

## 3. Australia's fertility

### Key points

Since the early-1960s, the fertility of Australia's women has generally declined, although rates may now have stabilised.

- The total fertility rate decreased from 3.55 in 1961 to 1.73 in 2001, before increasing to 1.93 babies per woman in 2007.

More families are delaying having children or not having children at all.

- In 2003, 41% of all first births were to women aged over 30, compared with 28% in 1993.
- Around one-in-five women of child-bearing years can be expected not to have children.

The decision to have children is affected by a range of factors.

- In 2004 the top-ranked factor for both men and women was whether they could afford to support the child.

Fertility can affect the future labour supply and the capacity to care for older people.

- As the population ages, the difference between numbers of births and deaths will decrease. The number of births, however, is projected to remain higher than the number of deaths until the end of the century.
- It is projected that by 2047 there will only be 2.4 people of working age supporting each person aged 65 and over, down from 5 people in 2007.

Fertility patterns vary for different groups.

- Women from areas of low socio-economic advantage have more children than women from areas of high socio-economic advantage.
- Teenage fertility in the last three years is the lowest it has ever been in Australia, but it is still around the level of the OECD average, and some groups, particularly Indigenous Australians, have higher rates of teenage pregnancy.

# fertility

In assessing the state of the family in Australia, a key issue is the level of fertility; that is, the number of children women have on average. For society, fertility is important because of its impact on population growth, and its potential to affect workforce participation, and its ability to care for and support an ageing population. For families, fertility is important because it fulfils the aspiration of many families to have and raise their own children.

Australia's fertility has generally fallen since the 1970s, but it has increased in recent years. Fertility rates are higher for certain groups of women, including those from areas of greater socio-economic disadvantage and Indigenous women. It is important to consider how fertility patterns vary across the population and what impact this should have on approaches to supporting families and children.

This chapter examines fertility trends in Australia and the differences in fertility rates among Australian women based on a range of factors, such as cultural identity and Indigenous status, socio-economic backgrounds, education levels, age and marital status. It also looks at the factors that Australians consider before having children.

## Fertility trends

Fertility in Australia has varied considerably over the last century. In 1920 Australia's total fertility rate was very high in comparison to current levels, at just over 3 babies per woman. By 1934, around the time of the

Great Depression, the fertility rate had fallen to 2.1 babies per woman (see Figure 3.1).

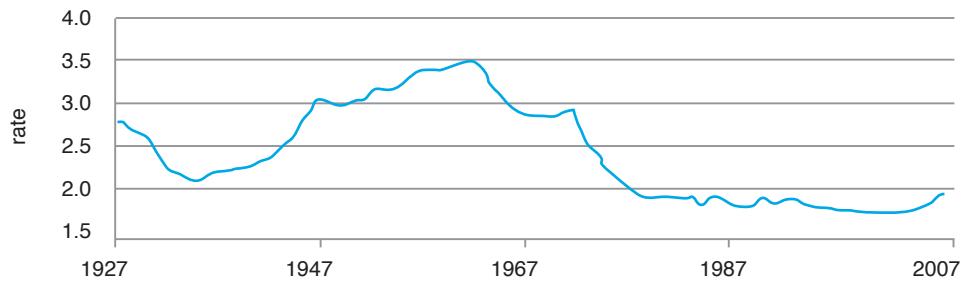
During the late-1940s and early-1950s, fertility increased substantially and by 1961, the total fertility rate (TFR) in Australia was a new high at around 3.5 babies per woman. This 'baby boom' was to be short lived, with the fertility rate dropping until in 1976 it fell below 2.1 babies per woman (the replacement fertility rate). Over the next decade Australia's fertility rate was generally stable at around 1.9 babies per woman, falling only slightly.

In 2001 the TFR in Australia hit a record low, having fallen to 1.73 babies per woman. Since then, the rate has increased to 1.93 babies in 2007. The rise in Australia's fertility is largely due to older women having delayed having children when they were younger. Recent research suggests that the long-term TFR may have stabilised at around 1.75-1.90 babies per woman (Lattimore and Pobke, 2008).

