09	8:45
Living alone or in group household	8:45	**0:35	5:29	14:50
Partner in a couple family with no children	9:41	**0:14	4:12	14:07
Parents in a couple family with children <15 years	10:09	8:59	3:16	22:24
Females				
Living at home with parents	7:28	*0:35	5:22	13:25
Living alone or in group household	9:55	**0:50	7:14	17:58
Partner in a couple family with no children	16:27	**0:35	6:32	23:41
Parents in a couple family with children <15 years	23:41	22:17	6:47	52:44

* Estimate has a standard error of 25% to 50% and should be used with caution

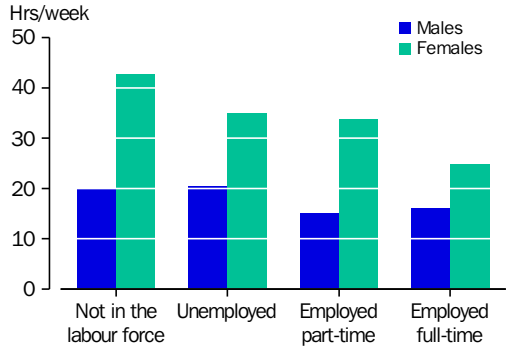
** Estimate has a standard error of greater than 50% and is considered too unreliable for general use

(a) Average hours and minutes per week by all persons for primary activities

(b) For people aged 20–49 years

Source: 2006 Time Use Survey

Time spent on household work by sex and status in employment[(a)(b)] — 2006



(a) Average hours per week by all persons for primary activities

(b) Aged 15–64 years

Source: 2006 Time Use Survey

While mothers spent less time in paid work than women without children, they also got less sleep and had less time for recreation and leisure activities. For fathers, the extra household work came at the expense of sleep and recreation and leisure time, but not paid work.

Employment status

The amount of time people spend on household work often shapes or is shaped by their participation in paid work. In 2006, people who were not employed (i.e. either not in the labour force or unemployed) spent considerably more time on household work than those who were employed. This pattern was much more pronounced for women than it was for men.

Women aged 15–64 years who were not in the labour force spent an extra 17 hours and 50 minutes per week on household work compared with those who were employed full-time. Most of this additional time was spent cooking, cleaning and looking after children. However, women working full-time spent almost 65 hours in a combination of paid work and household work (total work), compared with around 43 hours for those women not in the labour force.

On average, men aged 15–64 years who were unemployed or not in the labour force did between four and five hours more household work per week than those who were employed full-time or part-time. Men who were not in the labour force or who were unemployed spent more time cooking, cleaning and looking after the garden.

Among employed men, there was little difference in time spent on household work between those who worked full-time and part-time. However, among women, those working part-time did almost nine hours more household work a week than those employed full-time, with around half of this extra time spent on child care activities. This reflects the different roles men and women tend to play within families and how these interact with participation in the labour force.

Couple families with children

The interaction between paid work and household work is particularly relevant for couple families with children. In many such families, mothers vary their participation in paid work and the time they devote to household work depending on their family situation and preferences, while the amount of time fathers spend on paid work and household work remains relatively constant.

In 2006, the most common arrangement among couple families with children under 15 years was for the father to be employed full-time and the mother part-time (42%). In these families, on average, mothers spent more than twice as long on household work as fathers. However, when total work (household work and paid work) is considered, there is little difference in the amount of work men and women in these families do (around 73 hours for men and 70 hours for women).

It was not very common for both parents to work full-time in families with children aged

Couple families with children aged under 15 years — 2006

	Proportion of couple families	*Males*			*Females*		
	%	*Paid work(a)*	*Household work(a)*	*Total work(a)*	*Paid work(a)*	*Household work(a)*	*Total work(a)*
Male partner employed full-time							
Female partner not employed	24.4	52:30	19:57	72:27	*0:29	65:13	65:41
Female partner employed part-time	41.5	51:27	21:21	72:48	19:29	50:24	69:53
Female partner employed full-time	21.3	52:23	20:32	72:55	32:26	41:32	73:58

* Estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Average hours and minutes per week by all persons for primary activities

Source: 2006 Time Use Survey

under 5 years. It is more common for both parents to work full-time when children are older and the demands of child care and some domestic activities may have eased. Mothers in families where both parents worked full-time spent considerably less time on household work, particularly cooking, cleaning, and laundry, compared with families in which the mother worked part-time.

While mothers who worked full-time did almost nine hours less household work a week on average than those working part-time, this did not offset the additional time they spent in paid work. The increased workload of mothers working full-time appears to come at the expense of recreation and leisure time.

Arrangements where the father worked full-time and the mother was not employed were more common in families with very young children (i.e. aged 0–4 years). Mothers in families with these working arrangements did more than three times as much household work as fathers. However, when considering total workload, fathers in these families spent more time in a combination of paid work and household work than mothers (72 hours compared with 66 hours).

Mothers in these families tended to spend much more time on household work, particularly childcare, than those in families where the mother was employed. When paid work is taken into account, mothers who were not employed spent less time working overall (66 hours) than mothers employed part-time (70 hours) or mothers employed full-time (74 hours).

Conclusion

The past few decades in Australia have seen significant change in social expectations about gender roles. This has been reflected in women playing an increasing role in the paid work force, and in men becoming more involved in child care activities. While women still do the majority of household work, men continue to do the majority of paid work. The amount of total work (paid and unpaid work) done is much the same for men and women.

The extent to which the traditional division of labour between men and women persists in the future will likely be influenced by a range of factors, including institutional arrangements, economic conditions, social expectations and ultimately by the decisions individuals and families make based on their own circumstances and preferences.

Endnotes

1 Australian Bureau of Statistics 1997, *Unpaid work and the Australian economy, 1997*, cat. no. 5240.0, ABS, Canberra.

2 When taking both primary and secondary activities into account, women's average total workload in 2006 was 58 hours a week, compared with 54 hours and 20 minutes for men.

3 For further detail about coding changes between the 1992 and 2006 Time Use Surveys, see Australian Bureau of Statistics 2006, *How Australians use their time, 2006*, cat. no. 4153.0, ABS, Canberra.

4 This is consistent with findings from the Household Income and Labour Dynamics (HILDA) survey. See Baxter, J 2006, *Patterns of time use over the lifecourse: What we know and what we need to know.* Paper presented at the Social Policy Research Centre Time use and Gender Seminar, 14 June 2006. Viewed 20 February 2008, <http://www.sprc.unsw.edu.au/Time%20Use%20and%20Gender%20Seminar/Baxter.pdf>.

5 Craig, L 2006, 'Children and the revolution: A time-diary analysis of the impact of motherhood on daily workload', *Journal of Sociology*, 42 (2), pp. 125–143.

Retirement and retirement intentions

Many people look forward to retirement as a period to do all the things for which there was never enough time during their working lives. However, one less positive aspect of retirement is the fact that most people will have less income when they retire.

Retirement can negatively affect economic growth if it leads to lower participation in the labour force and the loss of skills. The high life expectancy of Australians, together with a low fertility rate, suggests that in future years there will be a relatively smaller working population to support those people who aren't working. The needs of an ageing population will put pressure on the capacity of government to adequately fund government payments, programs and services. In anticipation of this, there are various policies in place, particularly around taxation and superannuation, to encourage mature age workers to stay in the workforce for longer.

How many people are retired?

In 2007, according to the Survey of Employment Arrangements, Retirement and Superannuation, there were an estimated 7.7 million people who were aged 45 years or over. Of these, 3.1 million people were retired. In other words, around two-fifths of people aged 45 years or over were retired.

Data sources and definitions

Most of the information in this article comes from the 2007 Survey of Employment Arrangements, Retirement and Superannuation. The information relates to people aged 45 years and over.

When thinking about age at retirement, it's important to remember that the data only refer to 'surviving' retirees aged 45 years and over in 2007. This means that the distribution of age at retirement in this population is not representative of the age at which all people retire. For example, a person who retired at the age of 40 in 1982 (and would have been 65 in 2007) was more likely to be alive to participate in the survey than a person who retired at 65 in 1982 (who, if alive, would have been 90 in 2007). While this will have some effect on all of the estimates of age at retirement, the effect would be more pronounced for people who retired a long time ago, so most of the analysis in this article relates to people who retired less than twenty years before the survey was conducted in 2007.

Retired people (or retirees) are those people who had previously worked for two weeks or more, who were not in the labour force (i.e. were neither employed nor unemployed) and who did not intend to look for, or do, paid work in the future.

Not surprisingly, the older that people were, the more likely they were to be retired. Women tend to live longer and retire earlier than men, and so in 2007 there were more retired women (1.8 million) than retired men (1.3 million). The average age at retirement for women was 47, compared with 58 for men.

Retirement status and retirement intentions, people aged 45 years and over — April to July 2007

	Men by age group (years)							*Women by age group (years)*						
	45–49	*50–54*	*55–59*	*60–64*	*65–69*	*70+*	*Total*	*45–49*	*50–54*	*55–59*	*60–64*	*65–69*	*70+*	*Total*
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Retirement status														
Retired	4.5	6.7	16.5	35.9	67.7	90.8	36.6	6.9	13.8	31.3	56.5	84.4	97.1	48.2
Not retired	95.5	93.3	83.5	64.1	32.3	9.2	63.4	93.1	86.2	68.7	43.5	15.6	2.9	51.8
Employed														
Intends to retire	86.9	85.5	82.4	81.8	76.2	56.0	83.3	89.6	89.3	87.3	86.9	77.7	72.3	88.1
Never intends to retire	13.1	14.5	17.6	18.2	23.8	44.0	16.7	10.4	10.7	12.7	13.1	22.3	*27.7	11.9
	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000
Total people(a)	742.1	666.8	627.8	521.4	396.2	805.6	3 759.8	754.6	681.4	636.6	519.1	402.4	983.7	3 977.6
Total retired	33.0	43.4	101.0	179.7	264.7	726.8	1 348.6	49.4	90.0	188.2	273.6	320.9	875.8	1 797.8

* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Includes a small number of people whose retirement status could not be determined or who had never worked for two weeks or more. These two groups of people were excluded before calculating the percentages for retirement status shown in this table

Source: *Employment Arrangements, Retirement and Superannuation, Australia* (ABS cat. no. 6361.0)

Why do people retire?

Of the 1.9 million retirees who had worked at some time in the last 20 years, the most common main reason for retiring was the retiree's health. This was a more common reason for retired men (38%) than retired women (25%). People who had retired at a relatively young age (before their 50th birthday) were particularly likely to have done so for reasons relating either to their own health or someone else's. Half of the people who had retired by age 49 said that their own health or physical abilities was the main reason they retired. This trend was even more marked for men who had retired before their 45th birthday, almost 80% of whom had done so for health reasons (compared with 37% of women).

Other common reasons for retirement for men included financial reasons (20%) and being retrenched or made redundant (10%). While financial considerations were likely to influence men, women were more likely to make their decision about retirement based on family considerations. Common reasons for women to retire included caring responsibilities (15%) and to spend more time with their family or partner (13%).

Why do people come out of retirement?

About 310,000 people who were working in 2007 had previously retired (that is, stopped working with no intention at the time of ever working again). The most common main reason for this group to return to work was financial need (36% of men and 42% of women who had previously retired). Another common reason for men to come out of retirement was because they were bored or needed something to do (32% of men gave this as their main reason for returning to the workforce compared with 14% of women).

Men were almost twice as likely as women to return from retirement to a job with duties that were less demanding than their last job before retirement (36% and 19% respectively). Women were only slightly more likely than men to return to a job with more flexibility or more control over the hours they worked (26% and 19%). Overall, about one-fifth of people who returned to work (22%) had the same working arrangements as their last job before retiring.

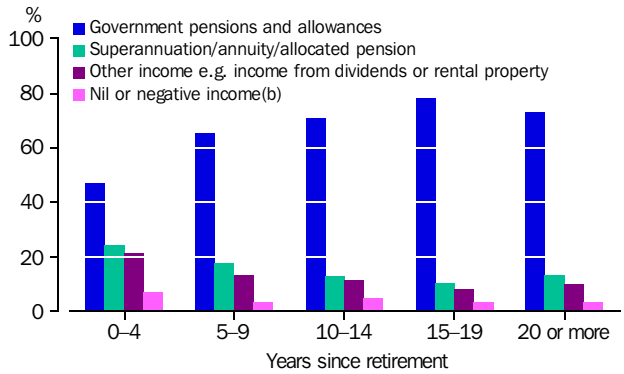
Current sources of personal income

Government pensions and allowances was by far the most common source of personal retirement income for both men and women, with around two-thirds of both sexes relying on this as their current main source of income. The longer people had been retired, the more likely they were to have this as their main source of income.

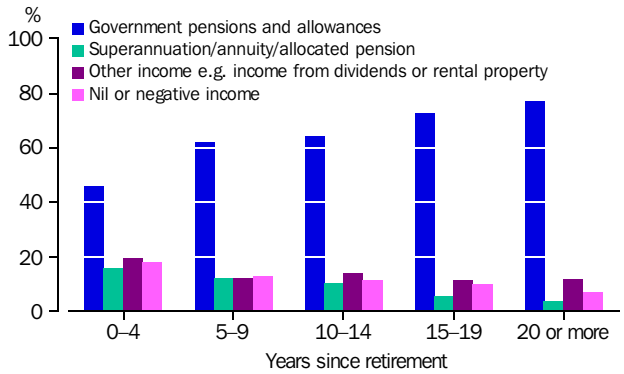
Women were much more likely than men to have either no income or negative income. In 2007, 10% of retired women aged 45 years and over had no, or negative, personal income (and therefore were relying on savings, assets or their partner's income) compared with 4% of men. Almost one in five women who had retired in the last four years had no (or negative) personal income. While some people with no personal income may have quite a high standard of living, relying on a partner's income may be of concern if family circumstances change (for example as a result of divorce or death of a partner).

