

Population Ageing in Plain Language

An analysis in four dimensions

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Abstract

Over the next several decades Australia's population will age significantly. This ageing has two technically different dimensions—numerical ageing (primarily caused by high/increasing life expectancies which increase the *numbers* of elderly), and structural ageing (primarily caused by low/falling birth rates which increase the *proportion* of the population that is 'old'). The two dimensions, which have different implications for Australia's different institutions, have two further but somewhat less understood features—natural decline, which occurs as deaths exceed births (expected in Australia from around 2035) and absolute decline, which will occur if the numbers of migrants become insufficient to replace the 'lost' births and increased deaths (in Australia in the second half of the century).

This paper argues that successful management of these unprecedented demographic changes—the speed of which will differ markedly across and within Australia's States and Territories—will require people to engage with what can be termed the A-B-C of population ageing: **A**cept that this future has 'already happened'; that those who will be 65 in ten years time are already aged 55, and so on. **B**uffer—ameliorate the forthcoming problems and maximise the forthcoming opportunities by developing short-, medium- and long-term strategies that will fully incorporate the changing demography. And **C**elebrate, that while the future will be one of slower—even negative—population growth, it will not necessarily be one of 'stagnant' economic and social growth. Instead, future populations will almost certainly be wealthier, healthier and wiser. It will just depend on how well we manage the change.

Indeed this arguably utopian outlook conceals much information that needs to be better understood for successful strategies to be developed. Uppermost are the implications of regionally-differentiated demographic change for 'organisational renewal'—recruitment and succession in Australia's industries and occupations; for the underlying labour market entry:exit ratios that are declining at different rates across Australia's States and Territories; and for the resulting competition between regions (including other countries), industries and occupations for the participation of the same people that these changes will generate. All up the future looks bright for young and old alike, but there will be 'winners' and 'losers' and a very different labour and capital market to deal with. Those who understand their demography will be the better equipped to respond - the paper provides a plain language background to these issues.

Population ageing in Australia – the context:

Currently around 13 per cent of the Australian population is aged 65+ years, and this is projected to increase to over one-quarter by 2051. However, while Australia's age structure is considered 'old'¹, it is relatively young when compared with those of most other developed countries. The United Kingdom, for example, currently has around 16 per cent, Sweden 17 per cent, Germany 18 per cent, and Italy 19 per cent.

This demographic diversity reflects global differences in the three underlying components of population change—births, deaths and migration—and in particular in the speed of the associated *demographic transition*—the fall from high to low levels of birth and death rates. The declining death rates (or increasing life expectancies) bring about an increase in the numbers of elderly (*numerical ageing*), while the declining birth rates bring about an increase in the *proportions* of elderly (*structural ageing*). The two dimensions are now merging in the developed countries, and will eventually do so in the developing countries, which are also well into the transition. However the distinction between them remains important, because as well as having different causes, they have different implications. They also help us to gain an appreciation of two further but somewhat less understood features of population ageing that they foreshadow: *natural decline* (where deaths exceed births) and *absolute decline* (when the number of 'replacement' migrants is insufficient to offset the 'lost' births and deaths).

It is expected that each of these dimensions will be experienced by most of the world's countries during the present century—developed and developing countries alike (e.g., Lutz, Sanderson and Sherbov 2001; Yeoh, Lutz, Prachuabmoh and Arifin 2003). In Australia the shift to natural decline is expected around the mid-2030s—sooner if net international migration falls much below 100,000 per year; while absolute decline will almost certainly begin during the second half of the century (Australian Bureau of Statistics 2003). As a comparison, many European countries are already experiencing natural decline, while a few, including other more recently developed countries such as Japan, are also on the cusp of absolute decline. By 2050 approximately 33 countries are projected to have begun absolute decline, among them even China (United Nations 2000a: 6).

