



Australia's fertility rate: trends and issues

Ageing of the population

In recent years, the ageing of the population has been of increasing concern to government and society. Most of this concern was about **numerical ageing** – the absolute increase in the number of older people. Concern both here in Australia and overseas focused on the sustainability of the retirement income, health and aged care systems given the increase in dependency ratios.

There has been a shift in public debate recently, as the importance of decline in the tax base to long-term system sustainability has led to recognition of the implications of **structural ageing** – which is primarily the result of falling fertility. As fertility falls, the proportion of the population at the younger ages decreases and the proportion at older ages increases.

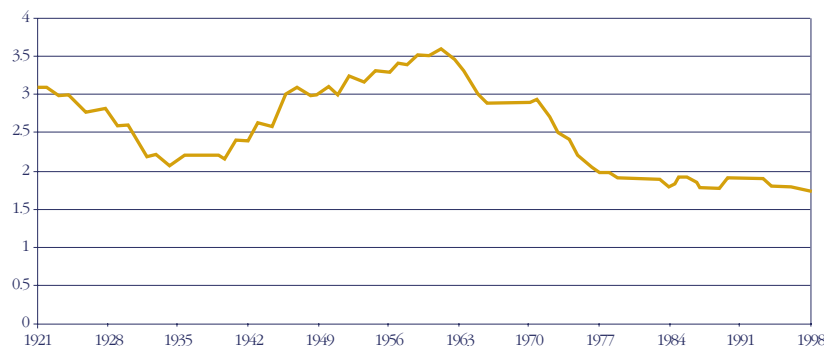
Falling fertility

Fertility in Australia, as in all other developed countries, has been falling for a considerable time. The replacement fertility rate is around 2.1. The total fertility rate (TFR¹) was at its highest point in the twentieth century in 1961 at 3.6. Throughout the 1970s and 1980s, TFR fluctuated around 1.8 or 1.9, with a small but steady decline throughout the 1990s. In 1999, Australia's TFR was 1.75, dropping from 1.76 one year earlier. This is the lowest level seen in the twentieth century (see Figure 1).

Almost all women in Australia, whether they are examined by age, marital status, labour force participation, occupation or education, are having fewer children. In general, higher levels of educational attainment and socio-economic position are associated with lower fertility rates.

Australia's fertility rate (1.75) is currently below the replacement fertility rate (2.1)

Figure 1: Total fertility rate 1921 to 1998



Source: ABS Cat. No. 3301.0

The TFR of women in capital cities is much lower than that of rural regions and the median age of mothers is slightly higher in cities. In 1999, the TFR was below 1.75 in all capital cities.

Comparative OECD data indicate that the average age of women at first birth in Australia is now amongst the oldest in the world. In 1993, this stood at 28.3 years, behind only New Zealand and Switzerland. Since then, Australian average age at first birth has continued to rise, reaching 29.1 years in 1998.

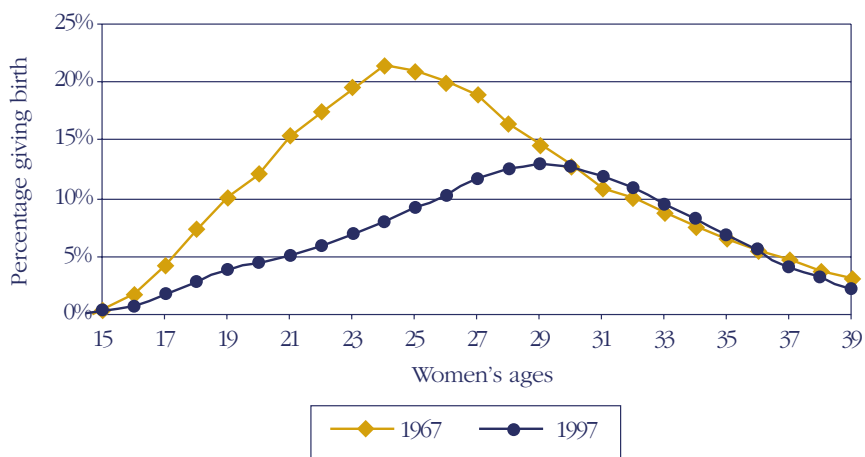
The average age of all mothers has been increasing over the past 30 years. Figure 2 shows the shift over this time to having children later.

Delayed child bearing reduces overall fertility in two ways. First, it stretches out each generation, resulting in fewer children overall in a given time period. Second, later commencement is associated with lower individual lifetime total fertility.

The main difference between fertility in Australia and fertility in those European countries with very low

The average age of women at first birth is among the oldest in the world

Figure 2: Age-specific proportion of women having babies, by age, 1967 and 1997



Source: ABS Cat. No. 3301.0

fertility is that very few of these European women have more than two children. In Australia, 37 per cent of women aged around 40 years have had three or more children. Projections for younger women indicate this rate may decline to 27 per cent for women currently aged 30 years and at this level they will be responsible for 50 per cent of total fertility. If these women were to have only two children, our fertility would gradually fall to 1.4.

that approximately 22 per cent of women who are currently around 30 years of age will have no children.

