

TRENDS AND DEMOGRAPHY

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Katharine Betts, kbetts@swin.edu.au

Population projections — what do they do?

They help provide a glimpse of the future and so are useful for policy makers. Sometimes they can feed into public debates about population growth (and immigration) and may even affect election politics.

But they are highly dependent on the assumptions used by their creators. Projections done only a couple of years apart can differ widely if they use different assumptions. It is helpful if there are a number published at the same time with the same base year but with different assumptions. Then users can choose the ones with the assumptions that seem most plausible. This is what the ABS does. It publishes lots of projections at the same time.

On the other hand if one group of planners is using projection number 2 and another is using projection number 22 they will be talking past each other.

So for some purposes it's helpful if there is only one projection so we are all focusing on the same scenario. And this is what the Treasury does. We've had three different projections from them, in 2002, 2007 and 2009 (published 2010), but only one of them on each occasion.

ABS projections: 2008 and 2006

But first the ABS. They regularly publish sets of projections and in 2008 produced 24 of them. We will look at eight of these to get an idea of the range of demographic futures that might be in store for us.

Apart from the size of the initial base population there are four variables affecting projections:

- Fertility—measured by the total fertility rate (TFR)
- Mortality—measured by life expectancy at birth (LE)
- Immigration and emigration—summarised in the combined measure of net overseas migration (NOM)

In 2008 the ABS took the 2006 population as its starting point and had three fertility assumptions, two life expectancy (LE) assumptions, and four assumptions for net overseas migration (NOM). See Table 1.

Table 1: Assumptions used in the 2008 ABS projections (base year 2006)

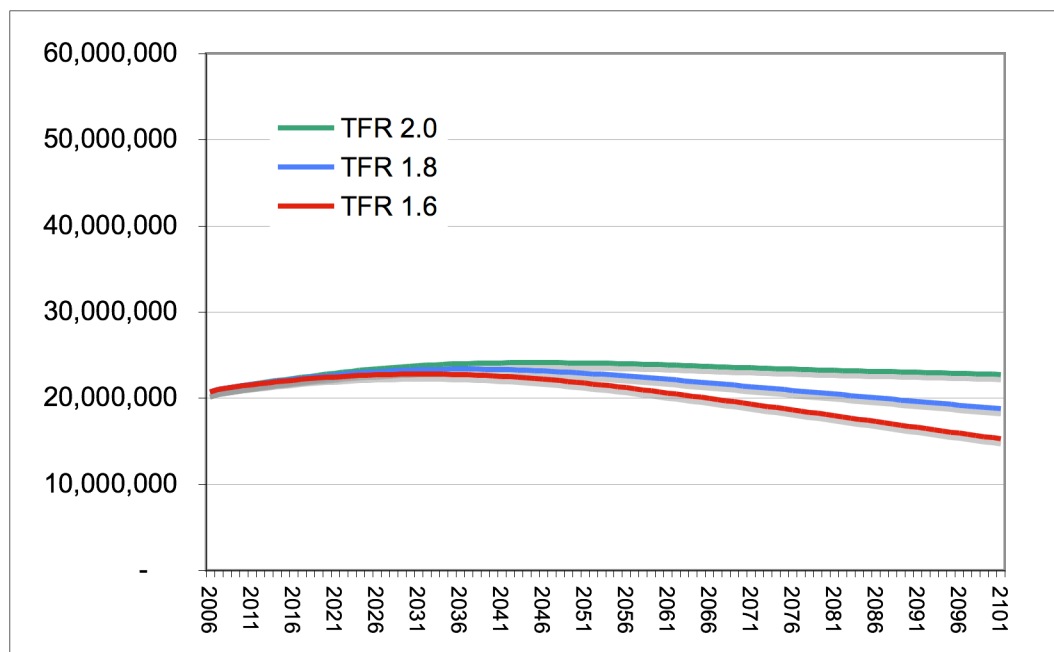
TFR	LE at birth	NOM p. a.
2.0	(2007: 79 males, 83.7 females)	220,000
1.8	By 2056:	180,000
1.6	High—rising to 93.9 males, 96.1 females	140,000
	Medium—rising to 85 males, 88 females	0

Source: ABS, *Population projections, Australia, 2006 to 2101*, Catalogue no. 3222.0, Australian Bureau of Statistics, Canberra, 2008, pp. 3, 11

Figure 1 shows what the different fertility levels would mean, if we were to hold NOM constant at zero and just use the medium LE assumption. (Note: a NOM of zero doesn't mean no immigration; it just means a balanced intake where immigrants equal emigrants. On present figures that would amount to an intake of around 80,000 a year.)

The difference between a TFR of 2.0 and one of 1.6 adds an extra 2.3 million by 2051 and an extra 7.5 million by 2101.

Figure 1: Projections from 2006 to 2101, different levels of fertility, holding NOM constant at zero and life expectancy constant at medium

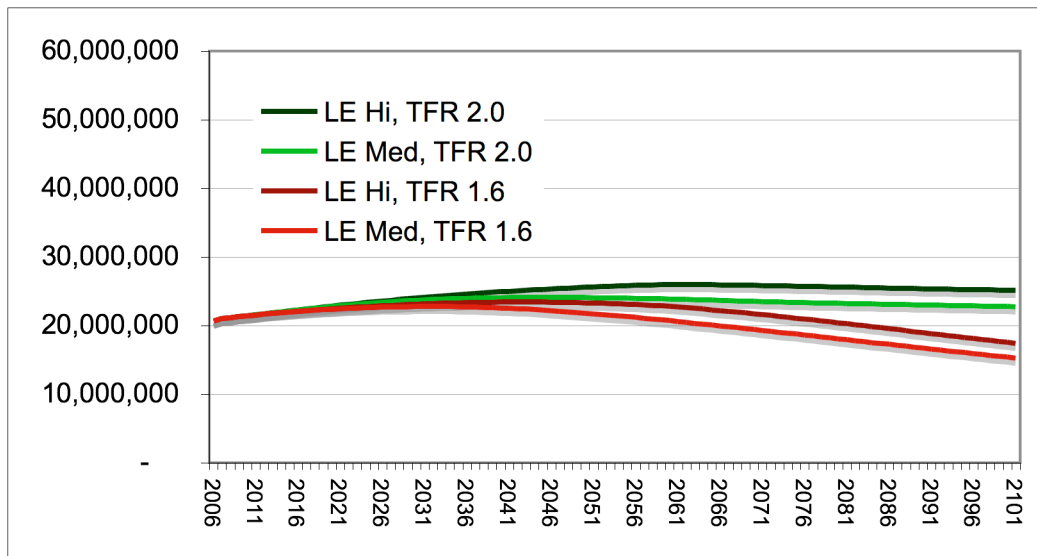


Source: ABS, 2008 projections, series 59, 65 and 71. The TFR is the total fertility rate. Medium life expectancy means life expectancy at birth rising from the 2007 levels of 79.0 years for males and 83.7 for females to 85 for males and 88 for females by 2056 and remain constant thereafter. NOM stands for net overseas migration.

Figure 2 still holds NOM at zero but takes the highest and the lowest fertility assumptions and shows what difference the high life expectancy would make. What would it mean for

the overall numbers if Australians lived for the extra eight years of so that the high life expectancy assumption projections? Not a great deal of difference — an extra 1.6 million or so by 2051 and 2.3 million by 2101. This is not as dramatic as the difference between high and low fertility.

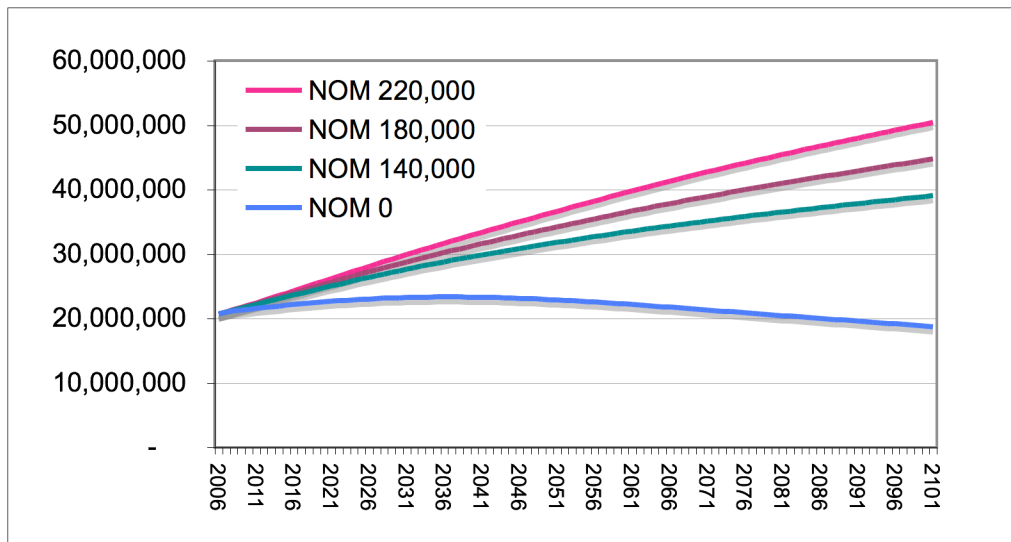
Figure 2: Projections from 2006 to 2101, two levels of fertility, NOM constant at zero and life expectancy varying from medium to high



Source: ABS, 2008 projections, series 56, 59, 68 and 71. Medium life expectancy at birth is explained at Figure 1; high life expectancy means life expectancy will reach 93.9 years for males and 96.1 years for females by 2056 and remain constant thereafter.