**The total fertility rate (TFR)** is the sum of age-specific rates (live births at each age of mother per female population of that age). It represents the number of children a female would bear during her lifetime if she experienced current age-specific fertility rates at each age of her reproductive life.

Source: ABS *Births, Australia 2006* (3301.0).

**Figure 3.1 Long-term pattern in total fertility rates (a) 1927 to 2007**



(a) Births per woman

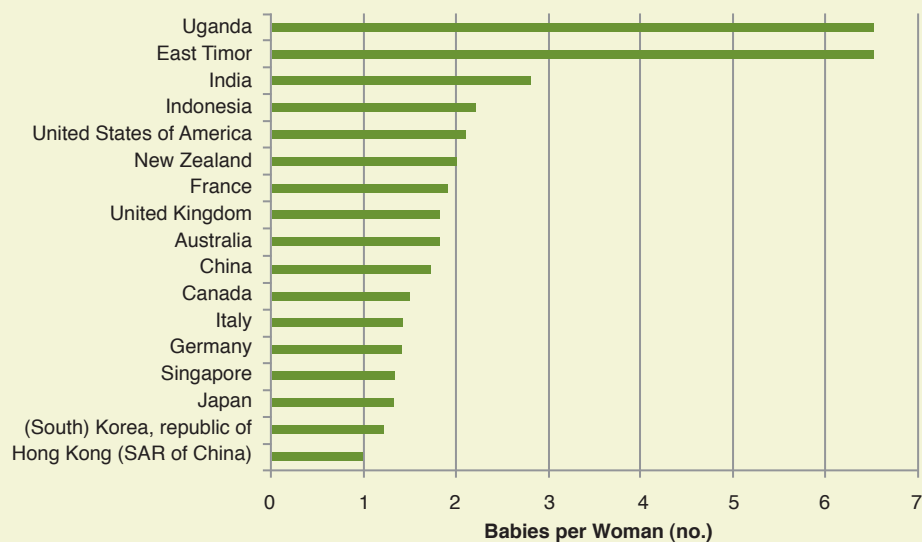
Source: ABS *Births Australia 2007* (3301.0).

### Australia's fertility rate compared with other countries

Low fertility rates (i.e. below replacement) are common among developed countries. According to United Nations projections for the period 2005-10, the lowest fertility for developed countries will be in European countries such as Italy and Germany (each 1.4); the Republic of

South Korea (1.2); Japan (1.3); and Hong Kong (1.0) (see Figure 3.2). Projected fertility rates for the United States of America and New Zealand (2.1 and 2.0 respectively) are higher than for the United Kingdom (1.8); China (1.7) and Canada (1.5).

**Figure 3.2 Projected total fertility rates for selected countries (a) 2005-10**



(a) Projected world average TFR for 2005-10 is 2.6 babies per woman.

Source: ABS *Births Australia 2006* (3301.0), p.22.

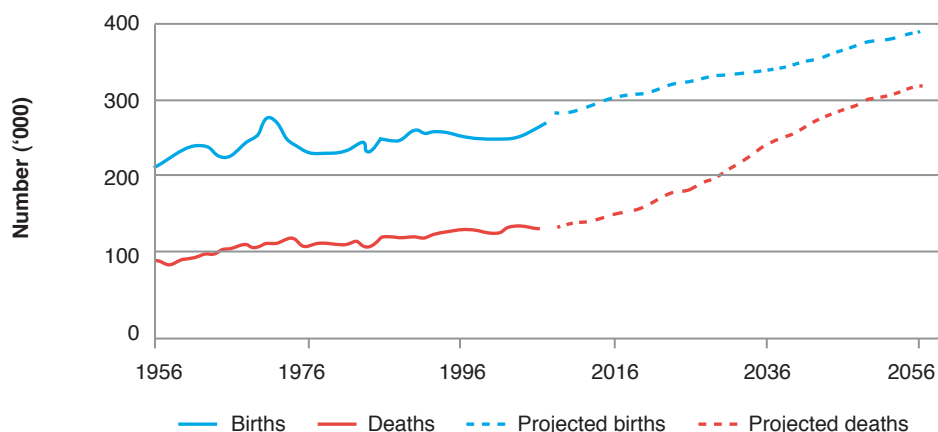
### Impact of Australia's fertility rate

A key factor in assessing the impact of fertility on Australia's future population is the relationship between births and deaths. Even though Australia's fertility rate is lower than in the past (at 1.93 babies per woman in 2007) there are enough women currently of childbearing age to keep the total number of births in comparison to deaths relatively high. This is also due to the relatively smaller proportion of people in older age groups.