There were notable differences for retirees, when compared with those workers who intended to retire, regarding their main (expected) source of income at retirement. Superannuation was the main source of income at retirement for only 16% of those people who had retired at age 45 or over[1] during the 20 years before the survey, while almost half (47%) of those who intended to retire expected this to be their main source of income. This change

Retired men aged 45 and over, main source of personal income[(a)] — April to July 2007



Retired women aged 45 and over, main source of personal income[(a)] — April to July 2007



(a) The percentages in these graphs were calculated after excluding those people whose main source of income was not stated

(b) The estimates for 'nil or negative income' for men have a relative standard error of 25% to 50% for all categories except '0–4 years since retirement'

Source: *Employment Arrangement, Retirement and Superannuation, Australia* ABS cat. no. 6361.0)

reflects the impact of compulsory superannuation initiatives that were introduced in the late 1980s and early 1990s. See the article on superannuation, also in the March 2009 issue of *Australian Social Trends,* for more details on Australians' use of superannuation.

Retirement intentions

While the fertility rate in Australia has recently increased, it is still below the replacement level (the rate of births needed for women to replace themselves and their partners).[2] Although the effect of this may be partly offset by increases in the numbers of young skilled migrants to Australia, the large numbers of people retiring from the labour force may be reflected in a decline in labour force participation.

Over one million people plan to retire in the next ten years

There were 3.9 million employed people who were aged 45 and over in 2007 and 85% of these (3.3 million people) intend to retire at some point. Over one million people plan to retire in the next ten years. However, not everyone plans to retire. One in seven employed Australians (aged 45 or over) intend to keep working for the rest of their lives.

...are people planning to work for longer?

In 2007, the average age at which employed people intended to retire was 64 years (64 for men, 62 for women). This is five years later than the average age at retirement for retirees. Of those people who had retired in the 20 years prior to the survey, and were at least 45 when they retired[1], the average age at retirement was 59 years (60 years for men, 57 years for women).

...deciding when to retire

For people who were working in 2007, were aged 45 or over, and intended to retire, the main factors influencing their decision about when to retire were: financial security (this was the main factor for 44% of men and 37% of women); personal health and physical abilities (19% of men, 20% of women); and reaching the eligibility age for an age or service pension (8% of both men and women).

Those people who said that financial security was the main factor influencing their decision intended to retire at 63 on average (64 for men and 62 for women).

People who believe that their health will be the main factor determining when they retire expect to retire, on average, two years later than those who think that financial security will be the driver. It may be that people are hopeful that health problems will occur later in life while those waiting for a sense of financial security before retiring hope that this can be achieved earlier. However, health problems are difficult to predict, and this is evident when the main factors influencing retirement intentions are compared with the main reasons for retirement among those who have already retired (aged 45 or over at retirement[1], who had worked in the twenty years to 2007). The average age at retirement for those retiring for health reasons was 57, whereas the average age at retirement for people retiring for financial reasons was 61.

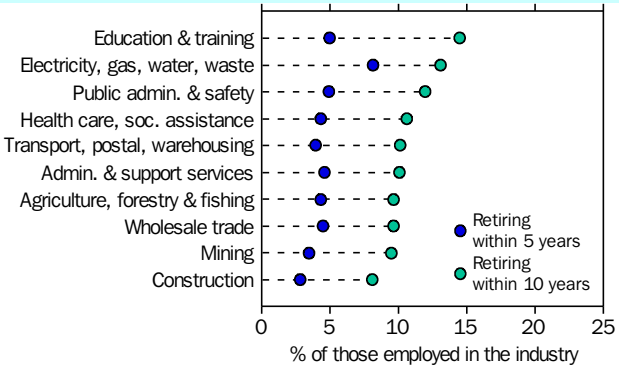
Another unpredictable factor affecting retirement decisions is job security. While less than 1% of workers intending to retire expected being retrenched or made redundant to be the main factor influencing their decision about when to retire, 8% of those people who retired in the twenty years to 2007, who were 45 or older when they retired[1], said this was the main reason they had retired. The average age at retirement for this group was 57 years (58 for men and 55 for women).

...industry

The industries which had a relatively large proportion of their workforce intending to retire within 10 years included education and training (14% of people whose main job was in this industry intended to retire before 2017), electricity, gas, water and waste services (13%); and public administration and safety (12%).[3] These industries tended to have higher proportions of older staff than other industries. At least 40% of staff in all three industries were aged 45 or over and around 15% of staff were aged 55 or over.

Conversely, other industries had relatively small proportions of their workforce intending to retire within ten years. Only 3% of those

People intending to retire within 10 years, selected industries — April to July 2007



Source: ABS Survey of Employment Arrangements, Retirement and Superannuation

working in the accommodation and food services industry (where staff tended to be fairly young, with less than 20% aged 45 or over) intended to retire in this time frame. Around 5% of those in the arts and recreation services and the 'other services' industries[3] (where around one-third of staff were 45 or older) planned to retire before 2017.

The average age at which employed people intended to retire was 64. Agriculture, forestry and fishing was the industry with the oldest average age of intended retirement, at 66. Farmers tend to be much older than people working in other occupations. The median age of farmers in 2006 was 52 years, much higher than the median age of 40 years for people working in all the other occupations combined.

At the other end of the spectrum, people in the mining industry were intending to retire while they were younger. The average age at which these people intended to retire was 62, and this was also the average for people employed in the electricity, gas, water and waste services industry and the arts and recreation services industry.

...winding down to retirement

About 1.1 million people, or 41% of the 2.8 million people working full-time in 2007, intend to switch to part-time work before retiring. Nearly two-thirds (64%) of these people plan to stay with their current employer when they change to part-time work. The average age at which they intend to make this change is 60 years. Another 12% plan to work part-time, change employer and change to a completely different line of work, and 5% plan to change employer and work part-time with no other plans to phase in retirement. The average age at which people intend to make these changes is 59 years. Other, less common, plans for winding down to retirement include working on a contract basis and becoming self-employed.

Almost three-quarters of a million people plan to keep working full-time until they retire. Most (almost 70%) of these people plan to keep working for their current employer with no plans to phase in retirement. A further 18% intend to stay with their current employer but with less demanding duties.

Not many people plan to change employer before retirement. About 3% of people who intend to work full-time until they retire plan to change employer and have no other plans to phase in retirement. Another 3% plan to change employer and move to a completely different line of work. The average age at which people plan to implement these changes is 53 years.

International comparison

The official age of retirement is when a worker can receive a pension. One difference between Australia and many OECD countries is the different ages at which men and women receive the age pension. The qualification age for Australian women is progressively increasing, and will reach 65 in 2013.

While the official retirement age for Australian men in 2002–07 was higher than the OECD average, Australia's life expectancy is also higher than most other OECD countries – the exceptions are Japan, Iceland and Switzerland.

Average official retirement age, OECD countries, 2002–2007

	Men		*Women*
OECD countries	*years*	*OECD countries*	*years*
Iceland	67	Iceland	67
Norway	67	Norway	67
United States	65.8	United States	65.8
Canada	65	Canada	65
Denmark	65	Denmark	65
Finland	65	Finland	65
Germany	65	Germany	65
Ireland	65	Ireland	65
Luxembourg	65	Luxembourg	65
Mexico	65	Mexico	65
Netherlands	65	Netherlands	65
New Zealand	65	New Zealand	65
Portugal	65	Portugal	65
Spain	65	Spain	65
Sweden	65	Sweden	65
Switzerland	65	Switzerland	64
Australia	**65**	**Australia**	**63**
United Kingdom	65	Slovak Republic	62
Poland	65	Japan	61
Austria	65	Austria	60
Japan	63	Poland	60
Hungary	62	United Kingdom	60
Slovak Republic	62	Hungary	60
Czech Republic	62	France(a)	60
Korea	60	Korea	60
Belgium(a)	60	Belgium(a)	60
Turkey	60	Czech Republic	59
France	60	Turkey	58
Greece(a)	58	Greece(a)	58
Italy(a)	57	Italy(a)	57
OECD average	63.6	OECD average	62.7

(a) In Belgium and France, workers can retire at 60 with 40 years of insurance contributions; in Greece, at 58 with 35 years of contributions; and in Italy, at 57 (56 for manual workers) with 35 years of contributions

Source: OECD, Statistics on average effective age and official age of retirement in OECD countries

...expected source of income at retirement

Over half the men who intend to retire (and who were able to say what they expected their main source of income to be at retirement) expect superannuation, an annuity or an allocated pension to be their main source of income, compared with about two-fifths of women.

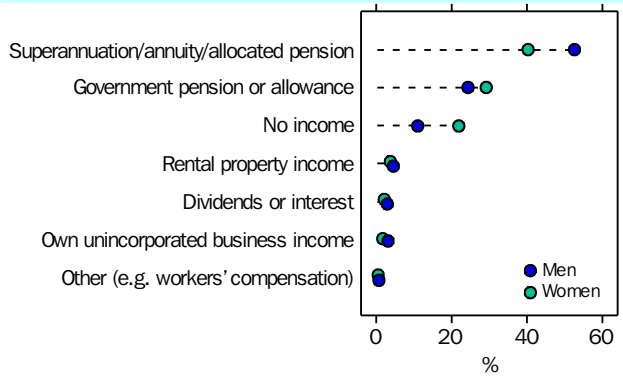
The second most common source of expected income was a government pension or allowance. Over one-quarter of people who intend to retire expect this to be their main income source (24% of men and 29% of women). The proportion expecting that this would be their main source of income at retirement increased with age, ranging from 22% of people aged 45–49 years to 35% of those aged 70 or over.

One in five women and one in ten men who intend to retire do not expect to have any personal income. Over half the women who intend to retire at a relatively young age (45–54) expect to have no personal income source when they retire.

Looking ahead

As Australia's population ages, the plans that people have for retirement have become increasingly important to Australia's social and economic outlook. Since financial security is a key factor in many people's decision about when to retire, the global financial crisis, which has had an effect on superannuation balances and wealth, may cause some people to retire later than they had originally intended. There is a marked contrast between the patterns evident from retirees to date compared with the intentions of future retirees, and only time will tell whether people's intentions about when they might retire match reality.

Main expected source of income at retirement[(a)] — April to July 2007



(a) People who could not state their expected main source of income at retirement were excluded before calculating percentages

Source: *Employment Arrangements, Retirement and Superannuation* (ABS cat. no. 6361.0)

Endnotes

1 Retirement intentions data were only collected for people aged 45 years and over. For this reason, the retired population has been restricted to those who retired aged 45 years and over when comparing the experiences of retirees with those people who have yet to retire, to aid comparability. Where no comparisons are made, the retired population includes those who retired before their 45th birthday.

2 Australian Bureau of Statistics 2008, *Births, Australia, 2007*, cat. no. 3301.0, ABS, Canberra.

3 The industries referred to in this article are based on the 2006 Australian and New Zealand Standard Industrial Classification. 'Public administration and safety' includes people who are involved in setting policy, overseeing government programs and creating laws. It includes, for example, police services and emergency services. 'Other services' includes a broad range of personal services (e.g. hair and beauty, dry-cleaning); funeral services; and maintenance and repair of equipment and machinery (e.g. cars, domestic appliances).

Household debt

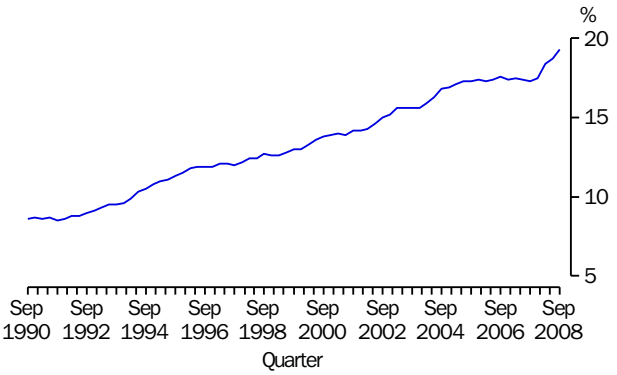
The onset of the global 'credit crunch' in mid 2007 and the subsequent financial turmoil appears to have discouraged households from taking on new debt. As an example, the number of owner occupied housing commitments (including refinancing) fell by 22% from the December 2007 quarter to the December 2008 quarter (from 200,000 to 156,000).

However, these developments follow an unprecedented period of growth in household debt in many developed countries over the past 30 years.[1] In Australia, this was particularly the case from the early 1990s, as more competition among lenders increased the supply and reduced the cost of credit.[1] On the demand side, the 1990s saw a decline in inflation leading to lower interest rates. This, combined with low unemployment and increasing income and wealth, meant that households were able to afford higher levels of debt than before.

Over the last 18 years, the level of household debt grew twice as fast as the value of household assets, as the ratio of household debt to assets doubled from 9% to 19%.

Household debt is not in itself a cause for concern, as incurring a debt presents opportunities as well as risks. However, the rapid increase in household debt relative to the growth of income and wealth attracted a lot of attention. While some of the increase was used to finance consumption, most was used to buy assets. One concern about this high level of debt is that in the event of an economic downturn some households may have trouble servicing their debt. Households with high levels of debt that wish to reduce their level of gearing may be affected by falling asset prices.

Household debt[(a)] to household assets[(b)] ratio



(a) Levels of household debt have been adjusted for breaks in the series (the establishment of new banks and other changes in reporting arrangements)

(b) Assets include financial assets of unincorporated enterprises and non-profit institutions serving households

Source: RBA Bulletin Statistical Table B21

Data sources and definitions

The main sources of data used in this article are the ABS 2003–04 and 2005–06 Surveys of Income and Housing (SIH). Reserve Bank of Australia (RBA) tables are also used.

