

2 Population ageing in Australia

2.1 Some demographic features of Australia's population

Before discussion of the general trends in population growth and ageing, it is worth highlighting some important demographic features of Australia's population.

Changes in population age structure are determined by the demographic factors of fertility, mortality and migration. Australia's level of fertility has declined since 1971 and has been below replacement level since 1976. This decline has contributed substantially to population ageing by increasing the proportion of older people in the total Australian population (Borowski & Hugo 1997; Young 1990).

In the meantime, the Australian population experienced a decline in mortality and an increase in life expectancy among older people during the 1970s and 1980s. The low level of fertility and the decline in mortality rate among older people have resulted in a higher proportion of older people in the total population.

Australia experienced a significant rise in birth rate between 1946 and 1961. People born during this period are often referred to as the post-World War II 'baby-boom generation'. This 'baby boom' was mainly due to changes in marriage patterns and the timing of births—a higher proportion of women married and had children—rather than any increase in average family size. Hence, the baby boom increased the proportion of children in the population during that period, but it was not a reversal of the trend towards the small family (Clare & Tulpule 1994; Rowland 1991).

It has been suggested that, to a large extent, it is the ageing of the baby-boom generation rather than increased life expectancy that is driving the projected changes in the age profile of the Australian population (Clare & Tulpule 1994).

Immigration played an important role in population growth after World War II. New immigrants and their children accounted for over half of the population growth, even during the peak of the baby boom. Immigration played a particularly important role in the 1970s and 1980s. In the 1980s Australia had the highest rate of population growth of any Western population, mainly attributed to its high level of immigration (Young 1990). The drop in natural population increase was largely offset by a rise in net immigration (Clare & Tulpule 1994).

Although immigration was an important component of population growth in Australia, it had little impact on the pace of population ageing either in the short term or in the long term. While a higher level of immigration can compensate for a lower level of fertility in terms of total population size, it may not necessarily counteract the severe undercutting of the age pyramid at the youngest ages or the increased proportion of the population at the oldest ages (Young 1990).

Only a huge increase in the annual immigrant intake (net gains of over 280,000) would have any significant effect on the pace of population ageing in Australia (Centre for International Economics 1988 cited in Borowski & Hugo 1997). The problem is that immigrants will also get older. To keep the population 'young'—to maintain the proportion of the population aged 65 and over at its present level of 12.2%—we would need an increasingly large number of immigrants, rising to 4 million per annum by 2048 (McDonald & Kippen 1999).

The current proportion of Australians aged 65 years and over (12% in 1997) puts Australia in a transitional position between the demographically 'young' populations of South-East Asia and Africa (where the proportions of the population aged 65 years and over are about 4% to 5%) and the 'old' populations of Northern Europe (with about 15% of their populations aged 65 years and over) (Kinsella & Taeuber 1993 cited in Borowski & Hugo 1997). In comparison with the Western European countries, Australia has a smaller proportion of the 65-plus population aged 80 years and older (Borowski & Hugo 1997).

Australia's population is 'younger' than that of many developed countries because Australia was much slower in reaching the point where its population structure began ageing markedly (Clare & Tulpule 1994). However, the aged population of Western European countries is now growing very slowly and many of these countries expect a decline in their older population. In contrast, the Australian aged population has itself been ageing comparatively quickly over the last decade and will continue to do so over the next few decades (Borowski & Hugo 1997; Gibson & Goss 1999).

Interstate migration is the most volatile component of population change in the States and Territories. Over recent years, the overall interstate migration patterns indicate a northward stream on the east coast and a smaller stream to the west coast. Both streams originate in the south-east, resulting in large net gains for Queensland and small net gains for Western Australia, but net losses for all other States and Territories (Wettenhall 1995; ABS 1998a: 36).

Over the past two decades there has been considerable variation between the States and Territories in terms of the proportion of the population aged 65 years or over. The greatest change has occurred in South Australia, which has overtaken the three mainland eastern states and now has the highest proportion of people aged 65 years and over. This was partly due to a relatively larger immigration of young adults in the 1950s to South Australia, and partly due to a decline in fertility and significant out-migration of young adults in the 1970s (Borowski & Hugo 1997: 37).