¹ A population is considered 'old' when 10 per cent is aged 65+ years, while a population is 'young' when it has less than 5 per cent at these ages. However it must be noted that these indices are somewhat arbitrary, and will undoubtedly move upwards as population ageing proceeds

Except in rare cases, increased migration levels will be insufficient to resolve ‘the problem’. First, the numbers required are enormous. For example, if the European Union wanted to keep its current age structure constant between now and 2025, it would need an annual net gain of approximately 8.5 million migrants, compared with its current 500,000 (United Nations 2000a: 88). Second, over the shorter term, migrants also add to structural ageing in that these days they tend to have lower birth rates than their host populations (a phenomenon that is exacerbated by recruiting skilled migrants); and in the longer term they also grow old, adding to numerical ageing. These points notwithstanding, it can be expected that international (and sub-national) competition for skilled migrants will soon become fierce (see Annan 2004 on an immigration strategy for Europe; also United Nations 2000b).

Regional differences in the components and dynamics of population change similarly cause Australia’s States and Territories to differ demographically. In terms of population ageing, the differences are summarised in Table 1, with the youngest to oldest regions arranged from left to right.

Table 1: Percentage Aged 65+ years, Australia’s States and Territories, 2004-2050 (selected years)

	NT	ACT	WA	QLD	VIC	NSW	TAS	SA	TOTAL
2004	4.2	9.3	11.6	12.0	13.3	13.4	14.5	15.1	12.9
2010	5.3	11.2	13.2	13.6	14.6	14.7	16.6	16.6	14.3
2020	7.9	16.0	17.9	18.1	18.7	18.6	22.7	21.7	18.6
2030	9.9	19.6	22.3	22.3	22.8	22.6	28.7	26.7	22.7
2040	11.2	22.0	25.2	25.1	25.6	25.3	31.9	29.6	25.5
2050	12.0	23.4	26.7	26.7	27.2	26.7	33.6	31.0	26.9

Source: Australian Bureau of Statistics (2003) Catalogue 3222.0

Notes: Medium Variant Assumptions (including annual net migration 100,000)

While just on 13 per cent of the national population is currently aged 65+ years, there is substantial disparity across the States and Territories. The Northern Territory (4 per cent) and the ACT (9 per cent) are not yet ‘officially’ old, contrasting markedly with Tasmania and South Australia, which already have around 14.5 and 15 per cent (aged 65+) respectively. As Table 1 shows, this gap will also now open up, from its current 11 percentage points, to around 22 percentage points by 2051. Along with regional differences in the experience of migration, the increasing disparity reflects differences in the ‘force’ of ageing (the number of years taken to transit from 10 to 20 per cent aged 65+ years – see Figure 6 below). For example, while Tasmania and South Australia will take between 36-38 years to go from 10 to 20 per cent aged 65+ (both having been at 10 per cent around 1980), the ACT will take only 25 years (beginning around 2007, when it reaches 10 per cent) (Jackson and Felmingham

2002). Thereafter it is expected that Australia's States and Territories will begin to encounter natural decline, with Tasmania, South Australia and Victoria entering this phase somewhat ahead of Total Australia (that is, before the mid 2030s), and the remaining regions (with the probable exception of the 'youthful' Northern Territory) crossing the line over the following two decades. Thus, while all Australian States and Territories will age over the forthcoming decades, the phenomenon will be experienced very unevenly, with the shift to natural (and later absolute) decline for each spread across a minimum four to five decades.

These disparities continue at the level of local government (Jackson 2004). However, here their correlation with the State/Territory to which they belong is less uniform. For example, the nation's oldest state, South Australia, does indeed have the highest proportion (75 per cent) of its local government areas with greater than national average proportions over the age of 65, and this situation will continue across the projection period. But the second oldest—and currently fastest ageing—state, Tasmania, has only the fourth highest proportion (62 per cent)—a reflection of the 'premature ageing' that Tasmania has experienced over the past decade.² Even in 2019, when it will (probably) be the oldest state, it will have only the third-greatest proportions of its local government areas older than the national average.