Figure 3 holds the TFR constant at 1.8 and LE at medium but varies the level of net overseas migration. Many analysts (including Treasury) now consider 1.8 to be a reasonable assumption for the TFR (though it is currently 1.978).¹ But the main interest here is looking at the difference made by NOM and you can see that it adds between nine and 14 million extra people by 2051 and between 20 and 32 million extra in 2101 (and of course is still heading upwards at that date).

Figure 3: Projections from 2006 to 2101, varying levels of NOM, TFR constant at 1.8, and life expectancy at medium



Source: ABS, 2008 projections, series 11, 29, 47 and 65

From these three figures we can see that different levels of fertility do affect the size of the population in both 2051 and 2101 with a maximum difference between the lowest and the highest in 2101 of 7.4 million. And rising life expectancy also has an effect. Other things being equal the higher life expectancy assumptions could add around 2.3 million more people by 2101 than would the medium life expectancy assumption. But it is net overseas migration that makes the biggest difference. None of the projections would rise above 25 million without it.

Whether you are concerned to limit growth or whether you welcome it this is a good thing: NOM is the variable that is most readily controlled by policy makers. This means that within limits we can chose the demographic future that we want; we don't have to walk backwards into an unwelcome future.

But Figures 1 to 3 illustrate the degree to which starting assumptions about the key demographic variables affect the outcomes of projections.

The previous projections published by the ABS in 2006 used TFR assumptions ranging from a low of 1.5 to a high of 1.9, and their net overseas migration assumptions ranged from 80,000 p. a. to 140,000.² (The medium life expectancy assumptions then were almost the same as those used in 2008, but the high ones were a trifle less optimistic.)³

Table 2: ABS population projections to 2051 in millions, 2006 and 2008 (medium life expectancy)

2006 (base pop.n 2004, 20.1m)			2008 (base pop.n 2006, 20.7m)		
TFR	NOM p.a.	Population	TFR	NOM p.a.	Population
1.9	140,000	31.7	2.0	220,000	38.3
	110,000	29.7		180,000	*35.8
	80,000	27.7		140,000	33.3
1.7	140,000	30.1	1.8	220,000	36.6
	110,000	28.2		180,000	34.2
	80,000	26.3		140,000	31.8
1.5	140,000	28.5	1.6	220,000	35.0
	110,000	26.7		180,000	32.6
	80,000	24.9		140,000	30.3

Sources: ABS, *Population Projections, Australia, 2004 to 2101, Catalogue no. 3222.0*, Australian Bureau of Statistics, Canberra, 2006, p. 80; ABS, *Population projections, Australia, 2006 to 2101, Catalogue no. 3222.0*, Australian Bureau of Statistics, Canberra, 2008 (spreadsheet downloads). (The year 2051 rather than 2050 is shown here as year by year data are not readily available for all the 2006 projections.)

Note: * This is series 23, the series used in Table 7 below.

TFR stands for total fertility rate and NOM for net overseas migration

Thus they made lower assumptions for both fertility and net migration in 2006 than they did in 2008 (Table 2). Indeed the net overseas migration assumptions were a lot lower; for example 140,000 per annum was the highest assumption in 2006 and the lowest assumption in 2008. The base population that the ABS was working on in 2008 had also grown by 0.7 million over the two years that separated the two series. This too has a cumulative effect on the difference between the two sets of projections for 2051.

Table 2 does not show the outcome of the nil net migration assumption as it was not published for the 2006 series.

Treasury's projections for the Intergenerational Reports (IGR), (1) 2002, (2) 2007 and (3) 2010

The ABS gives as a range of possibilities. Treasury offers but one, but it has put this one forward three times and all three used different assumptions, started from different base years, and gave us three very different results.

Table 3: IGR(1), 2002 to 2042

IGR1 (2002)	Base yr 2002	End yr 2042
Assumptions:		
TFR 1.6, LE 82.5/87.5, NOM 90,000	19.6 m	25.3 m
Annual growth rate	1.2% in 2000	0.2%

Source: Department of Treasury, *Intergenerational Report 2002-03 (First Intergenerational Report)*, Department of Treasury, Canberra, 2002, pp. 19-22. Life expectancy at birth rises from 77.2 years at birth for males and 82.6 years at birth for females to 82.5 years for males in 2042 and 87.5 for females.

[IGR(1) assumptions have the population growing at 1.2 per cent per year in 2000 and slowing to around 0.2 per cent per year by 2042 to increase by 5.7 million or 29.7 per cent on the 2003 population. The authors write that: ‘While the population of labour force age is projected to grow by just 14 per cent, the number of people aged 55 to 64 is projected to increase by more than 50 per cent over the next two decades’.^{4]}

Table 4: IGR(2), 2007 to 2047

IGR2 (2007)	Base yr 2007	End yr 2047
Assumptions:		
TFR 1.7, LE 86.0/89.8, NOM 110,000	20.9 m	28.5 m
Annual growth rate	1.3% in 2006-07	0.4% in 2047

Source: Department of Treasury, *Intergenerational Report 2007 (Second Intergenerational Report)*, Department of Treasury, Canberra, 2007, pp. 12-16. Life expectancy at birth rises from 79.1 years at birth for males and 83.8 years at birth for females in 2007 to 86.0 years for males in 2047 and 89.8 for females.

Table 5: IGR(3), 2010 to 2049

IGR3 (2010)	Base yr 2010	End yr 2050
Assumptions:		
TFR 1.9, LE 87.7/90.5, NOM 180,000	22.2 m	35.9 m
Annual growth rate	‘1.4% average last 40 yrs’ (2.1% to Sep 2009)	1.2%

Source: Department of Treasury, *Australia to 2050: Future Challenges (Third Intergenerational Report)*, Department of Treasury, Canberra, 2010, pp. viii, 6-7, 10. Life expectancy at birth rises from 80.1 years at birth in 2010 for males and 84.4 for females to 87.7 years for males in 2050 and 90.5 for females in 2050.

Between 2007 and 2010 Australia’s population added an extra 1.02 million, growing at around 2.2 per cent per year from 2007 to 2009, so IGR(3) starts from a higher base year than does IGR(2). IGR(3) says that growth is expected to slow ‘to an average annual rate of 1.2 per cent over the next 40 years, slightly lower than the 1.4 per cent average annual rate of growth in the previous 40 years’,⁵ though taking the past 40 years as a point of comparison glosses over the fact that the population has been growing at over two per cent a year since December 2007.^{6]}

Unlike the two previous Intergenerational Reports IGR(3) also assumes that substantial growth rates (1.2 per cent per annum) will continue beyond the projection period.

The key reason for this is the selection of high figure (180,000) per year for net overseas migration. But even so this selection makes the assumption that net migration will fall ‘relatively sharply’ to 180,000 from its current average of around 244,000.⁷

Table 6 summarises the projections in the three Intergenerational Reports.

Table 6: The three IGR projections compared by base population, assumptions, and end population

	Base population	TFR	Life expectancy	NOM	End population
1	19.6m	1.6	82.5/87.5	90,000	25.3m (in 2042)
2	20.9m	1.7	86.0/89.8	110,000	28.5m (in 2047)
3	22.2m	1.9	87.7/90.5	180,000	35.9m (in 2050)

We are clearly most interested in IGR(3) and Table 7 shows that it is closest in its assumptions to the ABS projection series 23 which assumed a TFR of 2.0, medium life expectancy (85/88 by 2056) and net overseas migration of 180,000.

Table 7: Treasury's 2010 IGR(3) and the ABS 2008 series 23 projections compared

	IGR (3) (base year 2010)	ABS series 23 (base yr 2006)
TFR	1.9	2.0
Life expectancy	Rising to 86/89.9 by 2050	Rising to 85/88 by 2056
NOM	180,000	180,000
Population in 2050	35.9 million	35.5 million

Sources: See Table 5 and Figure 3

Note: Life expectancy data are life expectancy at birth in years has the figure for males preceding the figure for females.