Households, as used in ABS surveys, refer to people who usually live in private dwellings in Australia. *Household sector,* as used by the RBA, comprises all people, including those living in non-private dwellings such as aged care residential facilities. About 2% of the Australian population are outside the scope of the SIH. These people would be included in the RBA data. The household sector excludes unincorporated businesses and non-profit institutions serving households for levels of debt, but includes their financial assets for levels of assets.

Debt or liabilities in the SIH includes: principal outstanding on loans for owner-occupied dwellings, rental and other property (including non-residential property), cars, investments and other purposes; debt outstanding on study loans; and amounts owing on credit cards. As used by the RBA, debt refers to loans made for owner-occupier and/or investor housing (i.e. residential dwellings) and other personal debt (personal loans and credit card debt).

Assets are owned by the members of a household, and provide economic benefits. In the SIH, assets include money held in bank accounts, the family home, other property and land, cars and home contents, amounts accumulated in superannuation funds, shares, trusts, debentures and bonds. The term 'assets' as used by the RBA includes dwellings (such as houses and apartments), consumer durables (such as cars and furnishings) and financial assets (such as shares). For more information see the RBA Bulletin Notes to Tables <http://www.rba.gov.au>.

Median refers to the level of a measure (such as income) which divides the units in a group (such as households) into two equal parts, one half having, for example, incomes above the median and the other half having incomes below the median.

How much has debt increased?

Based on information from the Reserve Bank of Australia, over the last 18 years the total amount of debt owed by Australian households rose almost six-fold. At September 1990 the level of household debt was almost $190 billion, increasing to around $1.1 trillion by September 2008 in real terms (i.e. adjusted to remove the effect of inflation).

Most debt was incurred to buy houses. Between 1990 and 2008, debt for investor housing increased from 11% to 27% of all household debt. Debt for owner occupier housing was consistently the largest component, ranging from 56% to 67% of debt (59% in September 2008). Other personal debt (for example credit card debt) halved as a proportion of all debt.

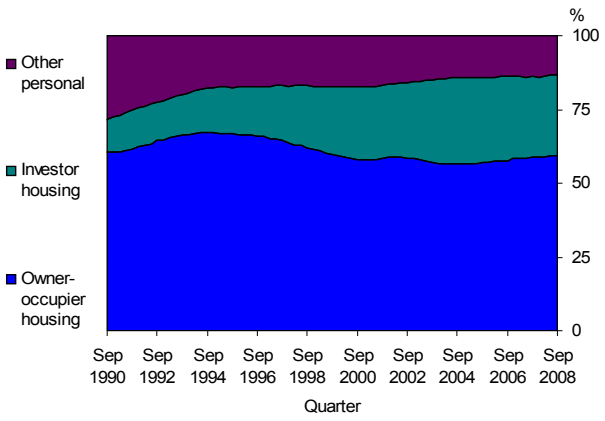
Most debt was incurred to buy houses, with owner occupier housing the largest type of debt, and investor housing the fastest growing.

...relative to assets

Comparing levels of debt with assets provides context on how they have changed over time. Between September 1990 and September 2008, the ratio of total household debt to assets held by households rose from 9% to 19%. In other words, debt grew twice as fast as the total value of assets held by households. The sharp increase in the debt to asset ratio from December 2007 to September 2008 was due to a decline in the value of household assets.

Among the different types of debt, housing debt as a proportion of housing assets rose from 11% to 29%, which means overall, households have come to own a relatively smaller proportion of their houses. On the other hand, the total amount of equity households hold in their houses increased by 62%, from an average of $185,000 to $299,000 per household. Borrowing for owner-occupation and investment both contributed to the rise in housing debt. In contrast, the ratio of other personal debt to assets was around 2% in both periods.

Household debt[(a)] components



(a) Levels of household debt and debt components have been adjusted for breaks in the series (the establishment of new banks and other changes in reporting arrangements)

Source: RBA Bulletin Statistical Tables B21 and D02

Income definitions

Gross household income refers to the sum of income from all sources (wages and salaries; profit/loss from own unincorporated business; investment income; government pensions and allowances; private cash transfers) before income tax or the Medicare levy are deducted. Deducting these produces *disposable household income*.

Equivalised disposable household income is disposable household income adjusted to take account of the economies of scale obtained when more than one person lives in a household and shares housing costs and other expenses. For a lone person household it is equal to disposable household income.

Quintiles are the groupings that result from ranking all households or people in the population in ascending order according to some characteristic such as their household income and then dividing the population into five equal groups, each comprising 20% of the estimated population. *Deciles* are ten equal groups, each comprising 10% of the estimated population.

For more information see *Household Income and Income Distribution, 2005–06* (ABS cat. no. 6523.0).

Who owes money?

Based on information from the Survey of Income and Housing, in 2005–06 there were 5.7 million households with some debt, that is, loans outstanding for houses, cars, investment, study or other purposes, or money owing on credit cards. The proportion of households with debt (72%) was similar to that in 2003–04 (73%).

In 2005–06, almost two-thirds (65%) of all households had non-property debt, including 55% with credit card debt. Almost one-third (32%) of households owed money for owner occupied property, and 12% had debt for rental properties and/or other property (including households living in rental properties who had borrowed money to buy or build a home somewhere else).

...age

Linked with changes in employment and income, people are generally more likely to owe money from young adulthood to middle age, and less likely to have debt during retirement and older age. Non-property debt was fairly common (between 69% and 77%) among younger and middle aged households (where the reference person was aged 15–24 years to 45–54 years) and then declined in older age groups. Owner occupied property debt increased steadily with age, peaking for households where the reference person was aged 35–44 years (51%) before declining in older age groups. Other property debt (such as debt used to buy a rental property) had a slight peak at 16–17% among households where the reference person was aged 35–44 and 45–54 years.

...income

In 2005–06, the prevalence of all types of debt increased with income, as the more income and assets a household has, the easier it is for that household to borrow money. The proportion of low income households (those in the lowest income quintile) with non-property debt (40%) was around half that of high income households (those in the highest income quintile). Owner occupier debt was less common among low income households (12%) than among households in the other income groups (ranging from 26% to 45%). Other property debt was concentrated among high income households, where 24% had this type of debt.

Households in the top two income quintiles owed almost two-thirds (64%) of all debt. These households accounted for 62% of owner occupier debt and almost three-quarters (73%) of rental property debt.

How much debt?

From 2003–04 to 2005–06, the median amount of debt among indebted households rose from $37,700 to $50,500 (in 2005–06 prices), a real increase of 34%. While the average (mean) amount of debt was substantially higher than the median at both points in time ($101,000 and $128,000, respectively), the real increase in average debt was slightly lower (27%) over the period.

The gap between the median and average amount of debt indicates that debt, like income and wealth, is not distributed evenly and that, while a considerable number of households have relatively low levels of debt, there are some households with very high levels. In 2005–06, 39% of households had debt less than or equal to $20,000, and 4% had debt greater than $500,000.

Negative gearing

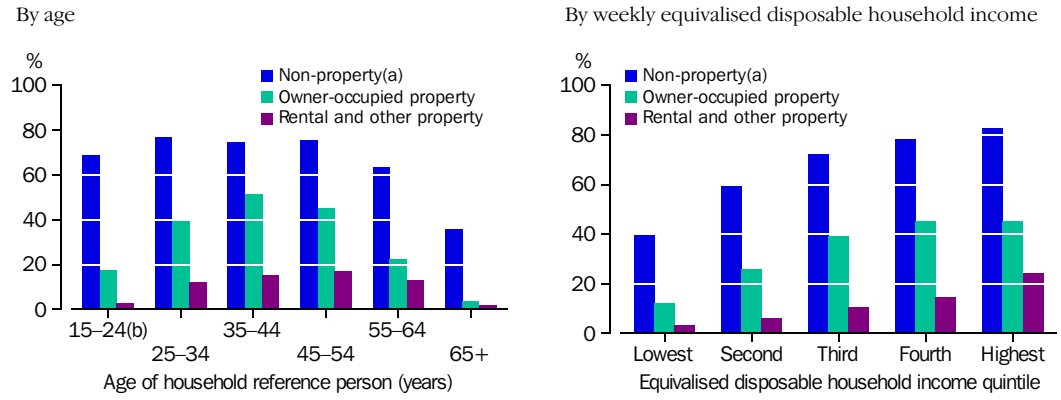
Taking on debt for investment purposes, for example to buy shares or a rental property, can offer tax benefits to the borrower. Negative gearing applies when the costs of earning income (such as interest on a loan) are greater than the income earned from the investment. This difference is a loss for taxation purposes, and so reduces the amount of tax borrowers pay, which makes it cheaper to borrow.

The annual tax deductions allowed for rental properties provide another perspective on increased investment in rental properties. In 1995–96, 1.1 million Australians declared net rental income on their tax returns. Of these, 68% claimed rental interest deductions, totalling $6.4 billion. Over half (56%) had a taxable loss after interest and other deductions (that is, they had negatively geared rental properties).[2] By 2005–06, 1.6 million individuals declared net rental income on their tax returns. Most (79%) claimed rental interest deductions, which amounted to $13.8 billion in initial taxation deduction claims. Just over two-thirds (67%) had negatively geared rental properties.[3] While some of the increase in interest deductions can be explained by higher interest rates, most is related to an increase in the number of investors and in the amount being borrowed for investment. Over that same decade gross rental income reported for tax purposes increased six-fold to just over $19 billion.

The greatest real increases in the median amount of debt from 2003–04 to 2005–06 applied to loans for other property, loans for investment purposes (to buy shares, for example) and loans for other purposes (which all increased by around 40%). The median amount of owner occupier debt increased from $106,000 to $131,000.

Some home loans have features that enable the borrower to draw on their asset for non-housing purposes. This can help households pay for expenses such as medical bills, to buy a new car or help with living costs during a transitional phase such as unemployment. In

Proportion of households with debt — 2005–06

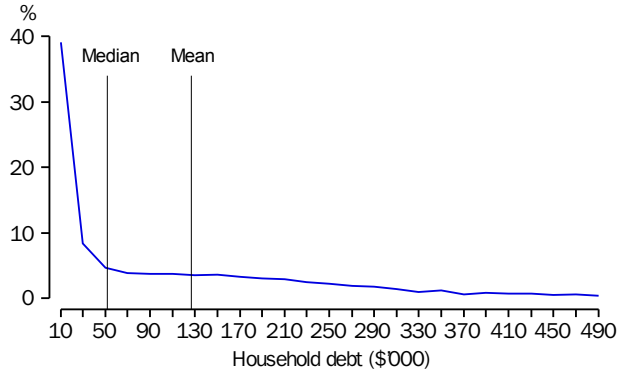


(a) Includes loans for investment, vehicle purchases, other purposes, credit card debt, and student loans

(b) Estimate for Rental and other property has a relative standard error of 25% to 50% and should be used with caution

Source: ABS 2005–06 Survey of Income and Housing

Distribution of household debt among indebted households — 2005–06



Source: ABS 2005–06 Survey of Income and Housing

Indebted households: components of debt — 2005–06

Type of debt	*Proportion with type of debt* %	*Median amount owing on type of debt among households with type of debt* $'000
Owner-occupied property	44.9	130.8
Rental property	9.8	202.0
Other property	6.8	138.0
Investment	4.1	79.6
Credit card	76.6	2.3
Vehicle purchase	23.0	14.0
Other purposes	13.8	7.0
Student	16.3	9.0
	'000	$'000
Total households with debt	5 723.4	50.5

Source: ABS 2005–06 Survey of Income and Housing

2005–06, almost one-quarter (24%) of households with a mortgage on their home had money owing on it for non-housing purposes (excluding business or investment purposes). The median amount owing among these households was $23,100. The proportion of lower income households (those in the second, third and fourth equivalised disposable household income deciles) with debt for other purposes on their mortgage was similar (27%) as was the median amount owing ($20,400).

...credit card debt and student loans

Among households with credit card debt, the median amount owing on credit cards did not increase by much from 2003–04 to 2005–06 ($2,200 to $2,300). This was also the case among those with student loans ($8,500 to $9,000).

In 2005–06, over half (58%) of all lower income households had one or more credit cards. This was the most common type of debt among these households, with 43% reporting some credit card debt. While the median amount owing for lower income households with a credit card debt was just over $1,700, 18% (180,000 households) reported a debt of $5,000 or more, including 60,800 households who owed $10,000 or more.

Debt, assets and income over the life course

In 2005–06, the median amount owed by indebted Australian households was $50,500, the median value of their assets was $488,000 and their median disposable household income per year was $56,900. Relationships among debt, assets and income vary over the life course and are influenced by home buying patterns and other investment strategies. As an example, people borrowing money for investment purposes would have higher levels of debt than would otherwise be the case. However, the asset holdings of such households would be higher.

During the early stages of the life course, the level of debt and value of assets tend to be relatively low, reflecting low home buying rates. In 2005–06, the median level of debt among young lone person households (reference person aged under 35 years) ($23,100) was lower than the median for all households. The median value of their assets ($121,000) was also lower as was their median disposable income per year ($35,200).

For the main home buying groups, such as couples with young children (eldest child aged under five years), the level of debt tends to be high. Among life-stage groups, couples with young children had the highest median amount of debt ($167,000). While their median level of debt was much higher than the median for all households, the median value of their assets ($501,000) and median disposable income ($63,200) were not far above the corresponding figures for all households.

Households with low income and low assets are not as readily able to borrow as households that are better off financially.[4] Among lone parent households, the median level of debt was relatively low ($23,400) as was the median value of assets ($234,000) and income ($39,100).