The same projection indicates

Impact on population structure

The number of babies being born each year is still well above the number of deaths that occur each year. In 1998, there were around 250 000 births (see Figure 3) and 129 000 deaths.

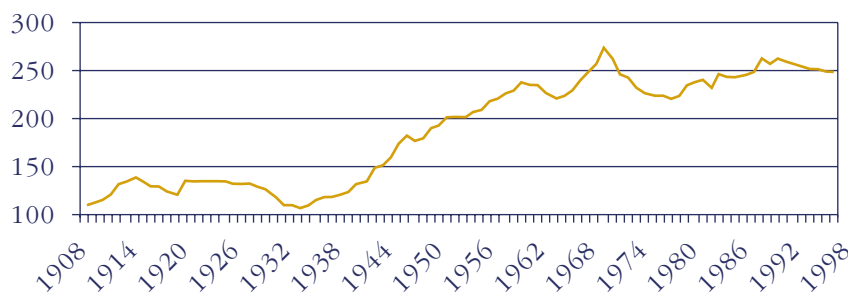
The main reason for this continued population growth, despite the low TFR, is the large cohorts of women currently at reproductive age.

Figure 4 shows how large the current cohorts of women are when compared to both earlier and later groups. (As the following cohorts are smaller, Australia is confronted with a future where a much smaller group of women will be available to have children, and at a time when the number of children that each woman is likely to have is also continuing to fall.)

Because of these changes, the shape of the population structure is changing quite radically and quite quickly. The graphs in Figure 5 represent change over a 40-year period.

Smaller cohorts of women having fewer babies means that Australia's population structure is changing rapidly and radically

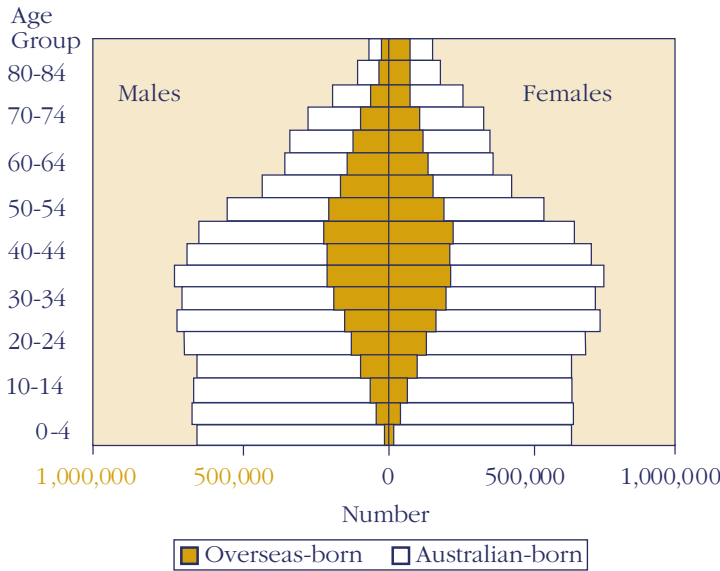
Figure 3: Registered births



Source: ABS 1998 Births Cat. No. 3301.0

Most importantly, the balance of people who are of retirement age, those of workforce age and those who are young, is shifting. Currently, people who are aged 65 and over make up 12.3 per cent of the total population and young people aged less than 19 years make up 26.4 per cent.

Figure 4: Age and sex structure for the Australian-born and overseas-born populations by number, 1997



Source: Jackson (1999, p. 211)

will negatively affect the workforce dependency ratio. It will also reduce growth in the population of workforce age. This is likely to reduce the growth in the workforce-age population from 180 000 per year to 140 000 over the whole decade commencing around 2020, unless policy or other influences on long-term fertility and participation rates impact soon. Most of this workforce has already been born.

Comparison with the situation overseas

While Australia’s TFR is one of the lowest in the world, overall it falls in the middle rank of developed countries. The United Kingdom, United States, New Zealand, Norway, Ireland and Iceland all have higher rates than Australia. However, our rate is higher than all other countries in Europe, as well as Japan, Korea, Hong Kong and Singapore in our region (see Table 1).

The proportion of people aged 65 and over is expected to double to between 24 per cent and 26 per cent by 2051, while the younger group will decline by several percentage points to around 20 per cent.