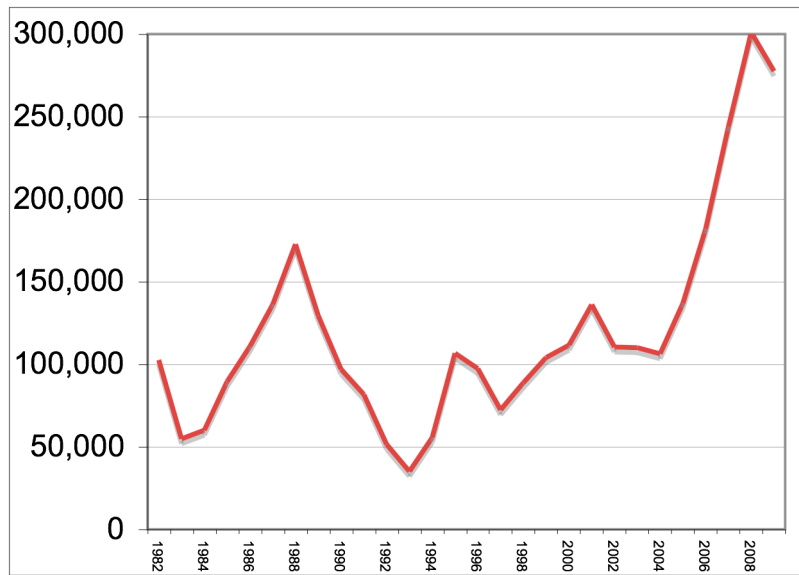
Choosing assumptions for projections

Why do demographers change their assumptions from one projection series to another? The ABS explains that their assumptions are 'formulated on the basis of demographic trends over the past decade and longer, both in Australia and overseas, in conjunction with consultation with various individuals and government department representatives...'⁸

In other words the range of assumptions chosen is based on what has been happening in the last few years. For example in Australia the TFR dipped to a low of 1.729 in 2001 but by 2008 it was 1.969.⁹ This can explain the slightly higher assumptions made about fertility in the later projection series, both by Treasury and the ABS. Life expectancy at birth has also been rising steadily from 73.1 years for males in 1988 to 79.2 in 2006-2008 and from 79.5 for females in 1988 to 83.7,¹⁰ adding around four months per year over the 20 year period.

But it is net overseas migration that has seen the really dramatic changes: in year 1997 it was 72,400; in 2008 it was over 300,000 and 2009 278,000 .¹¹ See Figure 4.

Figure 4: net overseas migration, 1982 to 2009 (calendar years)



Sources; Australian Demographic Statistics, Catalogue no. 3101.0 (various issues), ABS Canberra.

Demographers do not base their assumptions on whims or personal preferences; they try to pick plausible ones in the light of what is happening at the time that the projections are made. Assumptions change from one series to another because the demographic reality changes.

Demographic ageing

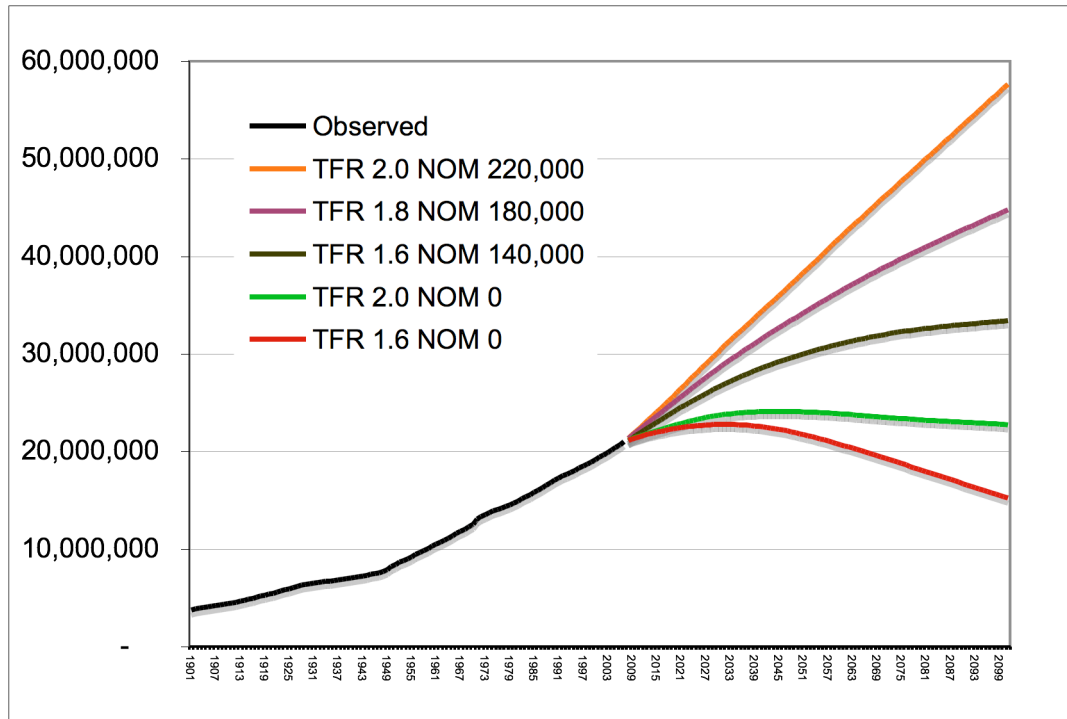
Demographic ageing is a product of two main factors; lower fertility and increasing life expectancy. Immigration makes very little difference. Unless a population is to keep growing from natural increase for ever its age profile inevitably rises. The only way to maintain a youthful age structure without perpetual growth is for most people to have large families and for most of us to die young. This is the demographic pattern that our ancestors escaped from. The older age structure that we are developing is the outcome of progress not of failure.

As a number of writers have pointed out, it is a mistake to see demographic ageing as a crisis. Rather it is a time of transition, as we learn how best to live with our demographic success.¹²

In 2009 27 per cent of the world's population was under 15 years of age and eight per cent over the age of 64.¹³ But in the 10 richest countries (according to a World Bank list compiled in 2008), the average for the proportion aged less than 15 was 18.2 per cent while that of those aged 65 and over was 14.1 per cent. (Australia was 13th on the rich list, with 19 per cent under 15 and 13 per cent over 64.) In contrast the ten poorest countries averaged 43.6 per cent of their people aged under 15 and only 3.1 per cent aged 64 plus.¹⁴

Figure 5 shows the population from 1901 to 2006 together with five different projections to 2101.

Figure 5: Australia's population from 1901 to 2006, with five different ABS projections to 2101 (LE medium)

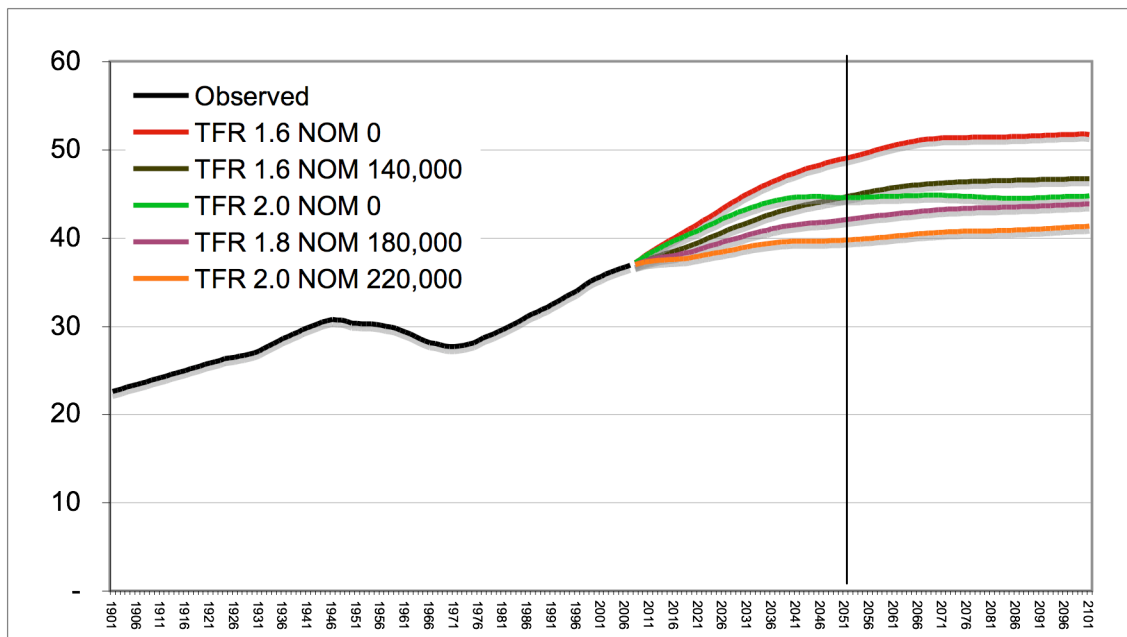


Sources: for 1901 to 2006, Australian Historical Population Statistics, spreadsheet, catalogue no. 3105.0.65.001, ABS, 2008; for the projections, ABS 2008 projections, 71, 54, 59, 29 and 5.