A household approaching retirement age may borrow against the equity in its home, to buy shares for example. Households at the pre-retirement stage, such as couples with

Indebted households: selected life course groups — 2005–06

Selected life course groups	*Median debt* $'000	*Median assets* $'000	*Median net worth* $'000	*Median disposable household income per year* $'000	*Median ratio of debt as a proportion of assets* %	*Median ratio of debt as a proportion of annual disposable household income* %	*Total households with debt* '000	*Proportion of households with debt among the life course group* %
Lone person aged under 35	23.1	120.5	67.0	35.2	36.2	78.6	281.3	76.2
Couple only, reference person aged under 35	90.0	338.0	156.0	66.1	35.9	138.4	388.4	91.7
Couple with dependent children only								
Eldest child aged under 5	167.0	501.2	306.6	63.2	31.9	246.3	399.7	93.0
Eldest child aged 5–14	148.1	560.5	377.6	65.8	25.7	217.2	782.6	91.1
Eldest child aged 15–24	122.1	723.5	569.7	79.5	18.5	169.6	426.7	90.9
One parent with dependent children	23.4	233.5	139.1	39.1	19.3	60.6	364.2	67.6
Couple with								
Dependent and non-dependent children only	121.9	682.7	569.9	96.8	17.7	119.3	234.6	88.7
Non-dependent children only	52.9	694.0	601.0	82.0	8.3	67.8	379.5	84.5
Couple only, reference person aged 55–64	19.0	807.5	743.8	51.1	3.2	32.5	368.3	72.7
Couple only, reference person aged 65 and over	1.6	590.0	582.5	30.3	0.7	3.9	296.5	43.7
Lone person aged 65 and over	0.9	374.0	362.2	16.7	0.8	4.4	218.9	29.4
Other	33.0	431.0	314.1	51.2	15.1	66.3	1 582.6	72.2
All households	**50.5**	**488.0**	**359.8**	**56.9**	**16.1**	**89.8**	**5 723.4**	**72.2**

Source: ABS 2005–06 Survey of Income and Housing

non-dependent children only, had a relatively high median level of debt ($52,900) but the median value of their assets ($694,000) and income ($82,000) were also high. A small proportion (7%) of households in this life-stage group had rental property debt and/or loans for investment purposes.

Among older households, such as couples where the reference person is aged 65 years and over, most debt has been paid off and the value of assets is generally high while income is low. In 2005–06, the median level of debt for this group was very low ($1,600) while the median value of their assets was $590,000 and median income was $30,300 per year.

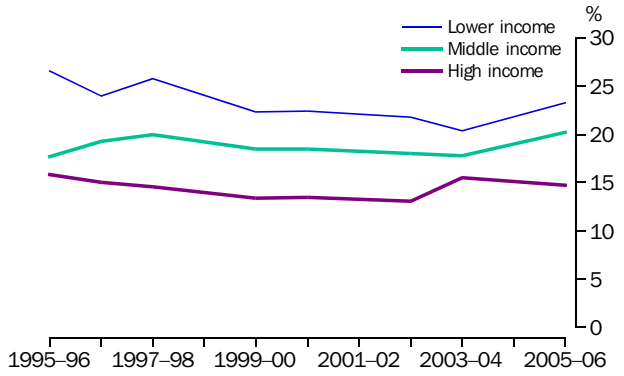
Debt servicing

The extent to which repaying their debt places a financial burden on households, in particular households with relatively low income, is also of interest. In 2005–06, there were 526,000 lower income households with a mortgage for owner occupied property, representing 23% of households in this income group. The median proportion of gross household income spent on mortgage repayments among lower income households decreased slightly in the ten years to 2005–06 (from 27% to 23%). However, there was a slight increase in the two years following 2003–04 from 20% to 23%, which may have been related to higher interest rates and house prices. Among these lower income households in 2005–06, 20% reported that they were paying between 30% and 50% of their gross household income on mortgage repayments and one-tenth were paying more than 50%.

Housing loan arrears

Another measure of the extent to which households are having difficulties servicing their debt is whether they are behind on their mortgage repayments. In September 2008 the Reserve Bank estimated that there were around 17,000 borrowers who were more than 90 days behind on their mortgage repayments, up from 15,000 borrowers in March 2008.[5] These and other arrears data cover a period of higher interest rates; when later data are available they may show some impact from the recent falls in interest rates. The share of housing loans that are in arrears has increased. From January 2001 to June 2008, the proportion of securitised housing loans more than 90 days in arrears increased from 0.15% to 0.35%.

Weekly owner occupier mortgage repayments as a proportion of weekly gross household income: income group[(a)(b)]



(a) Median proportion for each income group

(b) Lower income refers to households in the second, third and fourth equivalised disposable household income deciles; middle income to those in the fifth and sixth deciles, and high income to those in the ninth and tenth deciles

Source: ABS 1995–96 to 2005–06 Surveys of Income and Housing

There has been a general increase in arrears rates since 2003, in part reflecting the easing of credit standards over the past decade. This meant that many borrowers were able to obtain a housing loan who previously may not have been eligible, and many others have been able to borrow larger amounts.[6] From September 2003 to June 2008, the 90-day arrears rate for housing loans on banks' balance sheets (which account for around 75% of all outstanding housing loans) increased from 0.18% to 0.41%. However, it is currently no higher than it was in the mid 1990s, and low by international standards.[7] The arrears rate for prime securitised housing loans increased from 0.21% to 0.57% from January 2001 to June 2008.[5] For securitised prime low-doc loans, the arrears rate was 1.2% in June 2008, more than double that for securitised prime full-doc loans. The arrears rate for non-conforming loans was much higher at 8.5%.

...in New South Wales

The overall arrears rate for prime securitised loans was higher in New South Wales than the other states and territories, and increased to a greater extent between April 2003 and July 2008 (from 0.18% to 0.84%). Higher arrears rates in New South Wales have been related to relatively weak economic conditions and housing markets in areas of the state. As an example, the increase has been greatest in western Sydney (up from 0.25% in March 2004 to 1.28% in July 2008) where house prices have been under downward pressure and where a disproportionately large number of borrowers took out investment housing loans around the peak of the house price cycle.[5,6] The 2004–2006 increase in arrears rates in New South Wales resulted in a sharp increase in the number of court applications for property repossession as a proportion of the dwelling stock, from 0.10% in 2003 to 0.22% in 2006 (steady at 0.22% in 2007).[5,6]

Housing loan definitions

Prime loans are provided to borrowers who meet the standard lending criteria of mainstream lenders.

Full-doc loans are provided to borrowers who are able to provide full documentation as proof of their income, assets and debt.

Low-doc loans require less documentation to prove the borrower's income, assets and debt.

Non-conforming loans are provided to borrowers who do not meet the standard lending criteria of mainstream lenders, such as those with impaired or incomplete credit histories. These currently make up less than 1% of outstanding housing loans.

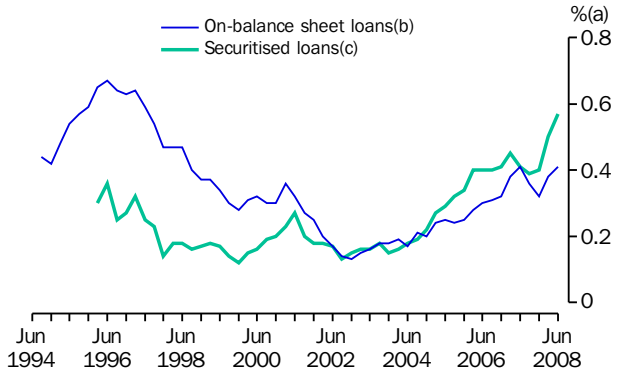
Securitised loans are loans that have been converted to 'residential mortgage-backed securities' and sold to institutional investors via a trust or a company known as a special purpose vehicle. These loans generally have a higher risk associated with them. They currently make up around one-quarter of outstanding housing loans, with the remainder being on banks' balance sheets.

90-day arrears rate is the value of housing loans 90 or more days in arrears as a proportion of the value of all housing loans.

Looking ahead

Although Survey of Income and Housing data suggest that during 2005–06 most households with high levels of debt were well placed to service it by way of high income and assets, more recently financial conditions for many households have changed. The banks' standard variable interest rate went up by 205 basis

Housing loans 90 or more days in arrears



(a) Value of loans 90 or more days in arrears as a proportion of the value of all loans

(b) From September 2003 includes 'impaired' loans that are in arrears and not well secured by collateral

(c) Prime loans

Source: Australian Prudential Regulation Authority; Perpetual; Reserve Bank of Australia; Standard & Poor's

points between July 2006 and August 2008, and since then has fallen sharply in the wake of the global financial crisis.[8] More recent data, such as housing loan arrears rates, indicate that some households have been facing a more difficult financial situation. Most recently, the level of wealth has fallen in many households, affected by substantial declines in share prices and the value of housing assets falling slightly.[5] However, households with mortgages may also be starting to benefit from lower interest rates. Housing comprises nearly 60% of household assets (and the majority of household debt) in Australia.

Endnotes

1 Kent, C, Ossolinski, C & Willard, L 2007, 'The Rise of Household Indebtedness' in Kent, C, and Lawson, J (eds) *The Structure and Resilience of the Financial System, Proceedings of a Conference*, Reserve Bank of Australia, Sydney, viewed 24 April 2008, <http://www.rba.gov.au>.

2 Australian Taxation Office 1998, *Taxation Statistics 1995–96 Detailed Tables,* Australian Taxation Office, Canberra.

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4 Headey, B, Warren, D & Wooden, M 2008, *The structure and distribution of household wealth in Australia: cohort differences and retirement issues Social Policy Research Paper No. 33,* Department of Families, Housing, Community Services and Indigenous Affairs, Canberra.

5 Reserve Bank of Australia 2008, *Financial Stability Review September 2008,* Reserve Bank of Australia, Sydney, viewed 25 September 2008, <http://www.rba.gov.au>.

6 Reserve Bank of Australia 2008, *Financial Stability Review March 2008,* Reserve Bank of Australia, Sydney, viewed 28 March 2008, <http://www.rba.gov.au/>.

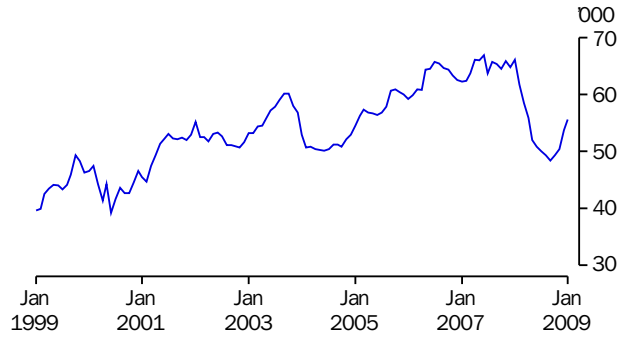
7 Reserve Bank of Australia 2008, 'An Update on Household Finances, Address by Mr Ric Battelino, Deputy Governor, to 7th ITSA Bankruptcy Congress Sydney, 30 October 2008' in *Reserve Bank Bulletin*, November, viewed 20 November 2008, <http://www.rba.gov.au/>.

8 Reserve Bank of Australia, Bulletin Statistical Table F5 Indicator Lending Rates, viewed 15 January 2009, <http://www.rba.gov.au>.

Recent changes in household borrowing

While the global economic downturn is still unfolding, its impact on households in terms of preparedness to take on debt is evident across a range of indicators. The following graphs provide some indications of recent changes in borrowing by Australian households as well as mortgage interest rates and household wealth.

Housing finance commitments[(a)(b)]



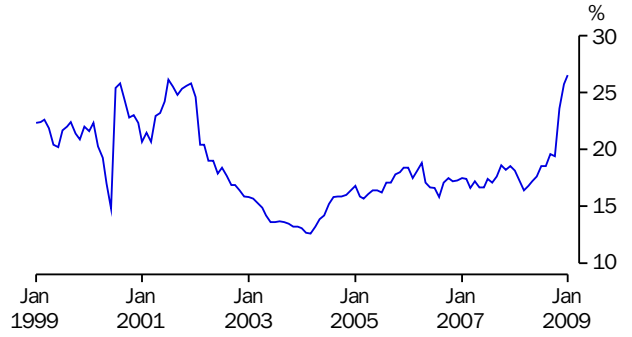
(a) For owner occupation

(b) Seasonally adjusted

Source: *Housing Finance, Australia, January 2009* (ABS cat. no. 5609.0), Time series spreadsheet – Table 1

- The seasonally adjusted number of housing finance commitments declined from around 65,000 per month throughout the December quarter of 2007, to an average 51,000 per month in the December quarter of 2008.
- December 2008 and January 2009 have seen some recovery, with 54,000 and 56,000 commitments respectively in these months. This upswing can be attributed to an increase in first home buyer commitments.

First home buyer finance commitments[(a)]

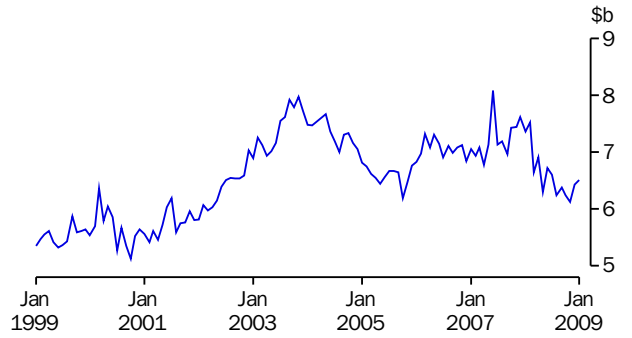


(a) As a proportion of dwellings financed for owner occupation

Source: *Housing finance, Australia, January 2009* (ABS cat. no. 5609.0), Time series spreadsheet – Table 9a

- Following the introduction of the First Home Owners Boost in mid October 2008, the number of first home buyers increased in November and increased further in December and January.
- The proportion of all home finance commitments made up by first home buyers increased to 24% in November 2008, and to 26% in December 2008 and January 2009, having been less than 20% since early 2002.