As Australia's population ages, the difference between the number of births and deaths will decrease (see Figure 3.3). Nevertheless based on ABS projections, the number of births will remain higher than the number of deaths until the end of the century.

Changes to Australia's age profile over time may have implications for the future. Over the next 25 years, the number of younger people is expected to form a smaller proportion of the total population and older people a larger proportion. There is some concern as to whether there will be a sufficient labour supply to support an ageing population. The Commonwealth Treasury, in the *Intergenerational Report 2007*, notes that 'in 2007 there are 5 people of working age (15-64 years) to support every person aged 65 and over. By 2047, there will only be 2.4 people of working age supporting each person aged 65 and over' (Commonwealth Treasury, 2007). On the other hand, recent research notes that Australia has a high fertility

**Figure 3.3** Actual and projected births and deaths  
1956 to 2056



Source: ABS *Births Australia 2007* (3301.0)

level compared with many other developed nations, and only small migrant intakes are required to address labour supply issues with an ageing population.

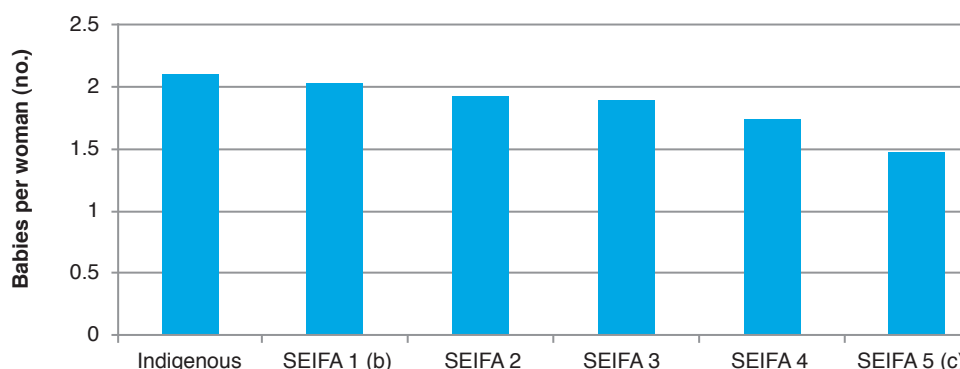
The relatively lower levels of fertility of the last 30 years may also affect the country's ability to care for its ageing population. Smaller family sizes mean fewer children to help care for aged parents. Increasing childlessness means that greater proportions of older people will not have children to assist in their care. This trend will likely see a demand for increased government services, as well as an increase in the number of working-age women and men caring for older parents as well as very young children, who may struggle to balance their work and caring responsibilities. There is also likely to be increasing demand for flexible work arrangements, child and elder care, and leave to balance work with family responsibilities.

### Fertility rates among women of different backgrounds

Although the overall level of fertility in Australia has declined since the 1970s, fertility rates differ among women of different backgrounds. In particular, Indigenous women, women from areas of low socio-economic advantage, women with lower educational qualifications, and some women living in Australia who were born overseas, have higher fertility rates than the general population.

For example, in 2007 Indigenous Australian women had 2.4 babies per woman, compared with the TFR for all women of 1.93 babies per woman. Figure 3.4 shows women living in areas of low socio-economic advantage, as measured by the ABS Index of Relative Socio-Economic Advantage/Disadvantage (see box) also tend to have more children (2.05 babies per woman in 2005) than women from higher levels of socio-economic advantage (1.51 babies per woman).