The purple line (TFR 1.8, NOM 180,000) in Figure 5 is close to Treasury's IGR (3) projection while the orange line (TFR 2.0, NOM 220,000) is closer to what we are now experiencing. Though it understates the trajectory we are on. Currently NOM is around 280,000 p.a. not 220,000.

Figure 6 shows the effect that each of these five projections would have on the median age of the population.

Figure 6: Population from 1901 to 2006, with five different ABS projections to 2101 (LE medium), median age in years



Source: Calculated from sources cited at Figure 5.

It demonstrates that whatever immigration intake we adopt an older age structure is inevitable. It also shows that very low fertility (TFR 1.6 with nil net migration—the red line) produces an older median age in 2101 than does near replacement fertility (TFR 2.0 with nil net migration—the green line). The green line also yields a lower median age than does very low fertility plus a NOM of 140,000 (dark brown). At 2050 the median ages for these two series are exactly the same (44.5) while, by 2101 the median age for the green line is 44.7 years compared to 46.7 for the brown line. But the latter series has added 5.8 million more people in 2050 (including 432,000 more people aged 65 and over) and 10.7 million more in 2101 (including 2.8 million more people aged 65 and over).¹⁵

By 2101 the green line also comes very close to that yielded by the purple line, the ABS projection (series 23) that is closest to the Treasury's IGR(3) projection.

The moral of this is that if policy makers really want to minimise the effects of demographic ageing the more effective course would be to support the two-child family rather than to pursue mass immigration.

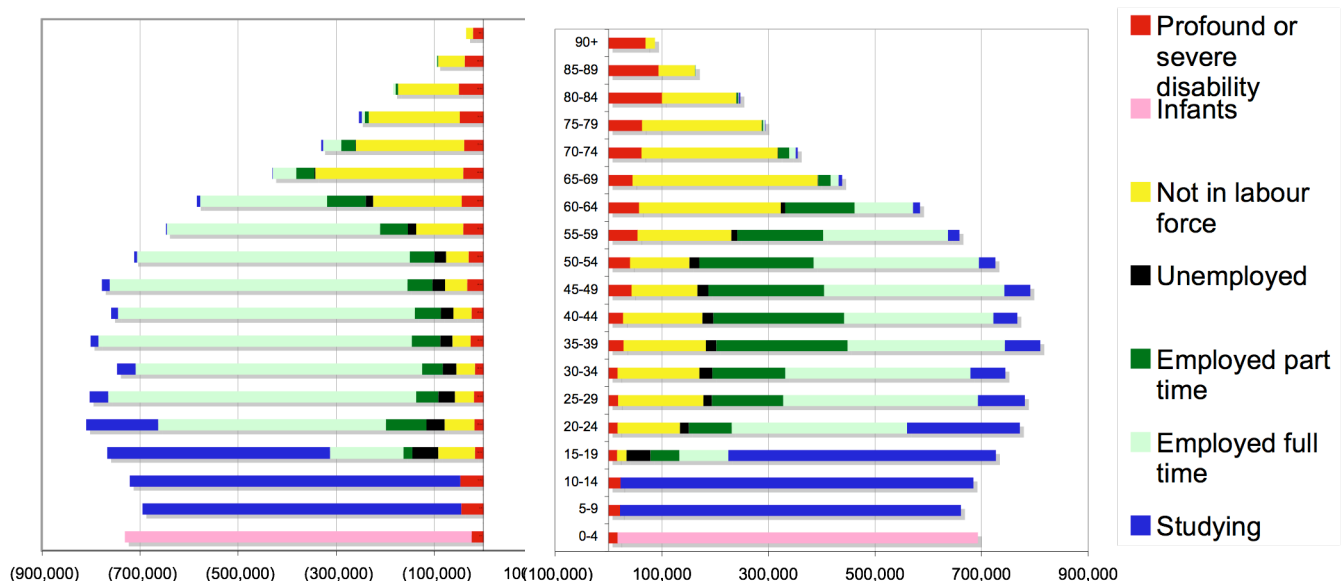
Can we afford demographic ageing?

But is the demographic success story of smaller families and longer lives going to be too much for us. Are we in the grip of an ironic tragedy where the lives that most of us want to live as individuals will ruin us collectively?

But are we right to see demographic ageing as an obstacle to our collective well being? This is how most commentators see it, especially those who focus on paid work, health care costs and economic transfers.

Figure 7 provides a rough snapshot of dependency and activity by age in 2009.¹⁶ The dependency can be social (as in the person being in full time education, unemployed or not in the labour force). Or it can be biological as with infants under the age of five, or with people suffering a profound or severe disability.

Figure 7: Australia, population in June 2009 by age, sex and dependency



Sources: *Disability, Ageing and Carers: Summary of Findings*, Australia 2003, Catalogue no. 4430.0, ABS, Canberra, 2004; *Labour Force, Australia, Detailed - Electronic Delivery*, Catalogue no. 6291.0.55.001; *General Social Survey 2006*, Confidentialised Unit Record File supplied by the ABS

Notes: The ABS defines a profound disability as one where the person always needs help with one or more of the activities involved in communication, mobility and self care, and a severe disability as one where the person sometimes needs such help.

The data on labour force participation are for December 2009, but detailed age break downs were only available for June 2009. All of the data have been standardised to the age/sex structure of the population in June 2009.

People who are studying but are employed full time are classified simply as employed full time; people who are studying but are also unemployed are classified as studying.

The ABS defines a profound disability as one where the person always needs help with one or more of the activities involved in communication, mobility and self care, and a severe disability as one where the person sometimes needs such help. Figure 7 presents data that show that rather more profoundly or severely disabled people were aged less than 65 in 2009 than were aged 65 and over: 763,000 as opposed to 669,000.

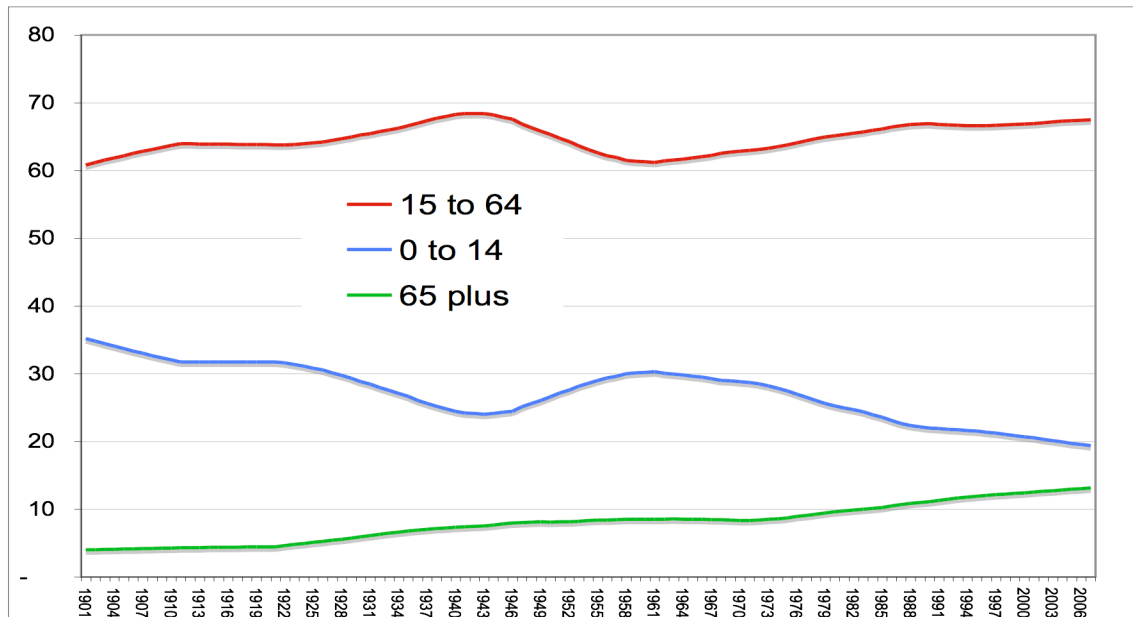
Of course all infants under five always or sometimes need such help as do many children aged five to nine. And none of them are in the paid work force. In contrast a fair proportion of people aged 65 plus are in paid work and many more are helping care for their grandchildren, or for disabled spouses or are doing voluntary work.