Personal finance commitments[(a)]



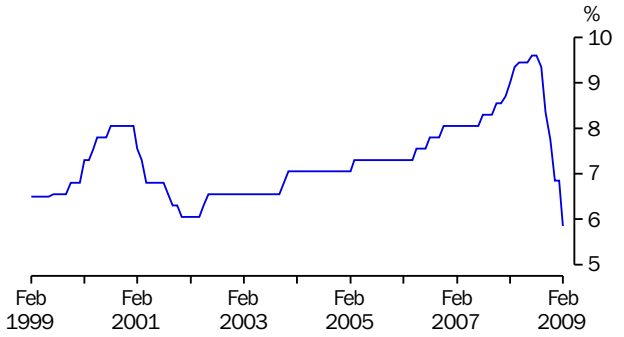
(a) Seasonally adjusted then price adjusted to September 2008 dollars

Source: *Lending finance, Australia, January 2009* (ABS cat. no. 5671.0), Time series spreadsheet – Table 1

- The value of personal finance obtained has been in general decline since late 2007.
- The average monthly amount committed in the December quarter of 2007 was $7.5 billion, falling to an average $6.3 billion in the three months to December 2008, and was the lowest level since the June quarter of 2002 ($6.2 billion).

- In February 2009, the banks' standard variable interest rate charged on housing loans was 5.85%, the lowest it has been in decades.
- This follows the longer period of interest rate increases from May 2002, which peaked at 9.6% in July and August 2008.

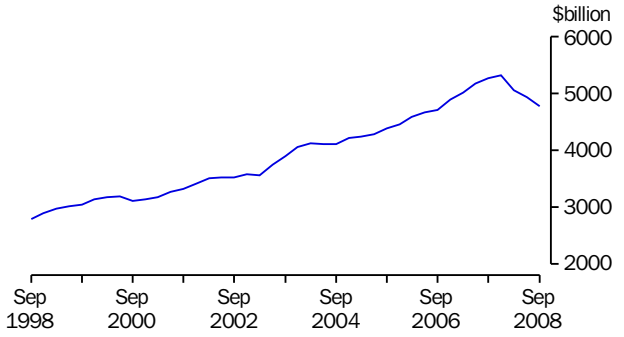
Interest rates — banks' standard variable rate



Source: RBA Bulletin Statistical Table F05 Indicator Lending Rates

- Household net worth (the value of assets less liabilities) peaked at $5,320 billion in December 2007.
- In 2008, falling asset values produced a decline in the overall net worth of Australian households, to $4,780 billion in September 2008, similar to the level in September 2006 ($4,700 billion).

Household net worth[(a)(b)]



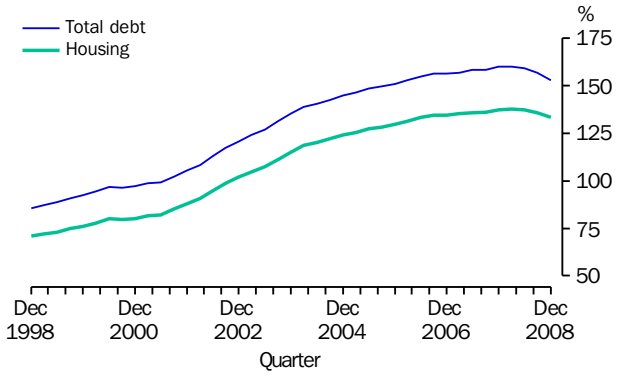
(a) Series price adjusted to September 2008 dollars

(b) Assets include financial assets of unincorporated enterprises and non-profit institutions serving households

Source: RBA Bulletin Statistical Tables D02 and B20

- Over the past decade, household debt grew much faster than income. The ratio of household debt to annual disposable household income peaked at 160% in December 2007 and March 2008. The ratio decreased over the last three quarters, reaching 153% in December 2008.
- Housing debt as a proportion of disposable income followed a similar pattern, and made up 87% of all debt in December 2008.

Household debt[(a)] to household income[(b)] ratios



(a) Levels of household debt and debt components have been adjusted for breaks in the series (the establishment of new banks and other changes in reporting arrangements)

(b) Disposable income

Source: RBA Bulletin Statistical Table B21

Definitions

Housing finance commitments are loans provided to people for the purpose of buying or building owner occupied dwellings.

Personal finance commitments are loans given to people for personal use, such as to purchase a car, household goods or a holiday. Revolving credit, for example credit cards, is included.

Disposable income is sourced from the ABS national accounts (ABS cat. no. 5206.0) and is reported in annual terms. It excludes gross mixed income earned by unincorporated enterprises and is measured before the deduction of net interest payments.

Trends in superannuation coverage

Quality of life for senior Australians is partly determined by their levels of income and wealth. Australia's current taxpayer funded system of income support payments and benefits in kind has been designed to support a basic, acceptable standard of living, accounting for prevailing community standards.[1]

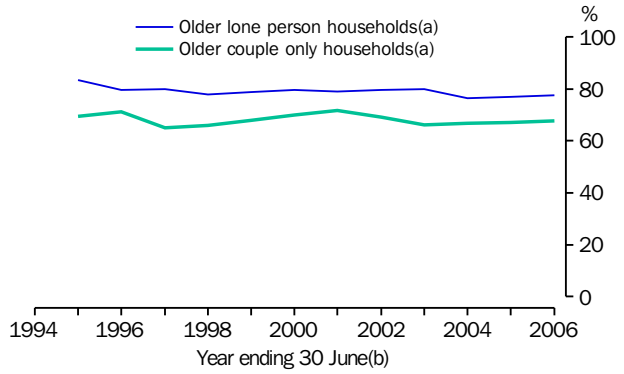
As the population ages, government spending pressures in areas such as health, age pensions and aged care are projected to rise while revenues are not projected to have any commensurate increase. These challenges, along with a general desire for higher standards of retirement living, have led to legislative changes encouraging longer workforce participation and higher retirement saving.[2]

While superannuation schemes have been operating in Australia since the middle of the 19th century,[3] widespread participation is a relatively new phenomenon. During recent decades, successive Australian governments have legislated compulsory superannuation contributions by employers and provided incentives for Australians to save for retirement over their whole working life.[4,5,6]

Retirement income trends

It is expected that superannuation will eventually replace (to some extent) taxpayer funded income support as seniors' main source of income in retirement. Available indicators of welfare dependency among households living in private dwellings show little change between 1994–95 and 2005–06 in the proportion of older lone person households and older couple only households relying on income support as their main source of income. However, numerous types of income support payments are received by members of older households and there has been some change in recipient rates for some payments over recent decades.[7]

Older households living in private dwellings with income support as their main source of income



(a) Household reference person aged 65 years or older
(b) Values have been interpolated for the financial years ending 30 June 1999, 2002 and 2005 when the ABS Survey of Income and Housing was not conducted

Source: ABS Surveys of Income and Housing

...Age Pension take-up rates

The main (but by no means only) income support payment received by seniors is the Age Pension. The proportion of people of Age Pension eligibility age receiving the Age Pension fell quite sharply between June 1982 (75%) and June 1990 (59%) before gradually rising between June 1991 (59%) and June 2008 (68%). It should be noted though, that this rise in Age Pension take-up was accompanied by a reduction in the proportion of recipients receiving the maximum amount of Age Pension; from 67% in June 1991[8] to 56% in June 2008.[9]

Data sources and definitions

Most of the information in this article is from the ABS Survey of Employment Arrangements, Retirement and Superannuation (*SEARS*) which collected data between April and July 2007 on people living in private dwellings throughout Australia. Where possible, data from previous ABS superannuation surveys (conducted between 1968 and 2000) have been used to indicate broad directions of change over recent decades.

In SEARS, a person has *superannuation coverage* if (s)he is currently receiving a superannuation pension or annuity, or had received a superannuation lump sum within the previous 4 years, or currently has a superannuation account in its accumulation phase. Different definitions have applied in previous ABS superannuation surveys, with variations in the treatment of lump sums, dormant accounts, annuity income, and superannuation pension income which had once been received but was no longer being received. For this article, some previously published coverage rates have been recalculated in an effort to align as closely as possible with the SEARS definition. Differences remain though, as it has not been possible to achieve strict data comparability.

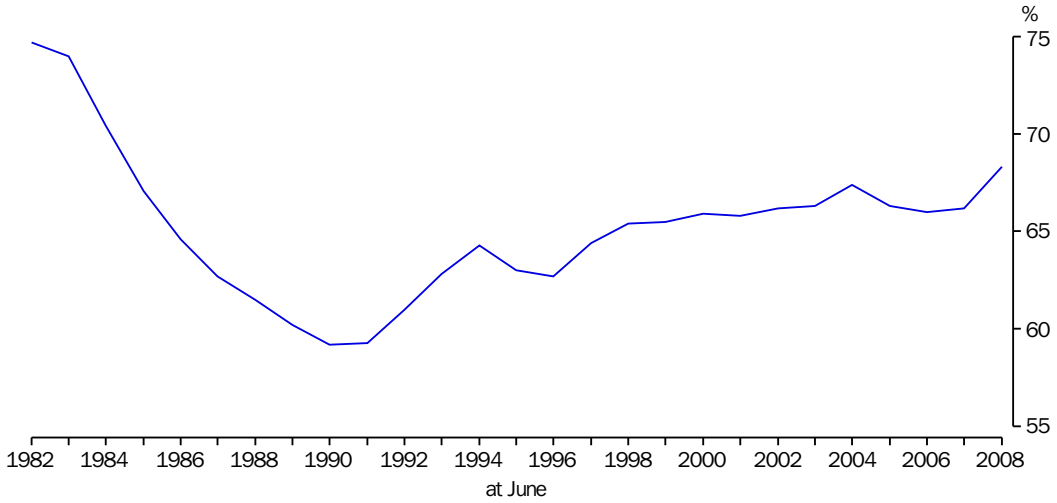
A superannuation account in its *accumulation phase* is one which has not yet been drawn upon to pay a lump sum and/or superannuation pension. Contributions do not necessarily have to be currently being made to the account (e.g. the account may be a preserved sum) and its balance could drop if the superannuation fund delivers a negative return on its investments.

An *accumulation account* balance is determined by amounts contributed to the account together with its fund's investment earnings (or losses), less costs and taxes.

A *defined benefit account* balance is usually determined by the length of employment and average salary level of its holder over a few years prior to his or her retirement. It is not affected by its fund's investment earnings or losses.

A *hybrid account* blends aspects of accumulation accounts with features of defined benefit accounts.

Age pensioners (full and part rate) as a proportion of all people of qualifying age



Source: Centrelink administrative data; Department of Veteran Affairs administrative data; ABS Estimated Resident Population

A leading indicator of change is the 65–69 year age group (the youngest 5 year age group in which every member is of Age Pension qualifying age). The proportion of this age group receiving either a full or part rate Age Pension rose from 49% in June 1991 to 64% in June 2008.

Fluctuations in the economic cycle (leading to changes in employment opportunities, asset values and investment income streams) could be one factor driving changes in the prevalence of Age Pension receipt. Other possible factors include trends in take-up rates of alternative income support payments received by seniors (e.g. Service pensions paid by the Department of Veterans Affairs, the Disability Support Pension and the Carer Payment), and legislative changes.

The base pension for people aged 70 years and over became subject to an income test in 1983; the assets test was reintroduced in 1984 (with the family home excluded); income test deeming rules were introduced in 1990; allocated pensions became subject to both income and asset tests in 1992; and in June 1998 people reaching pension age were offered a financial incentive to defer their retirement.[5,6,10] All of these legislative changes were designed to either tighten Age Pension eligibility criteria or defer Age Pension take-up and, all other factors remaining equal, reduce the rate of Age Pension receipt among people of qualifying age.

Since June 1998, legislative changes have generally acted to loosen Age Pension eligibility criteria and increase its rate of take up. In September 1998, some annuities were exempted from the assets test,[10] and in September 2007 the assets test threshold was raised, resulting in an estimated 300,000 extra seniors becoming eligible to receive the age pension.[6] According to the Australian Treasury's RIMGROUP model, the proportion of seniors receiving the age pension is expected to remain at 2007 levels until 2047, with increases in superannuation assets and income expected to reduce the proportion receiving the full age pension.[2]

...superannuation benefits

According to the ABS Survey of Employment Arrangements, Retirement and Superannuation, 43% of retired Australians had benefited from superannuation at some time. They comprised 11% who had received both a superannuation pension/annuity and a lump sum, 11% who had received a pension/annuity but not a lump sum, and 20% who had received a lump sum but not a pension or annuity.[11]

Receiving a superannuation benefit does not necessarily guarantee a comfortable standard of retirement living. In 2007, more than three quarters (78%) of the 206,700 retired Australians who had received a lump sum superannuation payment within the previous four years had received less than $60,000. Only 31% of retirees who had recently received a lump sum had mainly invested the money, with most people mainly using it to pay off debt, buy goods and services, or help their family.[11]

The generally small lump sums recently received by Australians who were retired in 2007 reflects the early stage of the superannuation system's evolution when these people were in the workforce. It may also partly reflect their early retirement. On average, they had retired at 57 years of age (the men at 58 and the women at 55). Fewer years spent accumulating superannuation before drawing upon it usually results in smaller lump sum payouts.