**Figure 3.4** Total fertility rates for groups of women 2005 (a)



- (a) TFR for all women in 2005 was 1.81.
- (b) Lowest socio-economic advantage quintile.
- (c) Highest socio-economic advantage quintile.

Source: ABS *Births Australia 2006* (3301.0); ABS *Australian Social Trends 2007* (4102.0).

### Socio-Economic Indexes for Areas (SEIFA)

The ABS has developed summary measures, or indexes, derived from the 2001 Census of Population and Housing, to measure different aspects of socio-economic conditions by geographic areas. One of these indexes – the Index of Relative Socio-Economic Advantage/Disadvantage – is used in this chapter to discuss the relationship between fertility and socio-economic conditions in different regions of Australia.

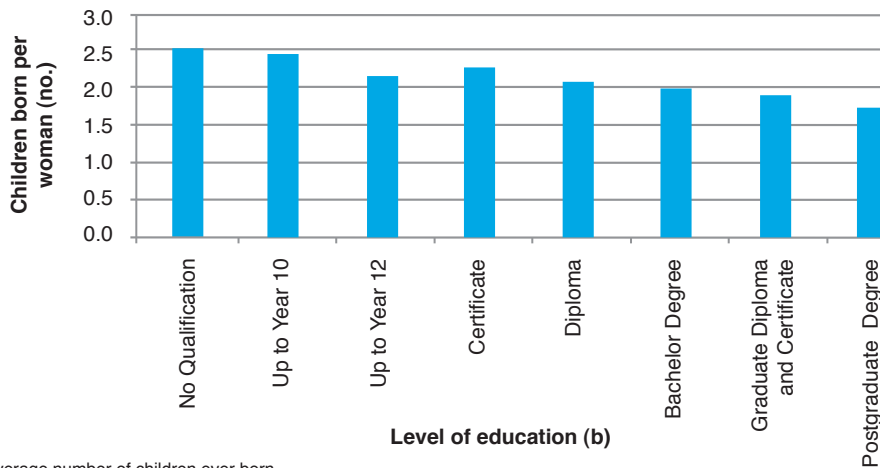
Statistical Local Areas (SLAs) within Australia were divided into quintiles (five groups, each containing around 20% of the population) based on their Index of Relative Socio-Economic Advantage/Disadvantage scores. The first quintile (SEIFA1) includes SLAs in Australia with the lowest proportions of people with high incomes or in skilled occupations, the highest proportions of people with low incomes, more employees in unskilled occupations, etc. In this chapter, this group has been referred to as being of 'least' or 'low' socio-economic advantage (or the least advantaged quintile).

Source: ABS 2001 Census of Population and Housing – SEIFA 2001 (2039.0).

Women who have lower levels of education are also more likely to have more children than those with tertiary qualifications (see Figure 3.5). At the time of the 2006 Census, women who could be said to have completed their fertility (women aged 40-44 years) with no educational qualifications had on average 2.5 children, those with a bachelor degree 2.0 children, and those with a higher degree had 1.7 children. Differences in fertility rates for different groups of women may reflect a range of factors, including differences in opportunities and aspirations, the impact of education in delaying commencing a family, and the opportunity costs of child bearing for more highly educated women on higher incomes. Lower rates of fertility for these groups, however, could also suggest that they continue to face constraints in deciding to have children, for example, through a lack of flexibility in their workplaces.

**Women aged 40-44 years** can be considered to be nearing the end of their reproductive years of life. Therefore, the average number of children ever born to these women can be regarded as a measure of completed fertility. Although the number of births to women aged 40 years and over has increased since the mid-1980s, they account for only a small proportion of all births (around 3.6% in 2007).

**Figure 3.5 Children born to women aged 40-44 by level of education (a) 2006**



(a) Average number of children ever born.  
 (b) Highest qualification.

Source: ABS 2006 Census Tables (2068.0).

### Australia's parents

Australia's fertility has been influenced by a change in the profile of Australia's parents and, in particular, an increase in the age of mothers and fathers associated with partnering later.