In 2003 24 per cent of the people acting as primary carers for someone with a disability (or someone aged over 60) were themselves aged over 64. Indeed 43 per cent of primary carers of older people are their equally elderly spouses.¹⁷ As well as this older people supply the greater part of informal childcare and, in a round 23,000 families children are being brought up by their grandparents.¹⁸ Indeed in 2003 more than twice the number of children under 15 lived with their grandparents as lived with foster parents.¹⁹

It is also clear from Figure 7 that many people in the nominally working age group category (15 to 64) are not in paid work. Some are studying, some are unemployed, and many are simply not in the labour force and of those who are, many work part time.

Moreover most commentary on demographic ageing focuses on the working age population and the increasing burden they will bear as the proportion of elderly people grows: such commentary tends to ignore the much heavier burden of infants and children, a burden that has progressively decreased over the last 100 years (Figure 8)

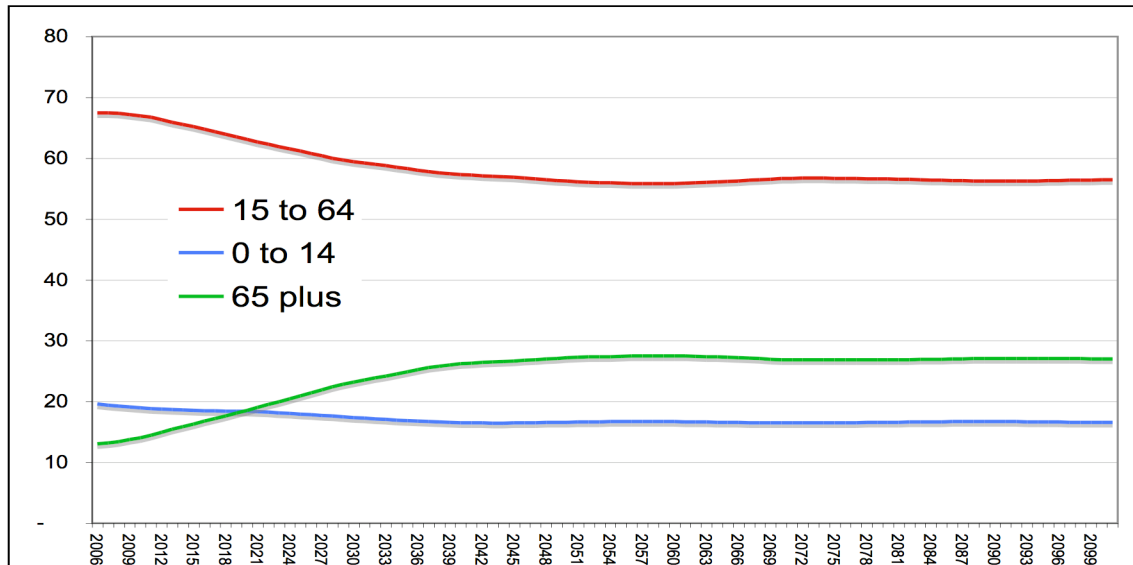
Figure 8: Australia, population by age group, 1901 to 2006, per cent



Source: Australian Historical Population Statistics, spreadsheet, catalogue no. 3105.0.65.001, ABS, 2008

Figure 9 shows what the age distribution would be over the next 100 years with medium life expectancy, at TFR of 2.0 and nil net migration (ABS projections 2008, series 59).

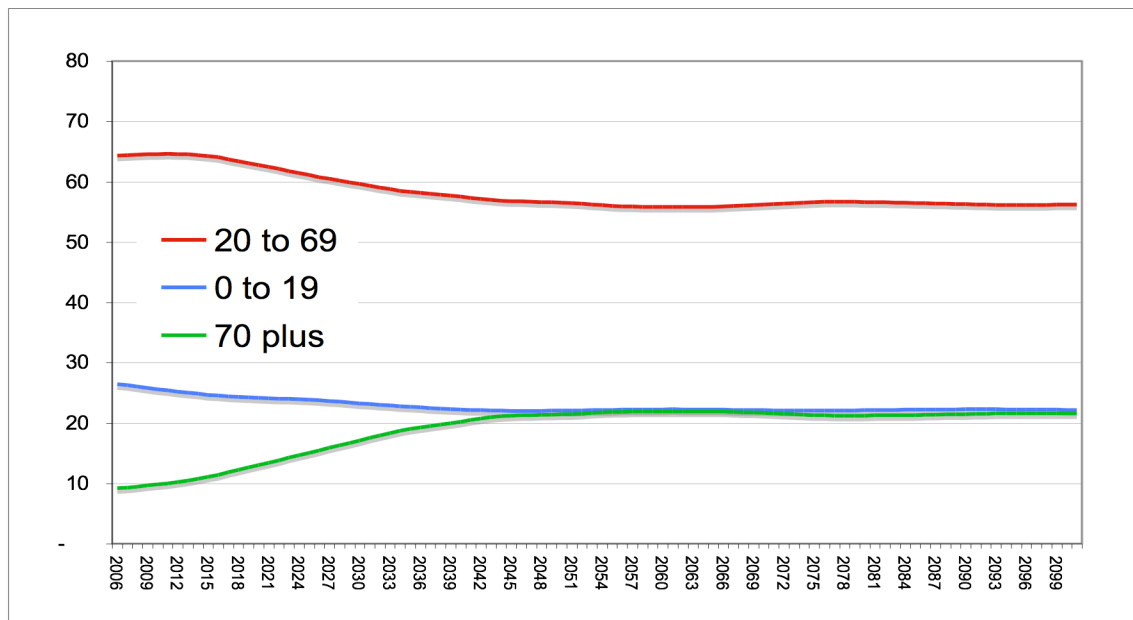
Figure 9: Australia, projected population by age group, 2007 to 2101 (TFR 2.0, LE medium, NOM 0), per cent



Source: *Population projections, Australia, 2006 to 2101, Catalogue no. 3222.0*, Australian Bureau of Statistics, Canberra, 2008, spreadsheets, series 59

But in an advanced knowledge economy is it sensible to go on thinking of working life as beginning at the age of 15? It's not something we want for our own children and it's not something we should be wanting for the country. Most young people in their late teens, and many of them in their early twenties should be engaged in further education.

Figure 10: Australia, projected population by age group, 2007 to 2101 (TFR 2.0, LE medium, NOM 0), working age 20 to 69, per cent



Yes the ranks of the elderly will swell as the baby boomers, people aged between 45 and 64 in 2009, move up the population pyramid but the cohorts coming up behind them are of a similar size.

But up until the age of 75 net transfers of money and help flow from the old to the young;²⁰ older people are a social asset. Despite this some commentators try to paint them as a burden and in so doing feed the fires of intergenerational conflict. Years ago Alfred Sauvy saw the post-transition future as ‘a society of old people, living in old houses, ruminating about old ideas’.²¹ Recent Australian commentators agree. Some claim that without massive growth the nation will simply become ‘God’s waiting room’,²² or that the aged will consist of ‘millions of self-indulgent baby boomers who are going to grow old even if they never managed to quite grow up’.²³ Or that old people are like ‘zombies’ or ‘reanimated corpses’ set to attack an unsuspecting population.²⁴

The Australian data in Figure 7 on work, unemployment, workforce participation, student status and disability show that age and usefulness to others are only highly correlated in the early years. Small children are universally and necessarily dependent on others. Once a person is in their teens dependency is much more a consequence of social arrangements than it is of biological incapacity. The zombies are more likely to be looking after their grandchildren, or writing cheques for their adult children, than they are to be attacking them.

Public opinion, immigration and population growth

Until recently there have been very few surveys on attitudes to population growth. But over the years there have been quite a number on attitudes to immigration.

However there are problems with using these as measures of attitudes to population growth:

First, if we were to do this we'd be assuming that people knew about the demographic link between the two

Many people don't. They may believe that below replacement fertility means that, without immigration, we'd be actually shrinking right now. Or they may think that immigration is an effective counter to the ageing of the population.

While there have been very few surveys of attitudes to population growth up until this year, in the past there have been one or two measuring knowledge about demography. In 1971 there was a large ANU-based survey of Melbourne women. It was mainly about birth control but with some basic demography questions added. It found that only half could guess the then size of Australia's population, even roughly. And this wasn't a neutral matter. The women were so distressed by their ignorance that the researchers had to move the question to the end of the schedule.²⁵

In 1986 only 48% of respondents to a REARK survey could give a rough estimate of the size of the population. And a small survey of Monash students in 1984 found that only 47% could guess the size of the migrant intake, even approximately (it was then around 100,000 a year). The answers they gave ranged from 1000 per year to 1.5 million.²⁶

The situation may have changed over the last 25 years but, as one who has recently taught demography to tertiary students, I doubt it. Students begin by knowing very little.