Superannuation trends

The ABS has been collecting superannuation data from households for several decades. Over this period, the focus of its surveys has broadened considerably; from whether Victorian employees aged 21 years or older were covered by an employer-provided superannuation scheme in their current job in 1968[12] to a wide-ranging collection of superannuation characteristics of most Australians aged 15 years or older in 2007.[11] While differences in how the information was collected over time mean that

Growth in superannuation coverage

	Proportion of retired people who have ever received a superannuation pension, annuity or lump sum	*Proportion of employees(f) with superannuation coverage*	*Proportion of employed people with superannuation coverage*	*Proportion of people aged 15 years and over with superannuation coverage*	*Median(j) superannuation balance (maximum of three accounts) of people aged 15 years and over with superannuation(k)*
	%	%	%	%	$
February 1974(a)	n.a.	(g) 32	38	28	n.a.
November 1988(b)	n.a.	(g) 55	62	(g) 34	n.a.
November 1991(b)	n.a.	(g) 78	(g) 71	60	n.a.
November 1993(b)	n.a.	(g) 89	(g) 80	66	n.a.
November 1995(b)	n.a.	(g) 89	(g) 81	(i) 63	n.a.
April to June 2000(c)	(e) 38	(h) 91	(h) 87	(h) 68	9 487
April to July 2007(d)	43	94	91	71	23 698

(a) Survey scope was civilians aged 15 years and over (except those who were inmates of gaols, reformatories, etc.)
(b) Survey scope was people aged 15–74 years who had left school (except those in institutions)
(c) Survey scope was people aged 15–69 years living in private dwellings
(d) Survey scope was people aged 15 years and over living in private dwellings
(e) Excludes those who had never received a superannuation lump sum but had received superannuation pension/annuity income which they no longer receive
(f) Excludes those who were an owner manager of an incorporated enterprise in their main job
(g) Only people with a superannuation account attracting contributions were defined as having superannuation coverage
(h) Lump sums received more than one year ago but less than four years ago were excluded from the definition of 'superannuation coverage'
(i) For people aged 15–44 years, only those with a superannuation account attracting contributions were defined as having superannuation coverage
(j) Medians were calculated using known values (i.e. missing values were excluded)
(k) Among pre-retired people with superannuation in April to June 2000, and among people with superannuation in the accumulation phase in April to July 2007

Source: *Survey of Superannuation, February 1974* (ABS ref. no. 6.42); *Superannuation, Australia, November 1988* (ABS cat. no. 6319.0); *Superannuation, Australia, November 1991* (ABS cat. no. 6319.0); *Superannuation, Australia, November 1993* (ABS cat. no. 6319.0); *Superannuation, Australia, November 1995* (ABS cat. no. 6319.0); *Superannuation Coverage and Financial Characteristics, Australia, April to June 2000* (ABS cat. no. 6360.0); *Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007 (Reissue)* (ABS cat. no. 6361.0)

data from the different surveys tend not to be strictly comparable (thereby preventing precise measurement of the extent of change over time), much of the data collected are comparable enough to indicate the direction of change.

...coverage has widened

Prior to the 1970s, superannuation coverage was generally limited to higher paid white-collar staff in large corporations, employees in the finance sector, public servants, and members of the Defence Force.[4] In February 1974, only 28% of civilians aged 15 years or older had ever had superannuation coverage. From this time until the mid 1980s, coverage increased through the negotiation of industrial awards, with the most prominent push coming from the Federated Storemen and Packers Union. In 1978 this blue-collar union created a portable accumulation fund for its members, then campaigned to force employers to contribute to it.[5]

September 1985 marked the advent of widespread coverage among employees, when the Australian Council of Trade Unions (ACTU) sought a 3% superannuation contribution from employers in the 1986 National Wage Case. The Australian Government supported the ACTU claim and the Conciliation and Arbitration Commission announced it would approve industrial agreements requiring employer contributions to approved superannuation funds as long as wage increases did not exceed 3%. Employer groups unsuccessfully challenged the Commission's decision in the High Court, and superannuation coverage then widened rapidly as new industrial awards were progressively negotiated according to the guidelines established by the 1986 National Wage Case.[4,5] By November 1991, among 15–74 year olds who had left school (excluding those living in an institution), 78% of employees and 71% of all employed people had a superannuation account attracting contributions and 60% of all people had ever had superannuation coverage.

On 1 July 1992, the Australian Government's Superannuation Guarantee (SG) took effect. The SG was intended to extend coverage, improve employer compliance, and establish a mechanism for increasing employer contributions over time. Minimum employer contributions were initially set at 3% (4% for those with a payroll greater than $1 million), rising to 6% from 1 July 1996,[13] 8% from 1 July 2000,[14] and 9% from 1 July 2002.

While the introduction of the SG had, by November 1993, boosted coverage among 15–74 year old employees and all employed people (who had left school and weren't living in an institution) to 89% and 80% respectively, it did not guarantee coverage for people outside the paid workforce. Coverage among all Australians aged 15–74 years had only reached 63% by November 1995.

However, ensuing legislation assisted overall coverage to rise to 71% of people aged 15 years or older (living in private dwellings) by 2007. In 1997, a rebate for contributions made on behalf of a low income spouse came into effect, and the maximum SG contributions age was lifted from 65 to 70 (then to 75 in 2002). In 2002, superannuation assets were able to be divided between the parties in a marriage breakdown, and since 2003 government co-contributions have been available for low and middle income earners making contributions from their after-tax income. From 2004, public superannuation funds were allowed to accept contributions on behalf of a person aged less than 65 years of age who was not employed. In 2006, contributions splitting took effect, enabling people to split their superannuation contributions with their spouse.[4,5,6]

...and is high among 25–64 year olds

People in their prime working years are those most likely to have superannuation coverage. In 2007, 88% of 25–34 year olds had coverage. The rate was similar among 35–44 year olds (87%) and 45–54 year olds (86%), lower among people aged 55–64 years (75%), and markedly lower among people of age pension qualifying age.

However the superannuation coverage rate understates the proportion who have ever had coverage (particularly for older age groups). Some people without superannuation coverage in 2007 previously had coverage (i.e. had received a superannuation pension or annuity but were no longer receiving it and/or had received a lump sum more than four years earlier). People without coverage who previously had coverage comprised 7% of all 55–64 year olds, 18% of 65–69 year olds, and 20% of people aged 70 years or older.

Factors contributing to the comparatively low coverage rate (57%) among 15–24 year olds in 2007 include their lower employment rate and their over representation in low-paying casual and part time jobs. Employers may not be required to make superannuation contributions for such low income employees. In addition, a very small proportion of 15–24 year olds choose to contribute to superannuation either by salary sacrificing pre-tax income or by investing after tax income.

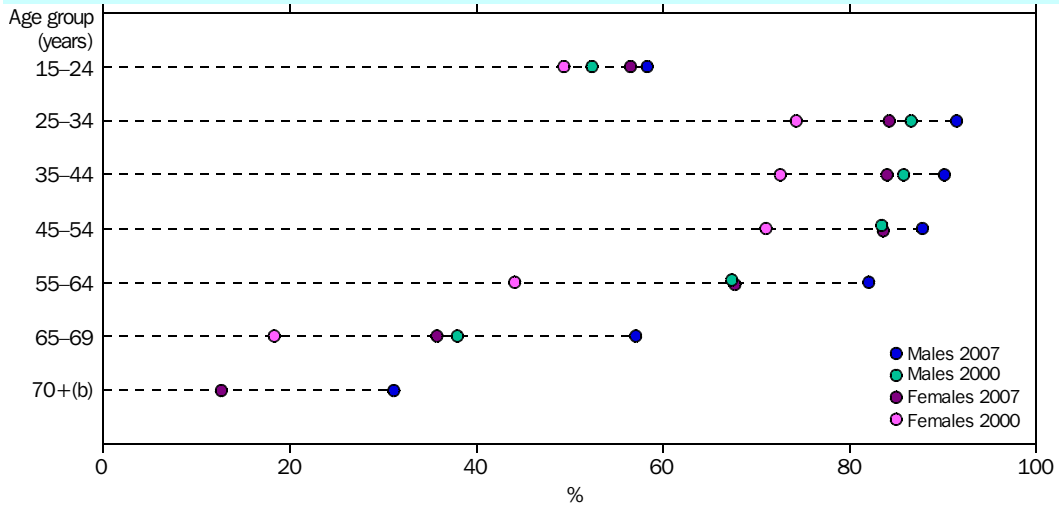
...though women trail men

Overall in 2007, men aged 15 years and over were more likely to have superannuation coverage (76%) than women aged 15 years and over (66%). This difference largely reflects greater workforce participation by men, especially for older people. Of Australians aged 70 years and over, 31% of men and 13% of women had coverage. The gender gap was actually slightly wider among 65–69 year olds (57% for men and 36% for women) but was narrower among 55–64 year olds (82% and 68%).

While there was a gender gap in 2007, it has narrowed since the start of the decade. Between 2000 and 2007, superannuation coverage among 15–69 year old women increased by 12 percentage points compared with 6 percentage points among men the same age. Although the gap widened slightly in the 65–69 year age group (by 2 percentage points) it narrowed for each of the younger age groups, most notably 55–64 year olds (by 9 percentage points) and 45–54 year olds (by 8 percentage points).

Some of the gap reduction can be put down to comparatively stronger increases in the labour force participation of women. Between 2000 and 2007, the participation rate of women aged 55–64 years rose substantially (from 34% to 48%)

Increase[(a)] in superannuation coverage rates from 2000 to 2007



(a) Part of the explanation for the observed increases is that a slightly more inclusive definition of superannuation coverage applied in the 2007 SEARS. People whose only form of superannuation coverage was a lump sum received more than one year ago but less than four years ago were defined as having superannuation coverage in 2007 whereas they weren't in 2000

(b) Data were not collected for people aged 70 years or older in the 2000 Survey of Employment Arrangements and Superannuation

Source: *Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007 (Reissue)*

whereas the participation rate of men aged 55–64 years increased more slowly (from 61% to 68%). The introduction of superannuation asset division following marriage breakdown in 2002, government co-contributions in 2003, and contribution splitting among spouses in 2006 may have also contributed to superannuation coverage rates rising faster among working-age women than among working-age men between 2000 and 2007.

...with salary sacrifice and post-tax contribution uncommon

Legislative changes between 1997 and 2006 designed to broaden superannuation coverage beyond those in the paid workforce meant that by April 2007 any Australian aged 15 years or older who was not yet retired could potentially have had a superannuation account in its accumulation phase. However, in 2007 only 22% were accumulating superannuation by either salary sacrificing, contributing from their own after-tax income, or receiving contributions from their spouse's after-tax income. Twice as many (44%) were relying solely on employer contributions, and 34% were not contributing or receiving contributions from any source. Very few (4%) of those without a job were accumulating superannuation by either salary sacrificing, contributing from their own after-tax income, or receiving contributions from their spouse's after-tax income, and barely a quarter (27%) of those with employment were doing so.

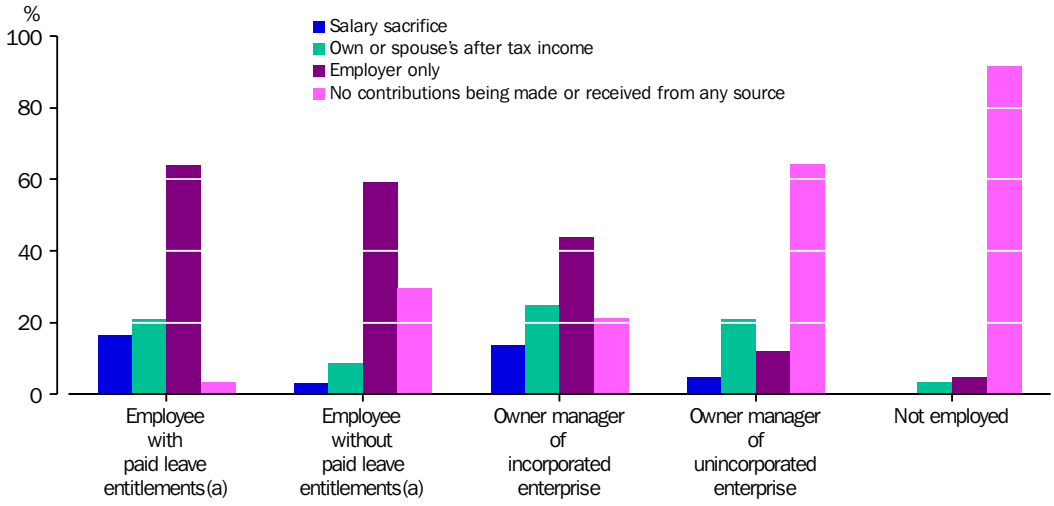
Among the employed, those working (in their main job) as an owner manager of an incorporated enterprise (35%) or an employee with paid leave entitlements (33%) were more likely to be accumulating superannuation by either salary sacrificing, contributing from their own after-tax income, or receiving contributions from their spouse's after-tax income than those working as an owner manager of an unincorporated enterprise (24%) or an employee without paid leave entitlements (11%). Of these four groups, employees with paid leave entitlements (16%) were the most likely to be contributing via salary sacrifice, whereas employees without leave entitlements were least likely (3%). Employees without leave entitlements were also least likely (9%) to be either contributing from their own after tax income or receiving contributions from their spouse's after tax income.

There was a strong association in 2007 between gross income and the propensity to contribute to superannuation accumulation. Of all people aged 15 years or older, 46% of those with gross personal income of $2000 or more per week were contributing through salary sacrifice (28%) or contribution from their own or their spouse's after tax income (25%). In contrast, only 12% of those with gross weekly personal income of $300–$599 were making or receiving such contributions, with just 3% contributing through a salary sacrificing arrangement. In addition to being less able to afford to salary sacrifice, most people with a low level of taxable income do not derive short term tax relief by doing so. The incentives are most attractive to people paying tax at higher marginal tax rates.