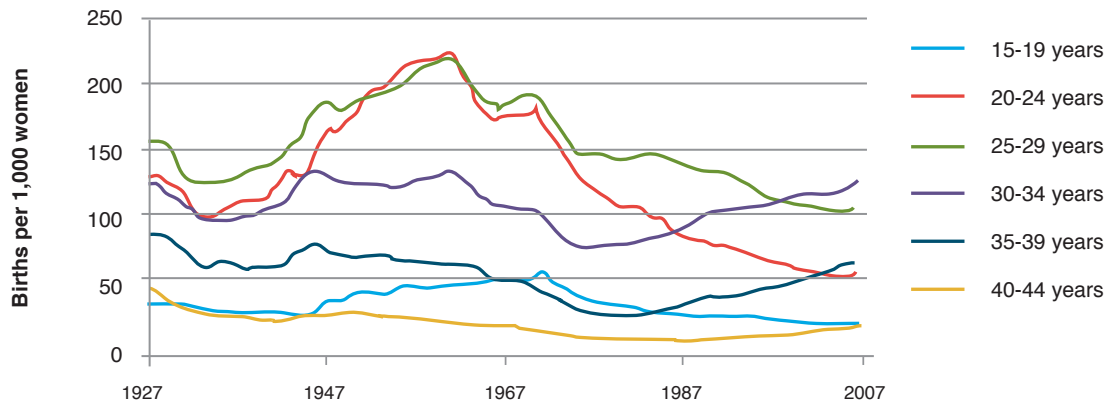
Australian women are having their children much later than was previously the case (see Figure 3.6). In 2007, the median age of mothers for all births was 30.7 years (compared with 27.7 years in 1987). The median age of all fathers at the time of their child's birth in 2007 was 33.1 years (compared with 30.4 years in 1986), continuing an upward trend over the last two decades.

Consistent with this overall trend, fertility rates have fallen for women in their early to late-twenties and increased for women aged 30 and over. In 2006, there were 120 births per

1,000 women aged 30-34 years, up from 73 per 1,000 women for this age group in 1976. Women over the age of 30 who are giving birth are increasingly likely to be first-time mothers – 41% of all first births in 2003 were to women in this age group, compared with 28% in 1993 (Gray et al., 2008). Fertility of women aged 40-44 years in 2007 was the highest since 1971, although this rate still remains very low.

At the other end of the age spectrum, the proportion of teenagers having babies has declined substantially. Between 1977 and 2007 the number of babies born to women aged under 20 years fell from 32 to 16 births per 1,000 women. Despite falling teenage birth rates, Australia's teenage fertility rate is around the OECD average, with a higher rate than France and Spain (at around 10 births per 1000 women aged 15-19) and a lower rate than

**Figure 3.6** Age-specific fertility rates 1927 to 2007



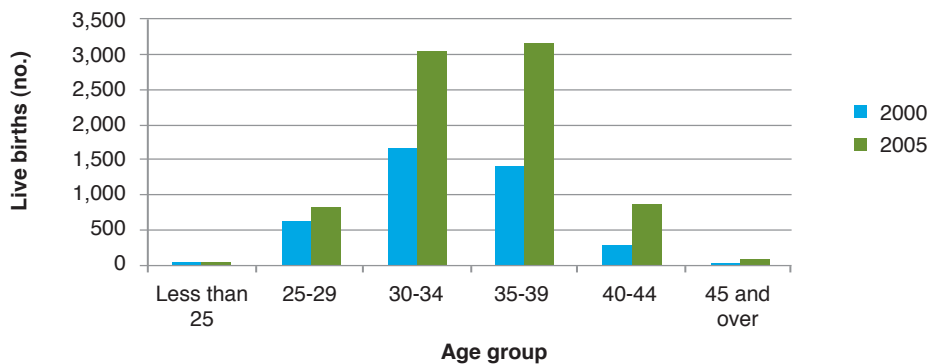
Source: ABS *Births Australia 2007* (3301.0).

countries such as New Zealand and the United States (at around 30 and 45 births per 1000 women respectively).