So most people would not know if net 100,000 migrants a year (or 200,000 or 300,000) was big number or a small one.

Or indeed, like Mr Rudd, they might have trouble telling the difference between the formal immigration program (which is part of the gross intake) and the net figures which include net long-term temporary migrants.²⁷ This is a shame because the net figure is much more important.

So if we want to use attitudes to immigration as indicators of attitudes to population growth there's a problem. If people don't know about demography their attitudes to the one will be a poor indicator of the other.

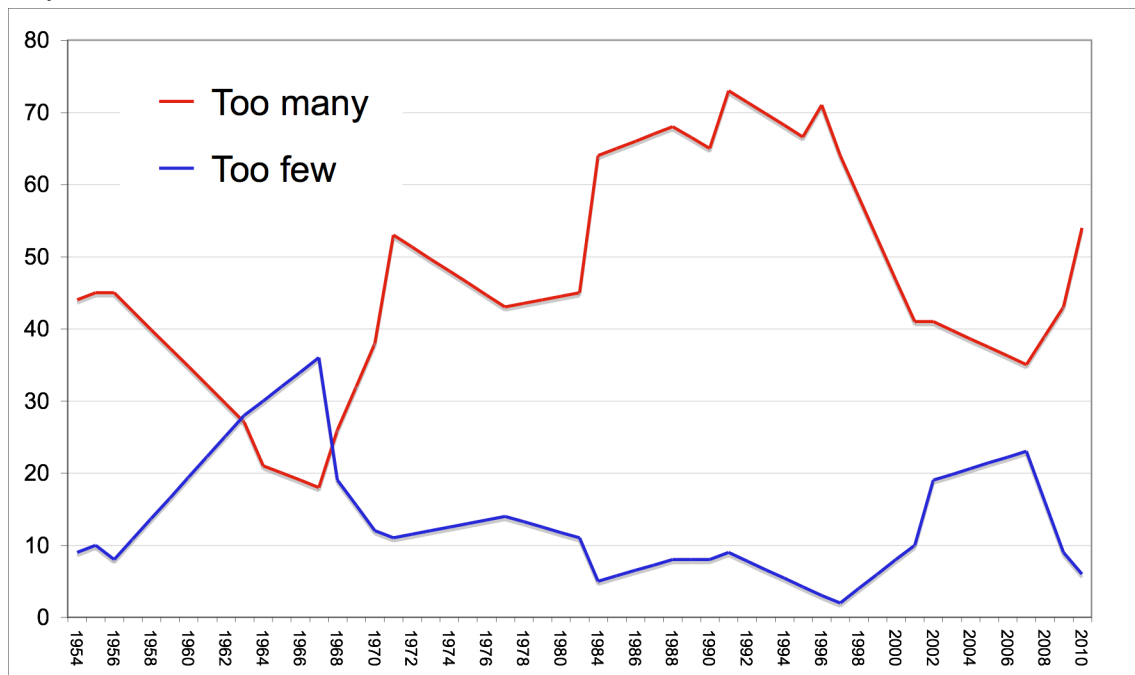
This ignorance also means that any questions on attitudes to immigration (or to population growth) that ask people to express their opinions by saying how many migrants (or how many people) they would like will be unreliable.

A second problem is that attitudes to immigration involve other values besides feelings about growth

They are affected by people's concerns about jobs. They may also tap attitudes to cultural diversity, internationalism and perceptions about migrants' use of welfare. When boat arrivals are in the news, these can affect perceptions of humanitarianism or of the effectiveness of border control policies. Many of these values have little to do with population growth per se.

Figure 8: Attitudes to immigration, 1954 to 2010

Question format: 'Last year X number of migrants came. In your opinion is this number about right, too many or too few?'



Source: Poll data for 1954 to 1996 are described in K. Betts, *The Great Divide: Immigration Politics in Australia*, Duffy and Snellgrove, Sydney, 1999, pp. 350-353. The post 1996 polls are: 1997 Newspoll, published in *The Australian*, 3 May 1997, 2001 AC Nielsen poll, published in *The Age*, 4 September 2001, 2002 is an Irving Saulwick poll commissioned by Job Futures; the sample is restricted to people in the workforce. 2007 is the Scanlon survey conducted and reported by A. Markus and A. Dharmalingam, *Mapping Social Cohesion: The Scanlon Foundation Surveys*, Monash Institute for the Study of Global Movements, Melbourne, 2008. It drew on a telephone sample of 2000 people aged 18 plus interviewed between June and August 2007. Andrew Markus completed a second survey for the Scanlon foundation in June-July 2009. The summary report finds that, on immigration, 37% said the numbers were too many and 53% said too few or about right, but the breakdown between about right and too few is not provided. It also gives data for polls in 2003 and 2005 but unfortunately does not reference them. However the findings are similar to those of the 2007 Scanlon report. See A. Markus and J. Arnup, *Mapping Social Cohesion 2009: The Scanlon Foundation Surveys, Full Report*, Monash Institute for the Study of Global Movements, Melbourne, 2010, p. 31. 209 is an AC Nielsen poll, carried out from 5-7 November 2009. 2010 is also an AC Nielsen poll, carried out from 15-17 April 2010.

Note: Data are available for 20 of the 58 years; values for the other years are provided by the fill function in Excel. The 'about right' category not shown. The samples are voters only from 1984 to 1996; other years, all adults aged 18 plus.

Attitudes to population growth

But what of attitudes to population growth itself?

The current debate began with the release of Treasury's Third Intergenerational Report in September last year and its projection of growth to nearly 36 million by 2050. Perhaps it was not so much the projection itself which startled people as Rudd's cheerful endorsement of it as something to be welcomed and encouraged.²⁸

At a time when the quality of life for many city dwellers is under stress this struck something of a sour note, and a number of polls were subsequently conducted. For the first time in years, these focussed on population growth.

There has been a Galaxy poll conducted in South East Queensland in December 2009,²⁹ a Roy Morgan poll in March 2010,³⁰ two online polls from Essential Media in February and March 2010,³¹ two AC Nielsen polls (one in November 2009 the other in April 2010),³² a Lowy institute poll in March 2010, questions on attitudes to population growth that Bob Birrell and I put on the 2009-2010 Australian Survey of Social Attitudes (AuSSA), and a TNS poll in May 2010.³³

Tables 8 to 12 present the findings from AC Nielsen, Lowy and AuSSA 2009-2010. These surveys have been chosen because they had large sample sizes of people (or voters) aged 18 plus and were not conducted online.

Table 8: Adults 18 plus, 'Is 35 million too many...', AC Nielsen, per cent³⁴

	November 2009	April 2010
Too many people	40	51
Too few people	2	2
About right	30	27
No opinion	26	19
Don't know	1	2
Total	100	100
Total N	1400	1400

Note: The question in November 2009 was: 'Recent population projections suggest that the Australian population will grow from 22 million people to 35 million people in 2049. Do you think 35 million people in 2049 is too many people, too few people, about right or is this something you don't have an opinion about?' AC Nielsen note that some respondents interpreted the question as meaning 'do think the projection is correct'. Consequently they changed the question for April 2010 and they do **not** regard the two sets of data as comparable.

The question in April 2010 was: 'Recent population projections suggest that the Australian population will grow from 22 million people now to 36 million people in 2050. If Australia does reach a population of 36 million in 2050 do you think that this will be too many people, too few people, about right or is this something you don't have an opinion about?' Method: Telephone interviews.

While the two questions in Table 6 are not totally comparable (see note to Table 10) they do suggest a sharp increase in the proportions who were unhappy about population growth. This may be a consequence of the population debate that has been taking place since October last year. This could have validated the feelings of pressure that Australians have been experiencing, and thus making them more likely to focus on population growth as one of the causes. Nonetheless both of the questions reported in

Table 1 depend on respondents having some understanding of the numbers and what they mean. The fact that many do not is reflected in the high proportions opting for the ‘no opinion’ category.

The problem of dependence on demographic knowledge is even more clearly evident in the pattern of responses to the Lowy poll.

Table 9: Adults 18 plus, ‘Which [target population] do you...think would be the best...?, Lowy Institute, March 2010, per cent³⁵

(1) Less than the current size of 22 million people	4
(2) Around the current size of 22 million people	22
(3) 30 million people	43
(4) 40 million people	23
(5) 50 million people or more	6
None of these	*
Don’t know	1
Total	100
Total N	1001

Note: The question was: ‘Now about the size of Australia’s population in the next 40 years or so. Which one of the following do you personally think would be the best target population for Australia in the next 40years?’ Method: telephone interviewing.

* Response given by less than 0.5 per cent.

