

A NOTE ON AGEING, IMMIGRATION AND THE BIRTHRATE

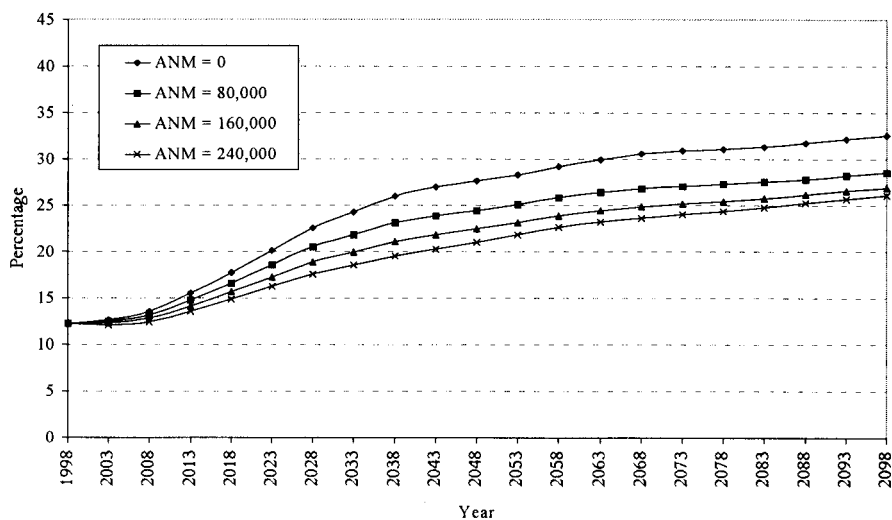
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The ageing of Australia's population is inevitable. Immigration could increase the size of the population substantially but still have little effect on the age structure. If policy makers want to minimise the proportion aged 65 and over without adding large numbers of extra people, it would be more effective to adopt policies that raised fertility.

Australia's population is getting older. A useful measure of population ageing is the proportion of the population aged 65 and over. Demographic projections show that this proportion is likely to double over the next fifty years.

There are three reasons for the ageing of Australia's population. First, the birth rate is low and declining. This necessarily implies that the proportion of people in older age-group categories will increase. Second, life expectancy at older

Figure 1: Percentage of Australia's population aged 65 and over under different annual net migration (ANM) scenarios, TFR = 1.65, 1998-2098



ages is increasing. Older age mortality has fallen since the mid 1970s and it is continuing to fall. About 90 per cent of Australians now reach the age of 65; at current mortality rates they will, on average, live for another 20 years. Third, the baby boomers are ageing. The baby boom began in 1946 and lasted until the mid 1960s. The first group of baby boomers will turn 65 in 2011 and, over the period from 2011 to 2031, one million Australians are projected to enter the ranks of those aged 65 plus.

It has been argued that increasing immigration will prevent the future ageing of Australia's population. This is not the case. Empirical research has found that substantial ageing of Australia's population over the coming decades is inevitable. However immigration does have a role to play in offsetting the extent of population ageing.¹ If the average number of births per woman (technically, the total fertility rate or TFR) were to fall from its current level of 1.76 to 1.65 by 2008, and if mortality were to continue to

decline in line with the projections published by the Australian Bureau of Statistics (ABS), and if net migration were to be held at zero, the proportion of the population aged 65 and over would grow from its current level of just over 12 per cent to 33 per cent in 2098. (See Figure 1 and Table 1.)

What are the consequences if we add an annual net migration of 80,000 to this mix? The figure of 80,000 has been the average annual net permanent and longterm migration over the 1990s and seems a plausible number to use for illustrative purposes. Annual net migration of 80,000 would reduce the proportion aged 65 plus by four percentage points, taking it to 29 per cent in 2098.

Levels of net migration higher than 80,000 per annum would have substantially less additional impact on population ageing. Figure 2 takes net migration of 80,000 per annum as a base figure and adds further increments of 80,000, taking the net intake to 160,000 and 240,000. Each extra 80,000 adds a further 10.8

Figure 2: Australia's total population under different ANM scenarios, TFR = 1.65, 1998-2098

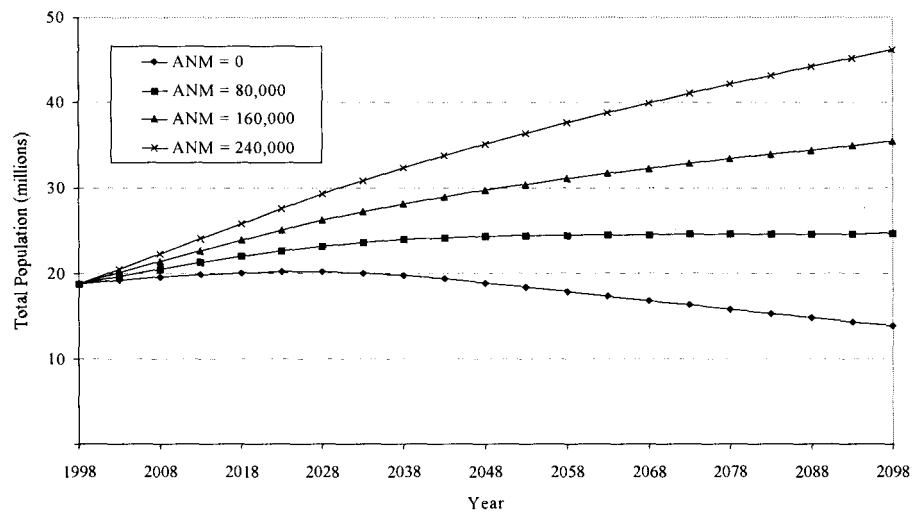


Figure 3: Percentage of Australia's population aged 65 and over under different TFR scenarios, AN M = 80,000, 1998-2098