Coinciding with the changing age profile of Australian parents, the number of couples using assisted reproduction technologies to help them have a baby has increased.

In 2005 across Australia and New Zealand, 8,166 babies were born using assisted reproduction technologies – an increase of 36% since 2000.<sup>1</sup> These births represented just over 3% of all births (up from 2% in 2000). Assisted pregnancies are much more common among women in their thirties than in any other age group (see Figure 3.7).

**Figure 3.7** Outcome of pregnancies from assisted conception 2000 and 2005



Source: Wang, Y.A., Dean, J and Sullivan, E.A. (2007), *Assisted reproduction technology in Australian and New Zealand 2005*, Australian Institute of Health and Welfare National Perinatal Statistics Unit; and Dean, J. and Sullivan, E. (2003), *Assisted Conception, Australia and New Zealand, 2000 and 2001*, Australian Institute of Health and Welfare National Perinatal Statistics Unit.

<sup>1</sup> While information concerning assisted conception are for Australia and New Zealand combined, the vast bulk of treatments are of Australian women.

Despite the overall trend to older mothers, some groups of women are more likely to have children at younger ages. As shown in Figure 3.8, the fertility rate among Indigenous women aged 20-24 years (143 babies per 1,000) was two and a half times the fertility rate of all women in this age group (56 babies per 1,000). In 2007, the fertility rate among Indigenous teenagers (70 babies per 1,000) was more than four times the fertility rate for all teenagers (16 babies per 1,000).

Younger women (under 30 years) from areas of least socio-economic advantage also have significantly more children than younger women living in the most advantaged areas. Women aged under 30 years contributed 62% of all births in the least advantaged quintile, while women under 30 years contributed just 25% of all births in the most advantaged quintile (see Figure 3.9). Teenage women from areas of least advantage were around seven

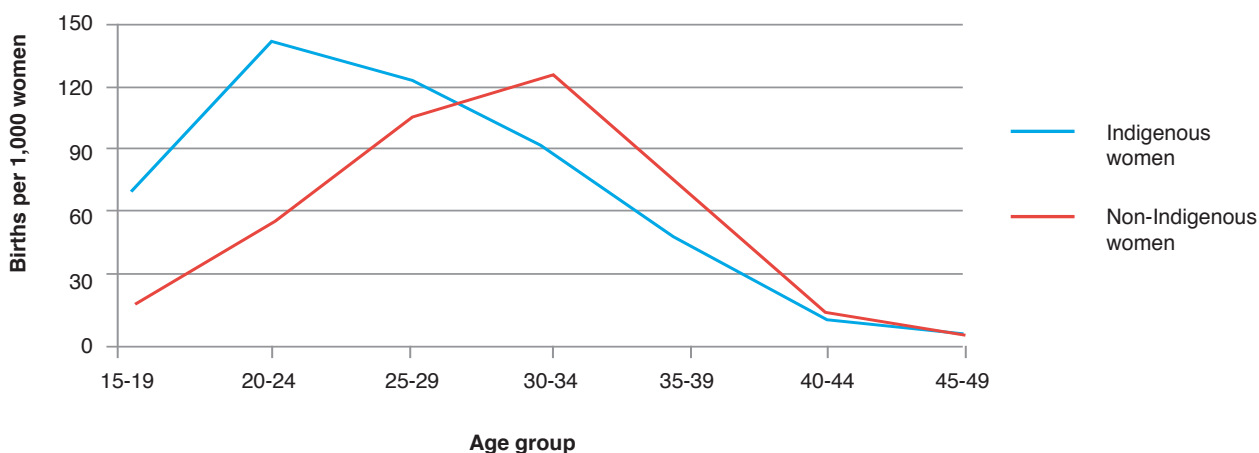
times more likely to have a baby than teenage women living in the most advantaged quintile (29 babies compared with 4 babies per 1,000 women aged 15-19 years).