The Lowy Institute’s media release emphasised the 72 per cent who appeared to want a bigger Australia,³⁶ but such a finding does not accord with the Nielsen poll of April 2010 and, as we will see, is at odds with the finding produced by the 2009-2010 Australian Survey of Social Attitudes.

The Lowy findings may well be influenced by the effects of demographic ignorance. If many people are both uninformed about demography and if some of them are also anxious about their lack of knowledge it is not surprising that many simply chose the middle response of the five substantive options that were read out to them. Indeed the distribution of responses around these five substantive options mimics a normal curve in an unusual fashion. One would not expect to find this in answers to a question that was actually measuring attitudes rather than attitudes plus demographic ignorance and anxiety.

In early 2009 Bob Birrell and I put some population questions on the forthcoming Australian Survey of Social Attitudes, a mailout questionnaire organised by the Australian Social Science Data Archives at ANU. As the main question we settled on: ‘Do you think Australia needs more people?’ This was sufficiently similar to questions asked by Irving Saulwick in 1977 and 2001 to allow us to compare responses over time and it did not require respondents to have any demographic knowledge. The initial response categories were simply ‘yes’ or ‘no’. As it was a self-completed questionnaire

anyone unhappy with having to make such a choice could simply skip it. Of the 3142 respondents, 90, or just under three per cent did do this.

In keeping with Saulwick's 1977 question we then went on to ask the people who did want growth how they would like to come about, via more children, more migrants, or both.

Table 10 sets out the results for our question and those asked by Saulwick before us.

Table 10: Voters, Attitudes to population growth, 1977, 2001, and December 2009 to February 2010, per cent³⁷

1977 Do you think that over the next few years we should—					
Not be concerned if growth slows down	<i>[Responses mentioning growth]</i>	<i>Total</i>	Encourage couples to have larger families	Encourage more migrants to come	Encourage both migrants and larger families
50	49	100	22	10	17
2001 Should Australia increase, maintain or reduce its population?					
Maintain or reduce	Increase	<i>Total</i>			
65 (58% 'maintain', 7% 'reduce')	36	100			
2009-2010 Do you think Australia needs more people? (Yes or no) If yes how would you like the population to grow?					
No	Yes	<i>Total</i>	Encourage people to have more children	Encourage more migrants to come	Encourage both migrants and larger families
72	28	100	7	5	15

Note: The questions asked were as set out in Table 3 above. Method: 1977, face-to-face interviews (not clearly stated in the records but one of the questions asked was whether the respondent was on the telephone—27% were not) (N=2000); 2001, telephone interviews (N=1000); 2009-2010 mailout questionnaire (final-release data N=3052 valid responses to 'Do you think Australia needs more people?').

In 1977 50 per cent were content with slower growth; in 2001 65 per cent actively wanted a stable (or smaller) population and in 2009-2010 72 per cent did not want further growth. The reasons they gave for this included a preference for training our own skilled workers rather than taking them from other countries, and concern for the environment (both natural and urban).³⁸

Table 11: Attitudes to population growth by state: December 2009 to February 2010, AuSSA, per cent

‘Do you think Australia needs more people?’

Australia needs more people?	Queensland (Qld)	South Australia (SA)	Victoria (Vic)	New South Wales (NSW)	Tasmania	Western Australia (WA)	ACT	Total
No	76	74	72	70	70	66	65	72
Yes	24	26	28	30	30	34	35	28
Total	100	100	100	100	100	100	100	100
Total	611	294	866	862	96	371	63	3192

Source: The Australian Survey of Social Attitudes [Computer file], Canberra: Australian Social Science Data Archive, The Australian National University, 2010, final-release data.

Notes: The question was: ‘Do you think Australia needs more people? Yes [or] no’. People who did not answer this (n=51) are excluded from the analysis here and in subsequent tables. The 29 respondents from the Northern Territory are not shown separately but are included in the total. The data in Table 9 are weighted.

Table 12: Attitudes to growth by region, the five mainland states, December 2009 to February 2010, per cent

Australia needs more people?	Qld non-metro	Qld outer metro	Qld inner metro	SA non-metro	SA outer metro	SA inner metro	Vic non-metro	Vic outer metro	Vic inner metro
No	**86	71	63	*83	74	67	77	71	66
Yes	**14	29	37	**17	26	33	23	29	34
Total	100	100	100	100	100	100	100	100	100
Total N	271	208	125	98	102	88	283	310	244

Australia needs more people?	NSW non-metro	NSW outer metro	NSW inner metro	WA non-metro	WA outer metro	WA inner metro	Total
No	76	69	**58	80	**49	69	72
Yes	24	31	**42	20	**51	31	28
Total	100	100	100	100	100	100	100
Total N	415	258	176	113	123	133	3192

Source: See Table 11.

Notes: Respondents were asked if they lived in an ‘Outer metropolitan area of a major city (over 100,000 people)’ or an ‘Inner metropolitan area of a major city (over 100,000 people)’.

Respondents who chose other options such as ‘a large town (over 25,000 people)’ or ‘a rural area or village’ have been grouped together as ‘non-metro’. Respondents who did not answer the question on region (n=59) are not shown separately.

* Difference between the sub-group and the total is significant at the .05 level.

** Difference between the sub-group and the total is significant at the .01 level.

Finally there is the recent TNS poll. Unfortunately the only information available for this is a media release which does not give details of the questions asked. But the company says that: ‘Generally, population growth is seen as positive, with 60% of the opinion it is a good thing for the nation and 59% of the opinion it is good for their local region’.

However respondents mentioned numerous aspects of their region that would change for the worse with population growth (including traffic, housing affordability, water, safety, the health system, a sense of community) and very few that would change for the better (these included retail shopping and entertainment options).³⁹ The poll also found that 69 per cent of respondents thought that governments were handling population growth ‘not well or poorly’, a proportion which was higher in NSW (80 per cent), Victoria (75 per cent) and Queensland (74 per cent).⁴⁰

Conclusion

This presentation has made three main points.

(1) Population projections between 2002 (IGR1) and 2009 (IGR3) have varied sharply, but this is a function of the assumptions used. Assumptions are not chosen at whim. They reflect current demographic reality. Fertility is rising, life expectancy is increasing, and, most important of all net overseas migration is bounding ahead. Consequently projections are rising.

(2) An older age structure is inevitable. Immigration makes very little difference to the average age of the population (but a big difference to the numbers of people, including the numbers of old people). But demographic ageing is not a bad thing. We have a lot to look forward to.

(3) Most Australians think that we do not need more people.

Australia is fortunate that much of its growth stems from immigration and is therefore a product of public policy. This means that we change the demographic path we are on if want to do so. We do not have to walk backwards into the future.

¹ Preliminary figure of 2008-09, see *Demographic Statistics*, December 2009, Catalogue no. 3101.0, ABS, June 2010, p. 29

² *Population projections, Australia, 2004 to 2101*, Catalogue no. 3222.0, Australian Bureau of Statistics, Canberra, 2006, p. 10

³ The medium life expectancy assumptions in 2006 were that LE at birth would reach 84.9 years for males and 88.0 years for females by 2050-51 and remain constant thereafter. This means it would increase by 0.4 years per year for males and 0.3 years per year for females until 2005-06 and then by 0.3 for males and 0.25 for females until 2010-11 and then slow down until stopping at 2050-51. The high assumptions made the assumptions re annual increase except that the 0.3 and 0.25 years per year keeps going until 2050-52 instead of leveling off after 2010-11. The high assumption said that life expectancy would reach 92.7 for males and 95.1 for females by 2050-51 and remain constant thereafter. *ibid.*, p. 8

⁴ Department of Treasury, *Intergenerational Report 2002-03 (First Intergenerational Report)*, Department of Treasury, Canberra, 2002, p. 22

⁵ Department of Treasury, *Australia to 2050: Future Challenges (Third Intergenerational Report)*, Department of Treasury, Canberra, 2010, p. viii

⁶ See *Australian Demographic Statistics (September Quarter 2009) Catalogue No. 3101.0*, Australian Bureau of Statistics, Canberra, 2010, p. 10.