Throughout Australia the older population tends to be concentrated in major urban areas (10,000 residents or more). Between the 1981 and 1991 censuses, the number of people aged 65 years and over in metropolitan areas increased by an annual rate of 2.9%, more than twice the rate for the total population in large cities (Borowski & Hugo 1997: 37).

The distribution of the older population outside major urban centres shows a number of patterns (Borowski & Hugo 1997):

- There are concentrations in non-metropolitan coastal resort areas. This is particularly evident along the northern and southern coast of New South Wales and in south-eastern Queensland. This is largely driven by retirement migration towards attractive environments and climate.
- There is a growth of retirement communities in attractive environments near the large cities, as retired people move away from areas within commuting distance of their workplace.
- Many country towns have an above-average concentration of older people. This is usually a result of older people retiring from farm properties into nearby towns and out-migration of younger people.

Within large metropolitan cities, older people tend to shift from the inner to the middle suburbs. The most rapid rate of growth of the older population tends to be even further out in the outer suburbs (Borowski & Hugo 1997).

2.2 Projected growth in population

The Australian population is projected by ABS to grow from 18.5 million in 1997 to between 22.1 and 23.1 million in 2021, and between 23.5 million and 26.4 million in the year 2051. Although the growth rates are projected to vary around an average annual growth rate between 1.0% and 1.1% during 1997–2001, there is a clear long-term trend of decline in growth rates from 1.2% in 1996–97 to between 0.0% and 0.3% by 2051 (ABS 1998a).

There are considerable differences in projected population growth among the States and Territories. The most rapidly growing States are the Northern Territory, Queensland and Western Australia. Queensland is projected to replace Victoria as the second most populous State between 2022 and 2048. The population of the Australian Capital Territory is projected to overtake that of Tasmania between 2037 and 2043. Tasmania is the only State or Territory where the population is projected to decline over the projection period under each of the ABS projection series (ABS 1998a: 2).

2.3 Trends in population ageing

Two measures are usually used to measure population ageing. The first measure is the median age of the population. A population is considered 'young' if it has a median age of less than 20 years, and 'old' if it has a median age of 30 or over (Shryock & Siegel 1976).

The second measure is the proportion of the population beyond the age of 60 or 65 years (the threshold age used for this measure varies). The United Nations classifies a nation as 'aged' if 10% or more of the population are aged over 60 or 65 years, as 'mature' if between 7% and 9% are over 60 or 65, and as 'youthful' if between 4% and 6% are over 60 or 65 years of age (McPherson 1990).

ABS projections show that the ageing of the Australian population will continue, as the inevitable result of low levels of fertility over a long period and decline in mortality rates. Median age is projected to increase from 34.3 years in 1997 to between 40.1 and 41.1 years in 2021 and between 43.7 and 46.2 years in 2051 (Table 2.1).

Changes in overseas migration would have little effect on the median age of the Australian population. With net overseas migration of 70,000 per year by 1999, the median age in 2051 would be between 44 and 46 years. With no net gain of overseas migration, the median age in 2051 would be between 47 and 49 years (ABS 1998a: 8).

The ageing of the Australian population is largely attributable to the projected decline in the population aged 0–14 years and the rapid increase in the population aged 65 years and over, both in terms of numbers and as a proportion of the total population. The proportion of people aged 0–14 years was 21.2% in 1997 and is projected to be between 16.0% and 17.3% in 2021 and between 14.1% and 15.8% by 2051 (ABS 1998a). The proportion of people aged 65 years and over will increase rapidly from 12.1% (2.2 million people) in 1997 to 17.6% (4.0 million people) in 2021 and between 23.7% (6.0 million people) and 25.6% (6.3 million people) in 2051 (Table 2.1). The proportion of people aged 85 years and over is projected to increase considerably, from 1.2% (216,100 people) in 1997 to between 4.4% (1.1 million people) and 4.8% (1.2 million people) in 2051 (ABS 1998a: 12).