...for a range of reasons

There were numerous reasons why 80% of employed people aged 15 years or older with superannuation in the accumulation phase (contributing family workers excluded) were not making personal after-tax contributions to their superannuation account(s) in 2007. The main reasons cited by those aged 15–24 years

Pre-retired people aged 15 years or older living in private dwellings: sources of superannuation contributions by type of employment in main job — 2007



(a) Excluding who were an owner manager of an incorporated enterprise in their main job

Note: The different reference periods for different topics in the survey can lead to apparent inconsistencies in the estimates. For example, a person may be unemployed (or not in the labour force) but report employer contributions to superannuation that were made in the 2005-06 financial year, when they were employed.

Source: ABS 2007 Survey of Employment Arrangements, Retirement and Superannuation

were cost (which can represent perceived value for money), a lack of interest in doing so, and a feeling of being too young. Some felt employer contributions were sufficient.

Similar main reasons were expressed by those aged 25–34 years, though there were fundamental differences. The 25–34 year olds were less likely to feel too young to be contributing and more likely to be giving priority to paying their mortgage. Mortgage payments were also cited by many of those aged 35–44 years as their main reason for not contributing. Still, the most frequently voiced main reason for this age group was the same as it was for every other pre-Age Pension qualifying age group; cost.

...so median balances are low

One consequence of relying solely on employer contributions is that the value of accumulated superannuation will be lower than it would be if contributions were also being made via salary sacrifice, personal after tax income and/or spousal after tax income. At one extreme, the account balances of minimum wage employees relying on the minimum 9% SG may be particularly low.

While some Australians with superannuation accounts in the accumulation phase in 2007 had large balances, many more had very small balances. This resulted in the mean superannuation balance ($71,000) being much higher than the median balance ($24,000).

The difference between mean and median balances generally widened with age. For example, the mean ($165,000) and median ($72,000) balances of 55–64 year olds accumulating superannuation were far more disparate than they were in younger age groups. Even so, people approaching age pension eligibility age in 2007 with a super balance of $165,000 would hardly have been much more likely than those with a $72,000 balance to self-fund a comfortable retirement lifestyle.

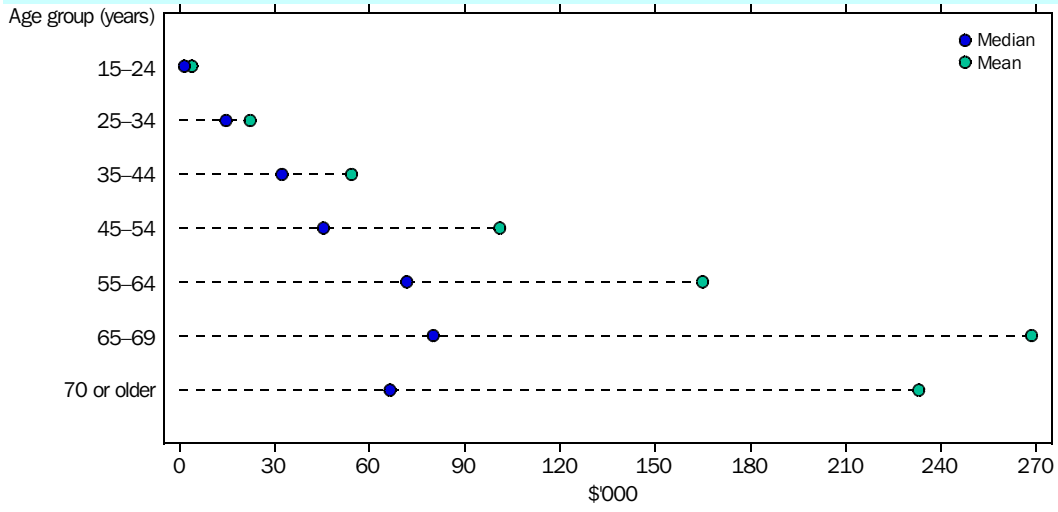
In September 2008, it was estimated that the current market cost of purchasing an annuity from a life company equal to the Age Pension was $289,000 for a 65 year old man, $344,000 for a 63 year old woman, and $550,000 for a couple comprising a 65 year old man and a 63 year old woman. It was also estimated that lower amounts of $240,000, $277,000 and $462,000 respectively would have been needed to purchase the Age Pension from the Australian Government if such a scheme existed. All of these dollar values would have been higher if they had included the value of the Health Card and other benefits in kind received by recipients of the Age Pension.[15]

Retirement expectations

On the other hand, superannuation balances in 2007 might not be a cause for great concern if the retirement intentions expressed by Australia's mature age workforce in 2007 are realised. In 2007, 15% of employed people aged 45 years and over did not intend to retire from the workforce. Of those who did intend to retire, the average age at which they planned to retire was 64, with only around a quarter of them expecting taxpayer-funded income support to be their main source of income at retirement.

On average, employed people aged in their late 40s who planned to retire intended to do so at 62, those in their early 50s at 63, those in their late 50s at 64, those in their early 60s at 66, those in their late 60s at 70, and those aged 70 years or older at 76. Only half of all Australians aged 45 years and over were employed in 2007; 84% of 45–49 year olds, 79% of 50–54 year olds, 67% of 55–59 year olds, 46% of 60–64 year olds, 22% of 65–69 year olds, and just 5% of those aged 70 years or older.

Average superannuation balances[(a)(b)] — 2007



(a) Of people with one or more superannuation accounts in the accumulation phase
(b) Balances are limited to a maximum of three accounts per person, with medians and means calculated on known values only

Source: *Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007 (Reissue)* (ABS cat. no. 6361.0)

Developments since July 2007

The general downturn in investment markets since November 2007 may cause some workers to put off retirement. Subject to a maximum of three accounts, only 6% of people accumulating superannuation in 2007 had one or more defined benefit accounts (which are unaffected by market fluctuations). Most had one or more market-exposed accumulation accounts (70%) and/or hybrid accounts (41%).[11]

The ABS Survey of Employment Arrangements, Retirement and Superannuation was run in early to mid 2007, prior to the downturn, so people who may have thought they would be able to partly or fully fund their retirement at that stage may have since changed their minds. The number of people successfully applying for the Age Pension rose sharply during the last quarter of 2008; from about 2,000 per week in October 2008 to 3,000 per week in December 2008.[16] Declining asset values, investment income and employment opportunities, and the arrival of the first baby boomers to Age Pension qualifying age are among the potential drivers of this increase.

The past year has also seen lobbying to increase the Superannuation Guarantee beyond 9% and to persuade the Australian Government to make superannuation contributions for carers. A review of pensions[1] was completed in February 2009 and has reported to the Australian Government. A review of other aspects of the retirement income system[3] is underway and due to report to the Australian Government by the end of March 2009. Changes to existing retirement income policy and legislation may flow from the findings of these reviews, given that long term pension reform is expected to be announced in the 2009–10 Federal Budget.[16]

Endnotes

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Are households using renewable energy?

While most greenhouse gas emissions are produced by industry, the amount and type of energy used by households also has considerable implications for the environment. The average household produces about 14 tonnes of greenhouse gas each year, much of it from energy use.[1]

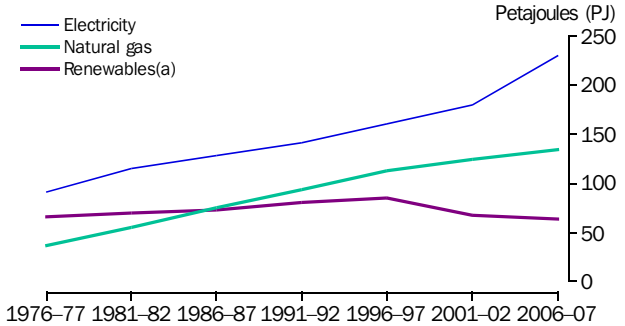
In 2006–07, household energy consumption made up about 8% of total energy use.[2] Electricity is used by almost every Australian household and accounts for around 85% of household greenhouse gas emissions (excluding car use, which is another major contributor, but is not covered in this article).[3] Some electricity for households comes from renewable energy (8%), but most electricity (92%) comes from burning fossil fuels such as coal and gas.[4] While coal and gas are the lowest cost fuel sources for electricity in Australia, they have higher greenhouse gas emissions than renewable sources.[5]

Renewable energy is sourced from wind, water, sun and biomass products, such as wood. There are two main ways people can use renewable energy in the home. The first is by installing small renewable generation units, or, more commonly, using wood or solar hot water. The other way is to choose to use renewable energy as part of their electricity supply, via GreenPower.

Trends in household energy use

Energy consumption by households is increasing. More people, more appliances and IT equipment per household, and bigger homes have contributed to this growth. Between 1987–88 and 2006–07, residential energy consumption grew by 49% or an average of 2.6% per year.

Type of household energy consumed



(a) Includes wood, woodwaste and solar energy

Source: ABARE 2008, Australian Energy Consumption, by Industry and Fuel; ABARE electronic datasets

Data sources and definitions

Most of the information in this article comes from annual and quarterly reports from the Australian Bureau of Agricultural and Resource Economics (ABARE) and GreenPower status reports. Other information comes from the 2008 *Environmental Issues: Energy Use and Conservation* (ABS cat. no. 4602.0.55.001) and 2007 *Australia's Environment: Issues and Trends* (ABS cat. no. 4613.0) publications.

Energy and emissions unit definitions are available on page 2 of this article.

Biomass is the generation of energy from organically based sources. Methane generated by the decomposition of biomass resources (green waste) in landfill sites, sewage treatment works or large scale composting, can be used to generate electricity. Waste materials from agricultural enterprises such as forestry, sugar cane (known as bagasse), winery and cotton production can also be used to generate electricity. Biomass can also be processed to produce liquid biofuels (biodiesel) or a gas biofuel (biogas).

Hydro-electric power is electricity produced from the energy of falling water using dams, turbines and generators.

Solar/solar photovoltaic: Photovoltaics, or PV for short, converts sunlight directly into electricity. Photovoltaic systems are different to solar hot water systems, which absorb sunlight directly into the water-carrying tubes contained in the panel.

Wind turbines can be used to drive a generator to create electricity.

The size and characteristics of people's homes have significant impacts on household energy use and greenhouse gas emissions. As an example, the amount of floor space will affect the amount of energy used to heat and cool a home. In 2008, 37% of separate houses had four or more bedrooms, while 77% of all households used a heater and 67% used a cooler. Household use of heaters and coolers is the major contributor (41%) to household energy use and costs. Water heating (24%) and other appliances (13%) were also significant users of household energy. These top three energy uses produced a combined 64% of the household sector's greenhouse gas emissions in 2005.[3]

Community awareness of environmental issues has, in part, led to an increased use of energy saving measures in the home. In 2008, 59% of households had energy saving lighting installed (up from 33% in 2005), and energy star ratings were the main household consideration when replacing refrigerators, freezers and clothes dryers. While people are becoming more environmentally aware, more households now own coolers (67%) and dishwashers (45%) and other appliances, such as LCD and plasma

televisions, the latter using almost three times the amount of energy that a standard television uses.[6]

Types of energy used

Households depend on energy for a range of purposes. Energy is needed to cook, to heat and cool homes, to heat water, for lighting, and to run white goods and other appliances.

...electricity

Electricity is the main energy source used in people's homes. In 2006–07, 52% of the energy used by households was sourced from electricity. Household electricity consumption rose to 231petajoules (PJ) in 2006–07, up 39% from 1997–98.

...natural gas

Natural gas is the second most common source of energy used in the home. In total, households used 135PJ of natural gas in 2006–07, equivalent to 30% of total household energy use, or a 16% increase since 1997–98.

...wood and solar

The most accessible sources of renewable energy available to households are wood and solar energy. Used primarily as a source of heating, wood use by households has declined 26% in the last 10 years, from 82PJ in 1997–98 to 61PJ in 2006–07. Due to air pollution concerns, households, over time, have been encouraged to stop using wood for heating or to convert open fires to slow combustion fires, which are more energy efficient and release only 5% of the greenhouse emissions that open fires produce.[1]

In 2008, 13% of Australian households used wood as a source of energy in the home. More than one-third (35%) of households in Tasmania used wood as an energy source, a decrease from 52% in 2002.

A range of government grants and rebates are available to households, to encourage people to use solar energy in the home. In 2008, 7% of households used solar energy to heat water, up from 4% of households in 2005. Over half of all households in the Northern Territory used solar energy to heat water (54%) – a larger proportion than any other state or territory. Western Australian households ranked second

Energy and emissions units

The basic unit of energy is the *joule* (J). A *Petajoule* (PJ) is one thousand trillion joules.

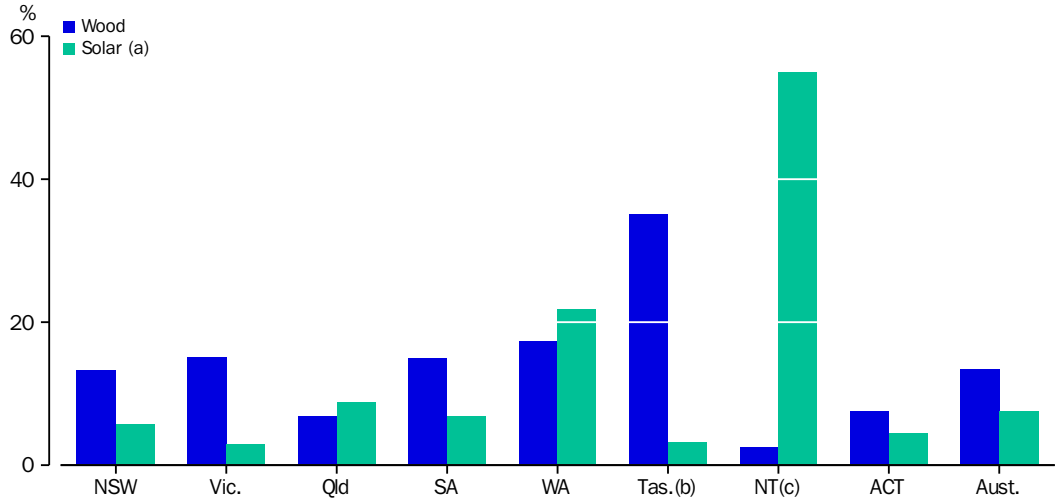
Energy delivered by electric utilities is usually expressed and charged for in kilowatt-hours (kWh):

- *Kilowatt-hours* (kWh): one thousand watt hours
- *Megawatt-hours* (MWh): one million watt hours
- *Gigawatt-hours* (GWh): one billion watt hours
- *Terawatt-hours* (TWh): one trillion watt hours
- Conversion example: 1PJ = 277 thousand MWh

Megatonnes (Mt): one million tonnes. Mt is the unit of measurement used for greenhouse gas emissions. A tonne of emissions is one tonne of carbon dioxide equivalent (CO_2-e), which measures all greenhouse gases.