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- ⁷ Department of Treasury, *Australia to 2050: Future Challenges (Third Intergenerational Report)*, Department of Treasury, Canberra, 2010, p. 7 (The average figure for net overseas migration is calculated from the three years to June 2009.)
- ⁸ *Population projections, Australia, 2006 to 2101, Catalogue no. 3222.0*, Australian Bureau of Statistics, Canberra, 2008, p. 8
- ⁹ *Births Australia*, Catalogue No. 3301.0, Australian Bureau of Statistics, Canberra, various issues. It may in fact never have fallen much below 1.8 as under-registration of births has become an increasing problem somewhat alleviated by the introduction of the baby bonus in mid 2004. See P. McDonald, 'Has the Australian fertility rate stopped falling', *People and Place*, vol. 13, no. 3, 2005, pp. 1-5; for changes in the proportion of births occurring in the year of registration see *Births Australia 2005, Catalogue No. 3301.0*, Australian Bureau of Statistics, Canberra, 2006, p. 37
- ¹⁰ ABS, *Deaths Australia 2008, Catalogue No. 3302.0*, Australian Bureau of Statistics, Canberra, 2009, p. 37
- ¹¹ *Australian Demographic Statistics, Catalogue No. 3101.0*, Australian Bureau of Statistics, Canberra, various issues.
- ¹² See J. Healy, *The benefits of an Ageing Population: Discussion Paper Number 63*, The Australia Institute, Canberra, 2004, pp. 1-8, 39
- ¹³ *2009 World Population Data Sheet*, Population Reference Bureau, Washington 2010
- ¹⁴ The 10 richest countries were, in order, Luxemburg, Singapore, Norway, United States, Ireland, Switzerland, the Netherlands, Austria, Sweden, and Iceland. I have excluded Macau and Hong Kong as they are not independent countries. The ten poorest countries were, in order, Malawi, Togo, Sierra Leone, Central African Republic, Niger, Eritrea, Guinea-Bissau, Liberia, Burundi, and the Democratic Republic of the Congo. East Timor should have been on the list in the eighth poorest position but I was unable to get data on its age distribution. 'List of countries by GDP (PPP) per capita', Wikipedia
[en.wikipedia.org/wiki/List_of_countries_by_GDP_\(PPP\)_per_capita#cite_note-1](http://en.wikipedia.org/wiki/List_of_countries_by_GDP_(PPP)_per_capita#cite_note-1) accessed 18 May 2010. Data on age distributions are from the *2009 World Population Data Sheet*, op. cit.
- ¹⁵ The brown line (TFR 1.6, NOM 140,000, LE medium) is series 54 and the green line (TFR 2.0, NOM 0, LE medium) is series 59. In 2050 series 54 projects a total of 29,891,886 people, including 6,978,266 aged 65 plus. In 2050 series 59 projects a total of 24,069,041 people, including 6,545,810 aged 65 plus. In 2101 series 54 projects a population of 33,396,039 including 8,946,423 aged 65 plus. In contrast in 2101 series 59 projects a population of 22,736,097 of whom 6,133,862 would be aged 65 plus. The number of people aged 65 plus is 2,812,561 higher in series 54 than it is in series 59..
- ¹⁶ The snapshot is rough because it makes oversimplifying assumptions such as that none of the people suffering profound or severe disabilities are studying or in the labour force. It also applies rates of disability and student status from earlier years to the June 2009 population. It does not show data for the many students who also have part time jobs, nor does it show unemployment figures for people who are studying. It does not distinguish between full time and part time students; people who are studying and working part time are simply shown as studying; those who are studying and working full time are simply shown as working full time.
- ¹⁷ *Older Australians at a Glance*, Australian Institute of Health and Welfare, Canberra, 2007, p. 32
- ¹⁸ *Older Australians at a Glance*, op. cit., p. 32
- ¹⁹ J. Healy, *The Benefits of an Ageing Population: Discussion Paper Number 63*, The Australia Institute, Canberra, 2004, pp. 20-21
- ²⁰ Healy, 2004, op. cit., p. 19
- ²¹ Quoted in B. Wattenberg, *The Birth Dearth*, Random House, New York, 1987 p. 65

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- ²² P. Goers, 'C'mon Aussie, the more the merrier', *Sunday Mail*, May 9 2010, p. 34
- ²³ T. McCrann, 'Rudd's pill a palliative, not a cure', *The Australian*, April 24 2010, p. 40
- ²⁴ R. Skeffington, 'The Old and the Deathless; Australia is bracing for a tide of centenarians.' *The Wall Street Journal (Online and Print)*, April 23 2010, p. W15
- ²⁵ J. C. Caldwell, C. Young, H. Ware, D. Lavis and A.-T. Davis, 'Australia: knowledge attitudes and practice of family planning in Melbourne, 1971', *Studies in Family Planning*, vol. 4, no. 1973, pp. 49-59
- ²⁶ REARK Research Pty Ltd, *Attitudinal Survey on Population Issues in Australia (A research report prepared for the Department of Immigration and Ethnic Affairs)*, Sydney, 1986, p. 15
- ²⁷ For Mr Rudd's confusion on this point see N. Mitchell, 'Transcript of Australian Prime Minister Rudd interview with Neil Mitchell', 3AW, broadcast 26 March 2010 (transcript available from the Factiva data base). The net figures matter. They count most of the actually people present in Australia and are used to calculate GST allocations to the states as well as to shape electoral boundaries. This means we should take them very seriously.
- ²⁸ Rudd: 'I actually believe in a big Australia. I make no apology for that. I actually think it's good news that our population is growing'. K. O'Brien, 'Prime Minister Kevin Rudd joins The 7.30 Report', 7.30 report, ABC TV (transcript), 22 October 2009
- ²⁹ This found that 60 per cent wanted the state government to limit growth. See C. Johnstone and N. Gregg, 'Shut the gate—residents want cap on population', *The Courier-Mail*, 7 December 2009, pp. 1, 2. Sample details unavailable.
- ³⁰ This was conducted on the evenings of 16 and 17 March. The question was 'Australia's population has increased by 5 million from 17 million to 22 million over the last 20 years. What population do you think we should aim to have in Australia in 30 years — that is, by 2040?' This depends on respondents having a knowledge of demography that many lack. See discussion of the Lowy poll below. (The sample was 670 residents aged 14 plus.) Morgan's results were: <22m 6%; 22 to <25m 19%; 25 to <30m 35%; 30 to <35m 21%; 35 to <40m 6%; 40 to <50m 2%; 50m plus 2%; can't say 6%. See Roy Morgan Poll Finding No. 4482: population, immigration and boat people <www.roymorgan.com/news/polls/2010/4482> accessed 9 April 2010.
- ³¹ Their February question was: 'It has been estimated that Australia will have a population of 36 million by 2050. Do you think this will be good or bad for Australia?' 24 per cent said it would be good, 48 per cent bad. But 23 per cent said neither good nor bad and five per cent said 'don't know'. The mention of a specific number is associated with a large proportion of uncommitted responses. In March 2010 they asked more questions about population growth, and did not mention numbers. There was no neutral option, but there were also very few don't knows. Results: 75 per cent said Australia did not have the infrastructure and services to manage more population growth, 61 per cent that the environment too fragile to cope with a much larger population, and 52 per cent disagreed with the idea that a larger population would help the economy. Essential Report, EMC, 15 February 2010, p. 8. Notes on methods (p. 9) say that EMC have an online panel of 109,500. From this they invite around 7000 to 8000 to participate in their weekly survey and normally get a response rate of around 1000 <www.essentialmedia.com.au/file.php?file=/essentialreport.html>. Essential Report, EMC, 1 March 2010, p. 7 <www.essentialmedia.com.au/file.php?file=/essentialreport.html>
- ³² Media Release, Lowy Institute, 7 April 2010. This does not seem to be on their web site. It was emailed to me on request.
- ³³ See media release at <www.tnsglobal.com/news/news-C2713BFD43854418A4BA2B2D4994AE9D.aspx> accessed 19 May 2010.

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- ³⁴ Nielsen, National Report, 8 November 2009, and Nielsen, National Report, 18 April 2010, sent to the author by Mr John Stirton, AC Nielsen Polling Director.
- ³⁵ Media Release, Lowy Institute, 7 April 2010
- ³⁶ The 7 April 2010 media release was titled 'Lowy Institute polling shows almost ¾ of Australians support a bigger Australia'.
- ³⁷ Sources: The Australian Survey of Social Attitudes [Computer file], Canberra: Australian Social Science Data Archive, The Australian National University, 2010, pre-release data; 2001 data, Saulwick Age Poll, published as a supplement to *The Age*, 8 October 2001, sample size 1000 voters; 1977 data, Saulwick Age Poll, published in *The Age*, 9 November 1977, sample size 2000 voters.
- ³⁸ See K. Betts, 'Population growth: what do Australian voters want?' *People and Place*, vol. 18, no. 1, 2010, pp. 49-64
- ³⁹ Sample size 1,378 Australian residents, interviewed in March 2010. Media release, 'Population growth raises fears for safety and community' TNS Global website 11 May 2010 <www.tnsglobal.com/news/news-C2713BFD43854418A4BA2B2D4994AE9D.aspx> accessed 19 May 2010
- ⁴⁰ These results are not in media release but are in *The Australian*. See S. Lunn, "'Population policy a failure at all levels'", *The Australian*, 11 May 2010, p. 4