Table 2.1: Projected changes in median age, proportion of population aged under 15 years and aged 65 years or over, Australia 1997–2051^(a)

Year	Median age (years)			Proportion pop aged 65+ (%)			Proportion pop aged under 15 (%)		
	Series 1	Series 2	Series 3	Series 1	Series 2	Series 3	Series 1	Series 2	Series 3
1997	34.3	34.3	34.3	12.1	12.1	12.1	21.2	21.2	21.2
1998	34.6	34.6	34.6	12.2	12.2	12.2	20.9	20.9	20.9
1999	34.9	34.9	35.0	12.2	12.2	12.2	20.7	20.7	20.7
2000	35.2	35.2	35.2	12.3	12.3	12.3	20.5	20.5	20.5
2001	35.4	35.5	35.5	12.3	12.4	12.4	20.3	20.3	20.2
2006	36.7	36.8	37.0	12.9	12.9	13.0	19.3	19.3	18.9
2011	38.1	38.3	38.6	13.9	14.0	14.2	18.4	18.3	17.4
2016	39.2	39.4	40.0	15.8	16.0	16.2	17.7	17.6	16.5
2021	40.1	40.4	41.1	17.6	17.9	18.2	17.3	17.1	16.0
2026	41.1	41.3	42.2	19.4	19.8	20.3	17.0	16.8	15.7
2031	41.9	42.2	43.3	20.8	21.3	21.9	16.7	16.5	15.4
2036	42.6	42.9	44.3	21.9	22.4	23.3	16.3	16.2	15.0
2041	43.1	43.5	45.2	22.8	23.3	24.3	16.1	15.9	14.6
2046	43.5	43.9	45.8	23.2	23.7	24.9	15.9	15.7	14.3
2051	43.7	44.1	46.2	23.7	24.2	25.6	15.8	15.6	14.1

(a) The three ABS projection series reported in this table differ in terms of the assumptions about future fertility and migration on which they are based.

Source: ABS 1998a: Table 4.6.

There are several important aspects of population ageing in Australia: the projected ageing of the aged population itself; the rapid pace of ageing of the working-age population; and the fluctuation in the size of some significant age cohorts, in particular the post–World War II baby-boom generation.

Table 2.2 shows that in the 1980s the highest growth rates were in the age groups 75–84 years and 85 years plus. This rapid growth partly reflected the large numbers of people born during the post–First World War period who were moving into the oldest age groups, post-war immigrants who arrived in Australia in the 1950s as young adults and the increased survival of older Australians (Borowski & Hugo 1997).

During the 1980s the growth rates of the working-age population aged 50–54 and 55–59 years were low or negative, reflecting the passage of people born in the low-fertility years of the 1930s into these age groups (Tables 2.2 and 2.3).

The population projections show that the working-age population in Australia (aged 15–64 years) will also be ageing in the coming decades. During the next two decades the working-age population is projected to account for a higher proportion of the total population than at any time since World War II (Young 1990; ABS 1998a). The greatest growth among the working-age population will be in the population aged 45–64 years, from 4.0 million in 1997 to between 6.1 million and 6.5 million in 2051. The number of people aged 45–64 years will be higher than the number aged 65 years and over throughout the projection period, although the difference in number will reduce steadily over the period (ABS 1998a; Tables A2.2 and A2.3; Figure 2.1).

Table 2.2: Estimated and projected percentage changes in selected age groups, Australia, 1981–2051