Million tonnes of oil equivalent (Mtoe): A measure of fossil fuel quantities. One Mtoe is the amount of energy released when one million tonnes of crude oil is burnt.

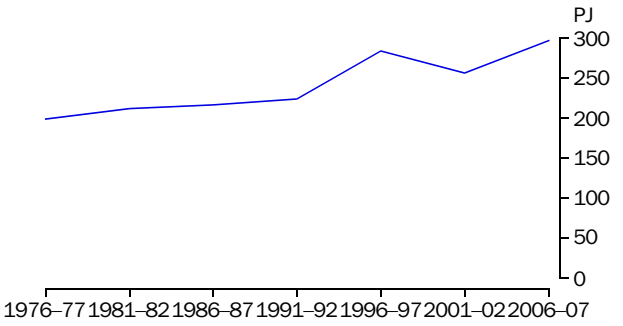
Wood and solar use by households: state/territory — 2008



(a) Solar hot water and solar-photovoltaic
(b) Solar estimate for Tasmania has a relative standard error of 25% to 50% and should be used with caution
(c) Refers to mainly urban areas. Northern Territory wood estimate has a relative standard error of 25% to 50% and should be used with caution

Source: Environmental Issues: Energy Use and Conservation, March 2008 (ABS cat. no. 4602.0.55.001)

Production of renewable energy



(a) Includes wood, woodwaste, bagasse, biofuels, hydroelectricity and solar

Source: ABARE 2008, Australian Energy Supply and Trade, by fuel type; ABARE electronic datasets

with 21% of homes using solar energy, while 9% of Queensland households used solar energy to heat water.

...wind and hydro-electricity

Other forms of renewable energy, such as small hydro systems or wind turbines, can be adapted for household use, but are less common.

Production of renewable energy

The production of renewable energy has increased over the last 30 years. In 1976–77, 200PJ of energy was produced from renewable sources. By 2006–07, this had increased to 298PJ, up 49%. Renewable energy production increased by 10% in 2006–07 compared with 2005–06. However hydro-electricity production fell by almost 10% in 2006–07, due to decreasing water availability as a result of dry conditions seen across New South Wales, Victoria and Tasmania during the last decade. Despite this decline, renewable energy maintained its 5% share of total energy supply in 2006–07, due to growth in solar/wind (up 230% to 28PJ), biomass (up 7% to 205PJ) and biogas/liquids (up 4% to 13PJ).

...supply

A range of policy measures have been introduced in Australia to support the supply and development of renewable energy into the future. The Carbon Pollution Reduction Scheme and the expanded Renewable Energy Target scheme are designed to support the reduction of Australia's greenhouse gas emissions by increasing the proportion of Australia's electricity generated from renewable energy sources.[7]

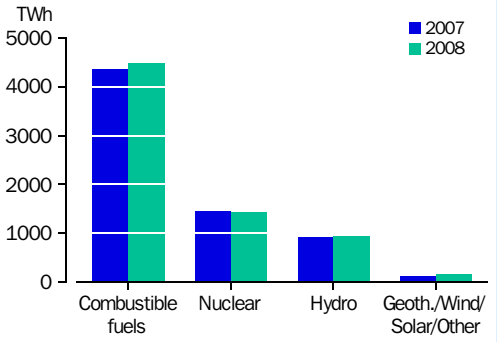
Electricity produced from renewable sources

The production of electricity from renewable sources in 2006–07 rose by 6% compared with 2005–06. Over the next 20 years, electricity generation from renewable sources is projected to increase by around 2% a year.[8] Wind and biomass (mainly bagasse and woodwaste) are projected to account for most of the increase in

International comparison

During January–August 2008, total electricity production from OECD countries rose to 7,032 terawatt-hours (TWh), an increase of 171.4 TWh, or 2.5%.[9] Production from geothermal, wind, solar and other renewables showed the largest percentage change of any fuel type, increasing 23.5%.[9] In the OECD Pacific region (comprising Australia, Japan, Korea and New Zealand), production of geothermal, wind, solar and other renewables increased 36.7%, to 14.6TWh, compared with January–August 2007.[9]

OECD electricity production: fuel type, January–August 2007 and 2008



Source: International Energy Agency, Monthly Electricity Statistics, August 2008

Australia's emissions per person (CO_2/pop) are high compared with other OECD countries.[10] High per capita emissions relative to other countries reflect, in part, Australia's reliance on coal in electricity production and the production of goods with high levels of emissions, namely, resource and agricultural products that are destined for export and consumption in other countries.[3]

Energy supply and emissions: selected OECD countries — 2006

Selected OECD country	Total primary energy supply Mtoe	Emissions (CO_2)(a) Mt of CO_2	CO_2/pop T CO_2/ capita
Luxembourg	4.7	11.2	23.6
United States	2 320.7	5 696.8	19.0
Australia	122.5	394.5	19.0
Canada	269.7	538.8	16.5
Germany	348.6	823.5	10.0
Korea	216.5	476.1	9.9
United Kingdom	231.1	536.5	8.9

(a) CO_2 emissions from fuel combustion only

Source: International Energy Agency, Key World Statistics, 2008

National GreenPower Accreditation Program: customers and mega watt hours — September quarter 2008

	Total customers	Total GreenPower sales	Sales growth, Sept Qtr 07 to Sept 08
		MWh	%
Households	817 282	279 306	51.0
Commercial	32 016	280 518	142.5
Total	**849 298**	**559 824**	**86.2**

Source: National GreenPower Accreditation Program, Quarterly Status Report, September 2008

electricity generation from renewable sources.[8] In 2007 the Australian Government committed to ensuring that 20% of the electricity supply will come from renewable energy sources by 2020.[7]

GreenPower

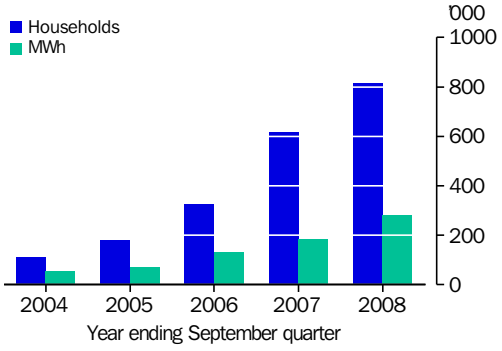
GreenPower products allow customers to replace a proportion of their electricity account with electricity generated from renewable sources, fed into the national power grid. GreenPower was first established in New South Wales in 1997 and GreenPower now has customers in all states and territories except the Northern Territory.

...uptake

Just over 817,000 households were part of a GreenPower scheme in the September quarter 2008. These households consumed just over 279,000 mega watt hours (MWh), or 1PJ of renewable energy. This was an increase of almost 149,000 MWh or 51% compared with the September quarter 2007.

In 2008, the total mega watt hours supplied to households under the National GreenPower Accreditation Program was enough to power a year of household electricity use for almost 45,000 homes.[11]

Household customers of GreenPower



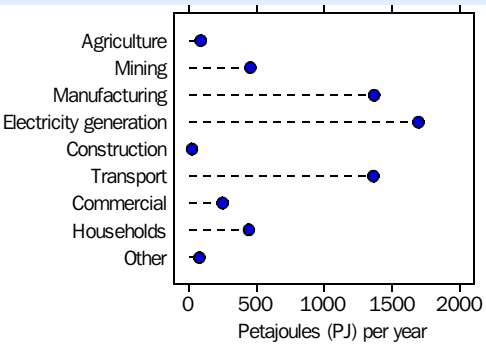
Source: National GreenPower Accreditation Program, Quarterly Status Reports, September 2004–September 2008

Total energy supply and use

Total primary energy production in Australia rose by 3.2% to over 17,000PJ in 2006–07 compared to 2005–06. Only around one third of this energy was used domestically. The energy increase largely came from hard coal production, which maintained its 51% share of total primary energy production, rising 5% to 9,292PJ.

In 2006–07, Australia's primary energy use increased by 2.3% to 5770PJ. Electricity generation, Manufacturing and Transport together accounted for more than 75% of all primary energy use.

Total energy consumption, by sector — 2006–07



Source: ABARE 2008, Energy Consumption in Australia, by industry; ABARE electronic datasets

...awareness

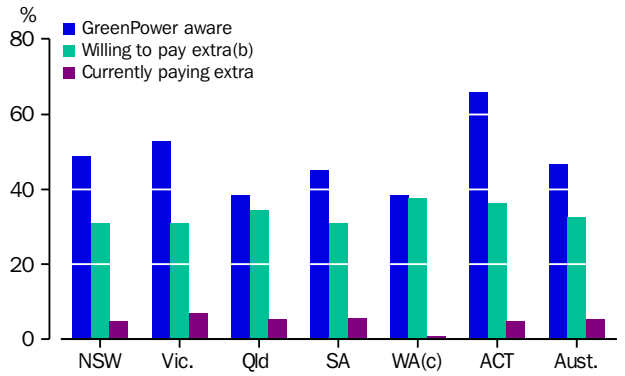
There has been an increase in the awareness of GreenPower options. In 1999 only 19% of households were aware of GreenPower. By 2008, this had risen to over half (52%) of all households, including 5% who reported that they were already paying for GreenPower. More recently, GreenPower reported the uptake at around 10% of households. Differences between the rates are related to the reference periods used and differences between survey and administrative data.

Households in the Australian Capital Territory had the highest rate of GreenPower awareness (71%, including 5% who were paying for GreenPower) while Western Australian households had the lowest awareness (39%).

Not all households who were aware of GreenPower were willing to pay extra for electricity generated from renewable energy in 2008. Around one-third (32%) of households were prepared to pay more for electricity generated from renewable sources.

The willingness to pay extra did not necessarily translate into action. The proportion of households in each state and territory who said they were willing to pay extra for GreenPower was much higher than the proportions who were currently paying extra for a GreenPower option.

Support for GreenPower — 2008[a]



(a) Data cover only states/territories participating in the National GreenPower Accreditation Program at the time the survey was conducted

(b) Of those who were already aware of GreenPower

(c) WA estimate for 'Currently paying extra' has a relative standard error of 25% to 50% and should be used with caution

Source: Environmental Issues: Energy Use and Conservation, March 2008 (ABS cat. no. 4602.0.55.001)

Conclusion

Australia's energy supply will face many challenges over the next decade. Increasing domestic consumption, the need for investment in new assets and policy measures aimed at reducing greenhouse gases, will all shape the investment in technologies needed to drive the production of renewable energy in the medium to long term.[12]

Endnotes

1 Department of the Environment, Water, Heritage and the Arts (DEWHA), *Greenhouse Gas Emissions Calculator*, viewed 10 December 2008, <www.environment.gov.au>.

2 Australian Bureau of Agricultural and Resource Economics (ABARE), *Energy Update 2008*, electronic datasets, viewed 15 December 2008, <www.abare.gov.au>.

3 Department of Climate Change (DCC), *Australia's National Greenhouse Accounts: National Inventory by Economic Sector 2006*, DCC, 2008, Canberra.

4 Australian Conservation Foundation, Total Environment Centre and World Wildlife Fund (WWF) Australia, *Green Electricity Watch 2007*, viewed 19 December 2008, <www.greenelectricitywatch.org.au>.

5 Australian Energy Regulator, *State of Electricity Market 2008*, viewed 22 January 2009, <www.aer.gov.au>.

6 Energy Australia, *Typical Household Appliance Wattages*, viewed 29 January 2009, <www.energy.com.au>.

7 Department of Climate Change (DCC), *The Australian Government's Renewable Energy Target Fact Sheet*, viewed 13 February 2009, <www.climatechange.gov.au>.

8 Australian Bureau of Agricultural and Resource Economics (ABARE), *Energy in Australia 2008*, 2008, Canberra.

9 International Energy Agency (IEA), *Monthly Electricity Statistics*, August 2008, IEA, Paris, France.

10 International Energy Agency (IEA), *Key World Energy Statistics 2008*, IEA, Paris, France.

11 GreenPower, *You Can Bank on GreenPower*, viewed 26 November 2008, <www.greenpower.gov.au>.

12 Australian Bureau of Agricultural and Resource Economics (ABARE), *Electricity Generation: Major Development Projects – October 2008 Listing*, Canberra 2008.

13 Department of the Environment, Water, Heritage and the Arts (DEWHA), *Adelaide Solar City*, viewed 10 December 2008, <www.environment.gov.au>.

Australia's first solar city

Adelaide is one of seven regions in Australia to trial new approaches to producing and using energy as part of the Australian Government's Solar Cities Program. From now until 2013, Adelaide's local governments, businesses and the community will support the uptake of 1700 solar panels for homes and business. Consumers installing solar systems will be given financial help to do so. There will also be 7000 'smart meters' installed in homes and business and a campaign to inform the community about energy efficiency and encourage the uptake of GreenPower. The trial is expected to cut energy usage by 28GWh, representing an annual saving of $5 million in electricity costs and a minimum of 30,000 tonnes of greenhouse gas emissions each year.[13]

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