Studies have shown that teenage mothers, particularly Indigenous mothers, are more likely to experience poor pregnancy outcomes, including low birth weight of babies. An early pregnancy can also limit the capacity of the mother to participate in schooling, which in turn can impact negatively on outcomes in later life of the child and mother. Providing support to disadvantaged women in these groups can play an important part in reducing rates of teenage pregnancy and improving outcomes for children.

### Size of Australian families

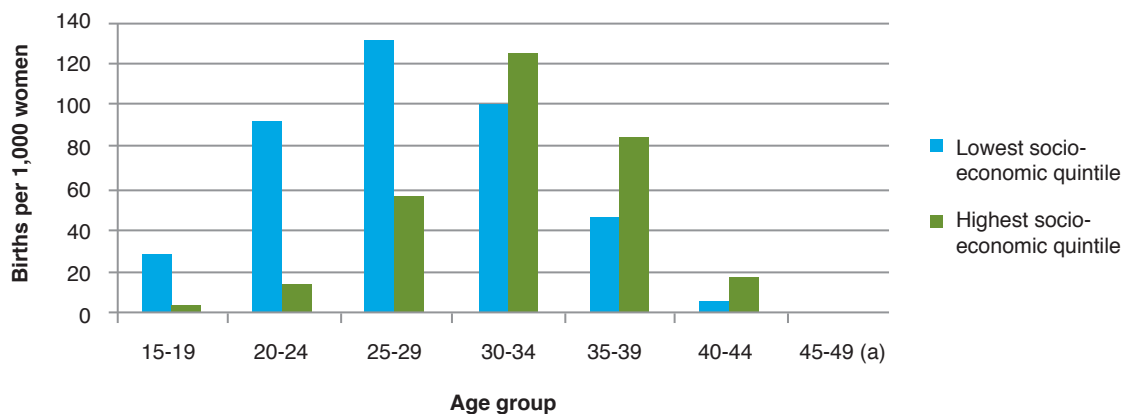
Reflecting overall fertility trends, there has been a marked trend towards smaller family sizes in

**Figure 3.8** Age-specific fertility rates for Indigenous and non-Indigenous mothers 2007



Source: ABS *Births Australia 2007* (3301.0).

**Figure 3.9** Age-specific fertility rates for the least and most advantaged areas 2005



(a) Births to women aged 45-49 years numbered only 3,800 for low socio-economic quintile and 7,900 for the high socio-economic quintile.

Source: ABS *Australian Social Trends* 2007 (4102.0).

Australia. In 2006 there were higher proportions of women in their early-40s with none, one or two children than in 1981, and lower proportions of women with three or more children (Figure 3.10). The rate of childlessness in Australia has also increased, with the proportion of women aged 40-44 years with no children increasing from 9% in 1981 to 16% in 2006. As shown in Figure 3.10, this rate is higher than for women aged 40-44 years having one child. In 2006 just over 13% of all women aged 40-44 had only one child (up from 7.6% in 1981), while around 16% had no children.

There is likely to be a number of reasons why parents are having smaller families, including increasing participation of women in higher education and employment, changing attitudes to family size, lifestyle choices, greater access to contraceptive measures and abortion and other complex factors.

There is evidence, though, that some families would like to have more children than they currently do. A survey by the Australian Institute of Family Studies (AIFS) suggests that the most preferred family size in Australia was the two-child family, but that three children and then four or more were also popular (Gray et al., 2008). Although the number of women having only one child or no children is increasing, more Australians would prefer to have four or more children than to have no children or only one child.

The AIFS survey also found that for women who had not had children, the preference of having no children or only one child became progressively more popular as they got older. Reasons for remaining childless included being single or having a partner who already had children, having postponed having a child and now feeling too old to cope with raising

children, or infertility problems experienced by themselves or their partner.

### Factors Australians consider before having children

Australia's fertility is likely to reflect a broad range of factors. Twenty years ago, marrying and having children early was the accepted social norm in Australia. Today, women are more in control of their fertility and there is less of an expectation that they will marry and have children at a young age. But with greater choice around whether and when to have children, there are also new constraints on prospective parents. Working arrangements, cost of living pressures, and changing values and attitudes towards having children can all have an impact.