Age	1981–86	1986–91	1991–96	1996–2001	2001–06	2006–11	2011–21 ^(c)	2021–31 ^(c)	2031–41 ^(c)	2041–51 ^(c)
45–49	14.5	22.2	(a)25.7	5.1	8.4	0.9	1.3	1.7	2.7	-2.5
50–54	(b)-4.9	14.9	19.8	(a)26.9	5.1	8.5	1.5	-2.1	6.7	-0.7
55–59	2.0	(b)-3.9	14.0	21.1	(a)26.9	5.3	9.7	1.6	2.0	3.0
60–64	17.3	2.4	(b)-3.6	13.5	21.3	(a)26.9	14.6	2.0	-1.7	7.0
65–69	6.3	17.8	3.1	(b)-2.8	14.1	21.6	34.2	10.3	2.2	2.5
70–74	17.9	7.9	18.1	3.9	(b)-1.8	14.7	(a)55.2	15.8	3.0	-0.9
75–79	24.5	18.5	10.1	20.7	5.1	(b)-1.0	41.4	36.2	11.8	3.6
80–84	20.1	24.2	22.9	12.9	22.2	6.2	16.4	(a)59.1	19.1	5.6
85+	26.0	19.3	30.9	26.7	18.0	22.0	19.7	39.0	50.3	23.3
Total 45–64	6.6	9.3	15.2	15.9	14.0	9.0	6.4	0.8	2.4	1.6
Total 50–64	3.9	4.4	10.5	21.3	16.4	12.4	8.3	0.5	2.3	3.0
Total 65+	15.6	16.0	12.9	8.3	9.5	13.1	36.2	25.6	12.8	5.8
Total 70+	21.0	15.1	18.1	13.3	7.7	9.5	37.1	32.6	16.7	6.9
Total 75+	23.5	20.3	18.1	19.6	13.2	6.9	27.4	43.5	24.0	10.3

(a) This shift mainly reflects the passage of the large cohort of the post–World War II baby-boom generation.

(b) This shift mainly reflects the passage of the people born in the low-fertility years of the 1930s.

(c) 10-year period has been applied.

Source: Calculated on the basis of ABS estimated resident population and population projections Series II; ABS 1998a.

Table 2.3: Estimated and projected population ('000) in selected age groups, Australia, 1981–2051