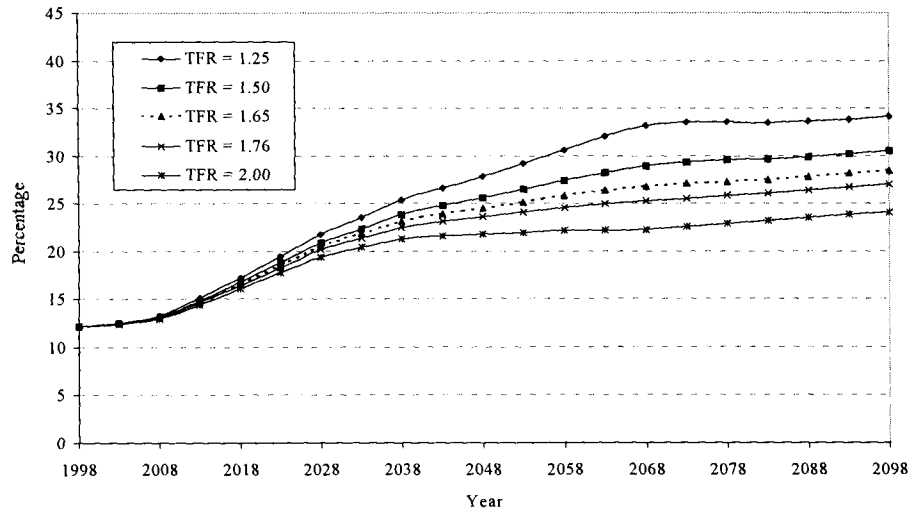


Figure 4: Australia's total population under different TFR scenarios, ANM = 80,000, 1998-2098

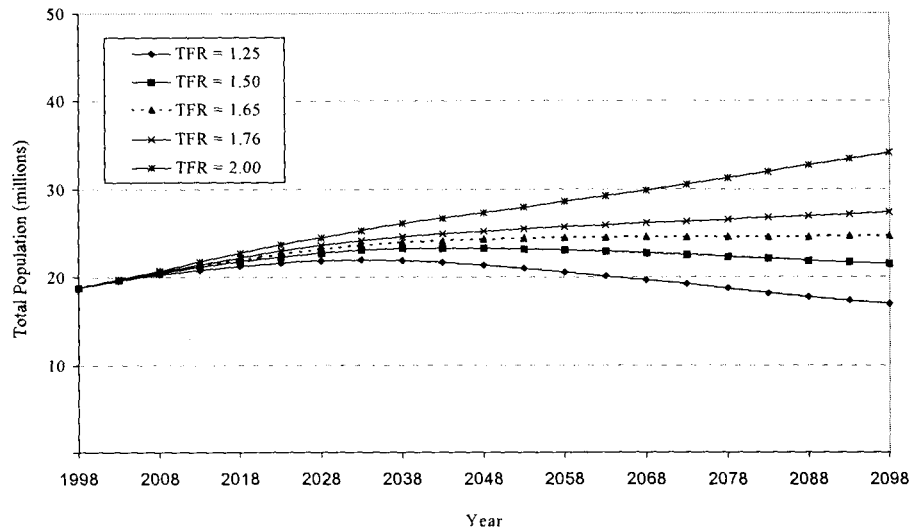


Figure 5: Percentage of Australia's population aged 65 and over under different TFR scenarios, ANM = 0, 1998-2098