The AIFS survey identified a number of factors considered by both men and women when making decisions about having

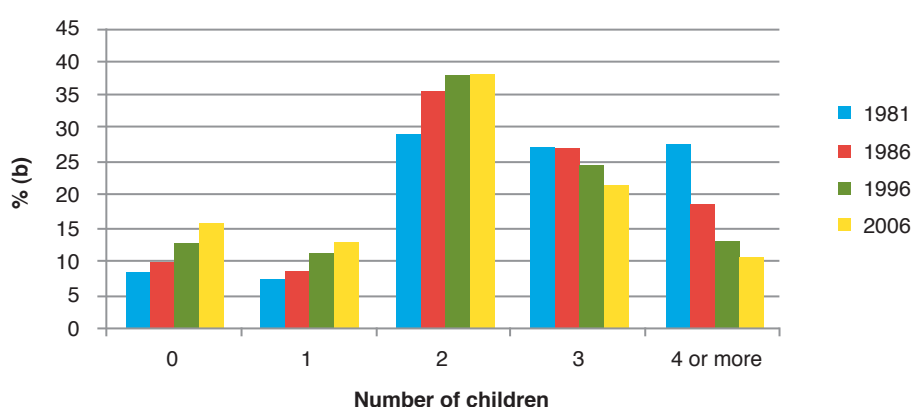
children. Prominent among these factors were consideration as to whether they could afford to support the child, and whether their partner would make a good parent (see Table 3.1).

In general, these factors indicate a strong emphasis on economic security in the decision to have a child. The perception of parenting skills, age of parents and the quality of family relationships are also important factors.

### Conclusion

In the past, the majority of Australians married in their twenties and generally commenced having children soon after. Over time, as society has changed, so too have expectations and aspirations around having children. Australians are now more likely to live together before marriage and are increasingly starting their family before they are married. Couples are choosing to have fewer children later in their partnership, with many women

**Figure 3.10** Trend is for smaller family sizes (a)  
2006



(a) Based on total number of children ever born to women aged 40-44 years.

(b) Proportion of all women aged 40-44 years.

Source: ABS *Births Australia* 2006 (3301.0).

**Table 3.1 Factors considered important in having children 2004**

Factors considered	Ranking		Per cent (a)	
	Men	Women	Men	Women
Can afford to support child	1	1	65	67
Female partner makes a good parent	1	3	65	58
Male partner makes a good parent	3	2	63	60
Having someone to love	4	7	57	46
Male partner's job security	5	4	53	57
Female partner's age	6	5	49	56
Uncertain that relationship will last	7	6	47	47
Add purpose/meaning of life	8	11	45	39
Male partner's age	9	9	42	42
Male partner established in job/career	10	13	41	37
Finding good affordable child care	11	7	40	46

(a) Respondents may report more than one factor.

Source: Gray, M., Qu, L. and Weston, R (2008) *Fertility and family policy in Australia*, AIFS Research Paper No.41, p. 23.

delaying having children until they are in their 30s. These changes have contributed to the decrease in the total fertility rate from the high of 3.5 babies per woman in the 1960s to a long-term prospect of fertility of around 1.75–1.90 babies per woman.

There have been concerns raised about Australia's fertility rates in the context of our ability to sustain Australia's population and ensure a future labour supply. These concerns are somewhat offset by recent increases in Australia's long-term TFR. Nevertheless, small family sizes and an ageing population are likely to place some pressure on government services and on families balancing caring responsibilities with other commitments.

There is also evidence some families feel constrained from having the number of

children they would ideally like to, perhaps because of concerns about economic security or how they can combine work with a family. Supporting families and reducing barriers to having children is an important part of an overall policy response to changes in the age profile of the population. Such policies can also enhance the wellbeing of parents who would like to increase their family size.

Although fertility is generally lower than in the past, fertility rates are not consistent across all groups of women. For some groups, particularly for those from disadvantaged backgrounds, pregnancy rates are higher than the average including among teenagers. Programs that target women in 'at risk' groups may help to achieve sustained improvements in pregnancy and birth outcomes.

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