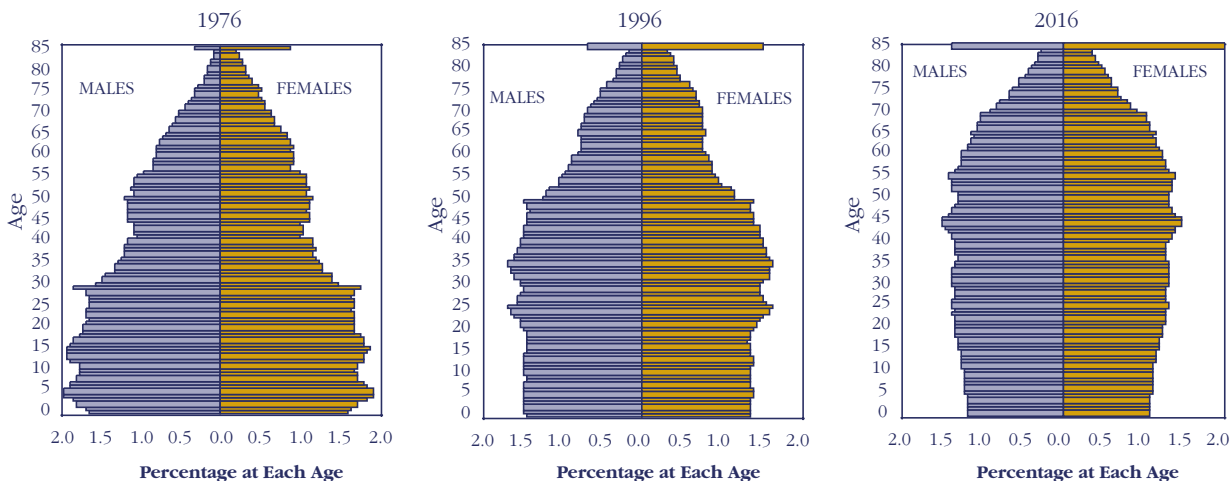
This represents an important change, as the proportion of people aged 20 to 64 years will decline. This group forms the primary tax base and has remained unchanged for several decades. Until now, the decline in youth and the increase in the aged have been in balance, even if the costs have not been.

The Primary tax base (people aged 20 to 64 years) is expected to decline as a proportion of population

The shift in Australia’s population structure

Workforce age population will fall unless long term fertility and participation rates improve

Figure 5: Age and sex structure of the Australian population by percentage: 1976, 1996 and 2016



Source: Jackson (1999 p. 204)

Table 1. Total fertility rates, selected countries

COUNTRY	1960	1970	1980	1990	1997
Malaysia	N/A	5.27	3.98	3.53	3.40
India	N/A	N/A	4.70	3.80	3.31
Indonesia	N/A	N/A	4.37	3.03	2.66
United States	N/A	2.48	1.84	2.08	2.06
New Zealand	N/A	3.17	2.03	2.18	1.96
Norway	2.91	2.50	1.72	1.93	1.85
Australia	3.45	2.86	1.90	1.91	1.78
Finland	2.72	1.83	1.63	1.78	1.75
Denmark	2.54	1.95	1.55	1.67	1.75
France	2.73	2.47	1.95	1.78	1.71
United Kingdom	2.72	2.43	1.90	1.83	1.71
Canada	3.90	2.33	1.68	1.71	1.66
Sweden	2.20	1.92	1.68	2.13	1.52
Singapore	N/A	N/A	1.74	1.60	1.46
Japan	2.00	2.13	1.80	1.54	1.44
Germany	2.37	2.03	1.56	1.45	1.36
Hong Kong	N/A	N/A	2.08	1.26	1.33
Greece	2.28	2.39	2.21	1.39	1.32
Italy	2.41	2.42	1.64	1.33	1.22
Spain	2.86	2.90	2.20	1.36	1.15

Bolded figures indicate the country is an OECD member country and the data were obtained from OECD Health Data 99. Data for non-OECD (non-bolded) countries was obtained from U.S. Bureau of the Census, International Data Base and represents expected TFR for the period 1995-00.

What role can immigration play?

Immigration is able to ameliorate but not reverse this situation. This is principally because immigrants also age, and, at numbers above 100 000 they do little to influence the age structure of the population while having a significant impact on total population. The decline in fertility worldwide among developed countries will also increase competition for skilled migrants and reduce sources.

NOTE

1. The number of children a woman would bear during her lifetime if she experienced current age-specific fertility rates at each age of her reproductive life.

This FaCS Sheet was prepared by Allison Barnes, Research Strategies Section, Department of Family and Community Services, Canberra.

Much of the material in this FaCS Sheet is drawn from publications of the Australian Bureau of Statistics (ABS) 1999, *1999 Year Book Australia*, Cat. No. 1301.0 and Jackson, N. 1999, 'Understanding population ageing: a background', in *Australian Social Policy* 1999/1, Department of Family and Community Services. The information in this FaCS sheet was also drawn from the occasional paper *Low Fertility: A Discussion Paper*, which contains references for the data.

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