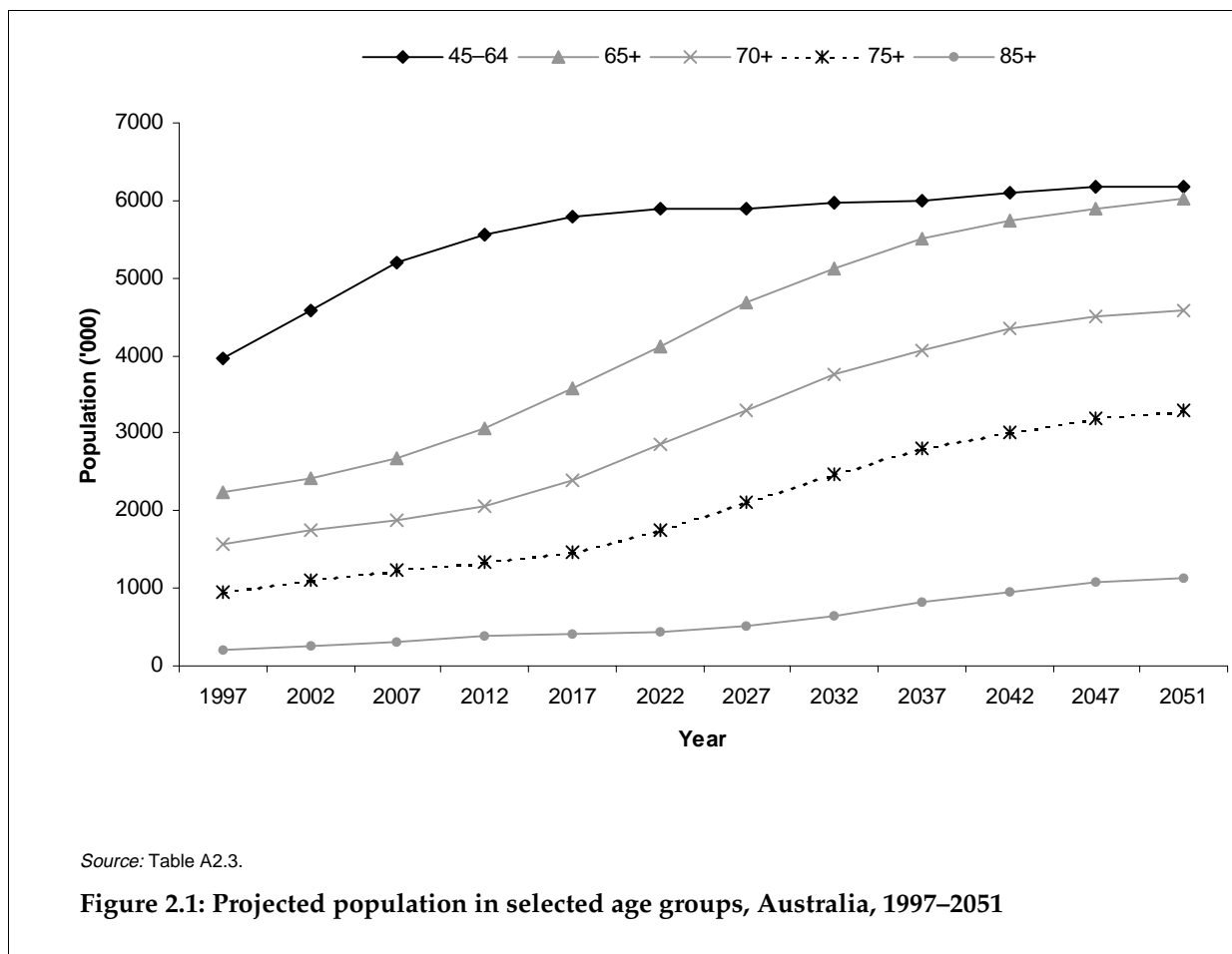
Age	1981	1986	1991	1996	2001	2006	2011	2021 ^(c)	2031 ^(c)	2041 ^(c)	2051 ^(c)
45–49	735.7	842.3	1,029.1	(a)1,293.9	1,360.5	1,475.3	1,488.4	1,507.5	1,532.7	1,574.8	1,535.2
50–54	774.6	(b)736.9	846.9	1,014.9	(a)1,287.5	1,353.7	1,468.8	1,491.5	1,459.7	1,557.2	1,546.7
55–59	740.6	755.5	(b)726.0	827.4	1,002.1	(a)1,271.3	1,338.6	1,468.7	1,492.3	1,521.4	1,566.6
60–64	613.1	719.4	736.9	(b)710.5	806.4	978.3	(a)1,241.9	1,423.4	1,452.1	1,427.1	1,527.1
65–69	536.2	570.2	671.4	692.2	(b)673.0	768.1	934.1	1,253.9	1,383.4	1,414.0	1,449.9
70–74	401.5	473.2	510.8	603.1	626.5	(b)615.2	705.5	(a)1,094.6	1,267.4	1,305.4	1,293.0
75–79	260.6	324.4	384.5	423.4	510.9	536.9	(b)531.7	751.8	1,024.0	1,145.2	1,186.6
80–84	154.1	185.0	229.8	282.5	318.7	389.4	413.4	481.1	(a)765.5	912.0	962.9
85+	102.6	129.3	154.2	201.9	255.6	301.7	368.1	440.5	612.2	920.4	1,134.8
Total 45–64	2,864.0	3,054.1	3,338.9	3,846.8	4,456.5	5,078.6	5,537.7	5,891.1	5,936.8	6,080.5	6,175.6
Total 50–64	2,128.3	2,211.8	2,309.8	2,552.8	3,096.0	3,603.3	4,049.3	4,383.6	4,404.1	4,505.7	4,640.4
Total 65+	1,455.0	1,682.1	1,950.7	2,203.1	2,384.7	2,611.3	2,952.8	4,021.9	5,052.5	5,697.0	6,027.2
Total 70+	918.8	1,112.0	1,279.3	1,510.9	1,711.7	1,843.2	2,018.7	2,768.0	3,669.1	4,283.0	4,577.3
Total 75+	517.3	638.8	768.6	907.7	1,085.2	1,228.0	1,313.2	1,673.4	2,401.7	2,977.6	3,284.3

(a) This shift mainly reflects the passage of the large cohort of the post–World War II baby-boom generation.

(b) This shift mainly reflects the passage of the people born in the low-fertility years of the 1930s.

(c) 10-year period has been applied.