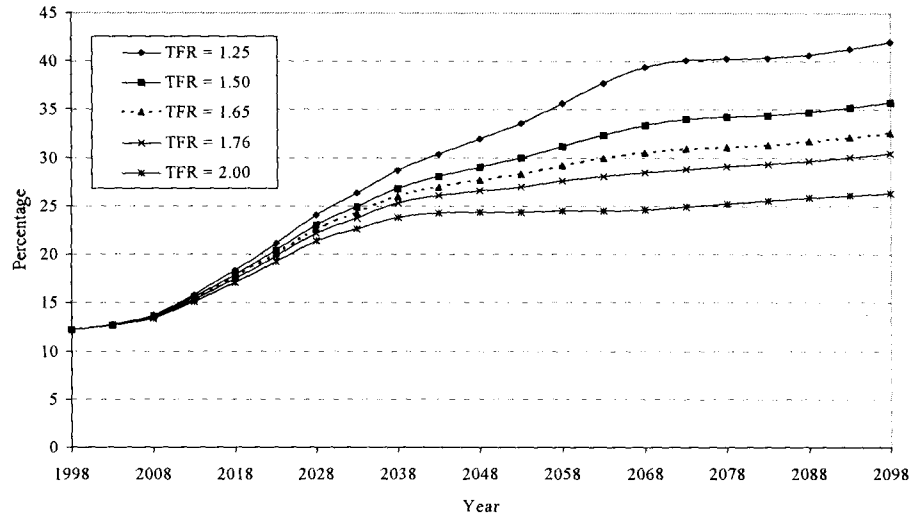
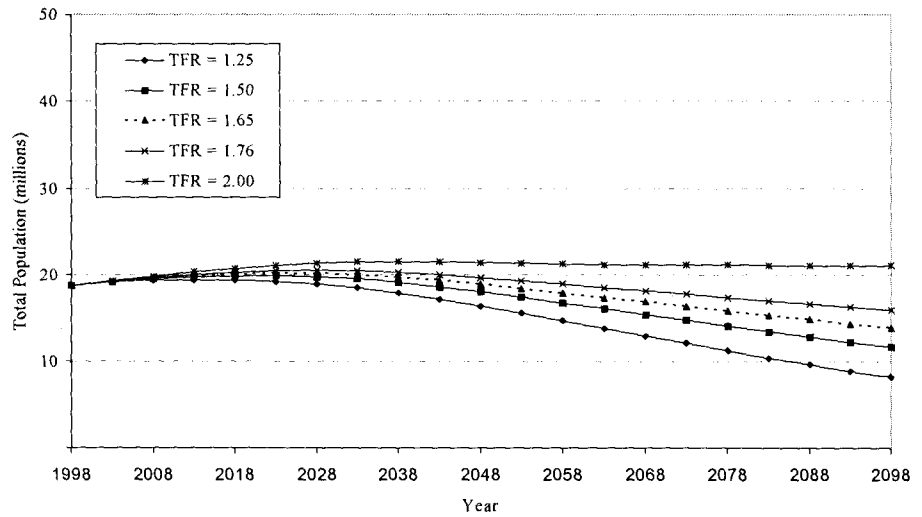


Figure 6: Australia's total population under different TFR scenarios, ANM = 0, 1998-2098



million people to the population in 2098. While the first 80,000 reduces the proportion aged 65 plus by 4.1 percentage points the second only reduces it by a further 1.6 percentage points and the third by a further 0.9 percentage points. These slight reductions in the proportion of older people are purchased at a considerable cost in larger numbers. (See Figure 2 and Table 1.)

If we wish to minimise the proportion aged 65 plus *and* limit population growth, maintaining the birthrate is more efficient than increasing immigration. Figure 3 shows the impact on population ageing of different levels of fertility given annual net migration of 80,000 (and mortality decline in line with ABS projections).

If annual net migration were to be held constant at 80,000 and the TFR were to remain at the current level of 1.76, the impact on population ageing over the next 100 years would be the same as allowing the TFR to fall to 1.65 and increasing annual net migration to 160,000. (See Figures 3 and 1, and Table

1.) In both scenarios the proportion aged 65 plus increases from 12 per cent in 1998 to 27 per cent in 2098. However, the maintaining-the-birthrate scenario results in a total population of 27 million by 2098 whereas the increased migration scenario results in a total population of 35 million by 2098.

For comparative purposes Figures 5 and 6 mimic Figures 3 and 4 showing the same range of fertility scenarios, but in this case they hold annual migration at zero. They emphasise that near replacement fertility (TFR 2.0) leads to a relatively low proportion in the 65 plus category (26 per cent) with the smallest increase in overall numbers.

Table 1 displays data for the year 2098 from the six figures.

Notes

1. See, for example, C. Young, *Australia's Ageing Population - Policy Options*, Bureau of Immigration Research, Melbourne, 1990 and P. McDonald and R. Kippen, *The Impact of Immigration on the Ageing of Australia's Population*, Department of Immigration and Multicultural Affairs, Canberra, 1999.

Table 1: The population in 2098 under different migration and fertility assumptions: per cent aged 65 plus and total numbers (1998, 65+ = 12.2%, total population = 18.8 million)

TFR constant at 1.65, annual net migration (ANM) variable					
	ANM 0	ANM 80,000	ANM 160,000	ANM 240,000	
2098 per cent 65+	32.6	28.5	26.9	26.0	
2098 numbers (millions)	13.9	24.7	35.4	46.2	
ANM constant at 80,000, TFR variable					
	TFR 1.25	TFR 1.5	TFR 1.65	TFR 1.76	TFR 2.00
2098 per cent 65+	34.1	30.5	28.5	27.0	24.1
2098 numbers (millions)	16.9	21.5	24.7	27.3	34.1
ANM constant at zero, TFR variable					
	TFR 1.25	TFR 1.5	TFR 1.65	TFR 1.76	TFR 2.00
2098 per cent 65+	42.0	35.7	32.6	30.4	26.4
2098 numbers (millions)	8.2	11.6	13.9	15.9	21.1