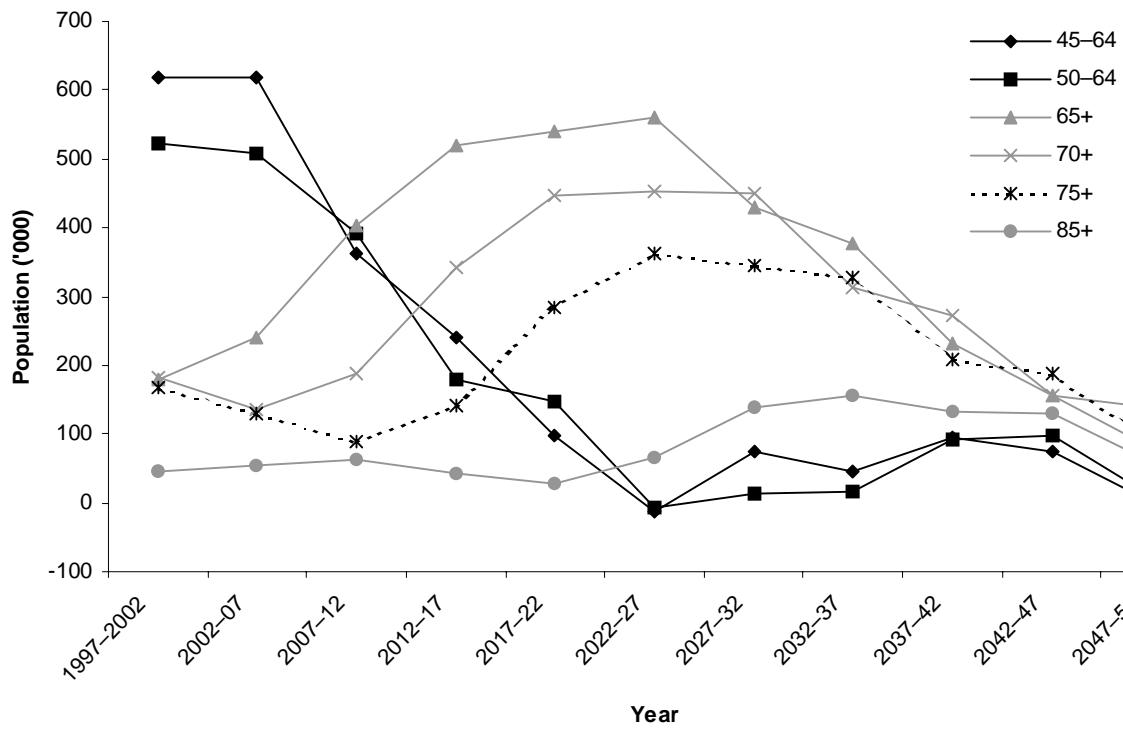
Source: Calculated on the basis of ABS estimated resident population and population projections Series II; ABS 1998a.



Between 1997 and 2006, the population aged 50–64 years is projected to increase at a markedly higher rate than the population aged 65 years and over. Thereafter, the population aged 65 years and over will grow faster (Figure 2.2; Table A2.2). This shift mainly reflects the passage of the post–World War II baby-boom generation. This generation is progressively moving up the age pyramid causing rapid growth in the number of older people (Tables 2.2 and 2.3; Figure 2.2).

The growth of the population aged 65 years and over is projected to reach record rates (i.e. to increase by 36.2% between 2011 and 2021) as the peak of the post–World War II baby-boom generation reaches retirement age (Tables 2.2 and 2.3).

The ageing of the aged population is very significant because of its size. Between 1997 and 2051, the number of people aged 75 years and over is projected to increase by around 3.5 times, and 5.3 times for people aged 85 and over (Table A2.3). The number of people aged 85 and over is projected to increase from 216,100 in 1997 to between 1.1 million and 1.2 million people in 2051. People aged 85 or over as proportion of total people aged 65 or over is projected to increase from 9.6% in 1997 to about 18.8% in 2051 (ABS 1998a: 12).



Source: Table A2.2.

Figure 2.2: Projected increase in the population in selected age groups, Australia, 1997-2051