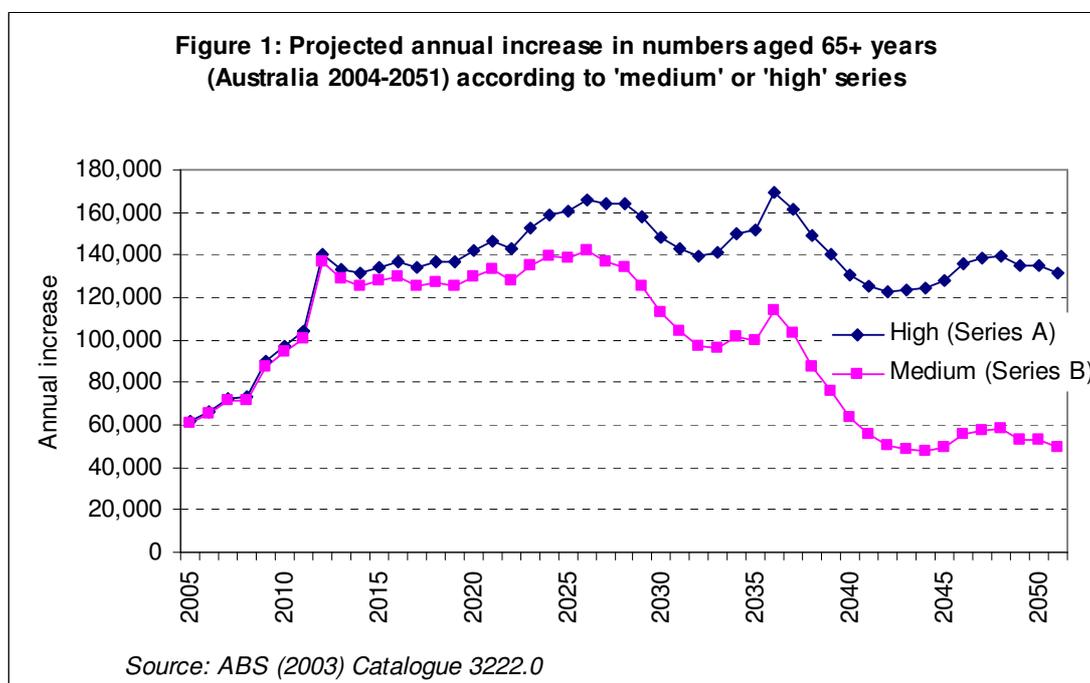
The issues in four dimensions:

A useful way of understanding the implications of population ageing is to consider them in terms of four dimensions: numerical and structural ageing, natural and absolute decline. Each of these trends can be 'weighted' in terms of the degree of confidence with which they can be anticipated.

Numerical ageing: Numerical ageing refers to the absolute increase in the numbers of elderly. Growth in these numbers is 100 per cent guaranteed, because most are already in the population: those who will be 65 years old in 10 years time are already 55, and so on. Historical patterns in migration rates have already been built in to these projections, as has increasing life expectancy. Currently in Australia there are around 2.6 million people aged 65+ years. By 2025 there will be between 5.0 and 5.2 million, and by 2050, between 7.2 and 8.9 million (Australian Bureau of Statistics' 'medium'

² This premature ageing has been caused by massive net migration losses over the 18-38 year age groups rather than low fertility *per se* (Jackson and Kippen 2001).

and ‘high’ variant projections). The speed with which these numbers will increase will dramatically stretch Australia’s capacity to deliver age-related services. As Figure 1 indicates, next year there will be approximately 65,000 more 65+ year olds in the population than this year. By 2012, as the ‘leading edge’ baby boomers (born 1946) pass this milestone, that number will increase to approximately 140,000. For the following 22 years it will hover around or above 130,000-140,000 per year, peaking in the late 2020s and again (as the baby boom ‘echo’ cohorts reach 65+ years) in the late 2030s. The rate of increase will then decelerate and steady off during the 2040s.

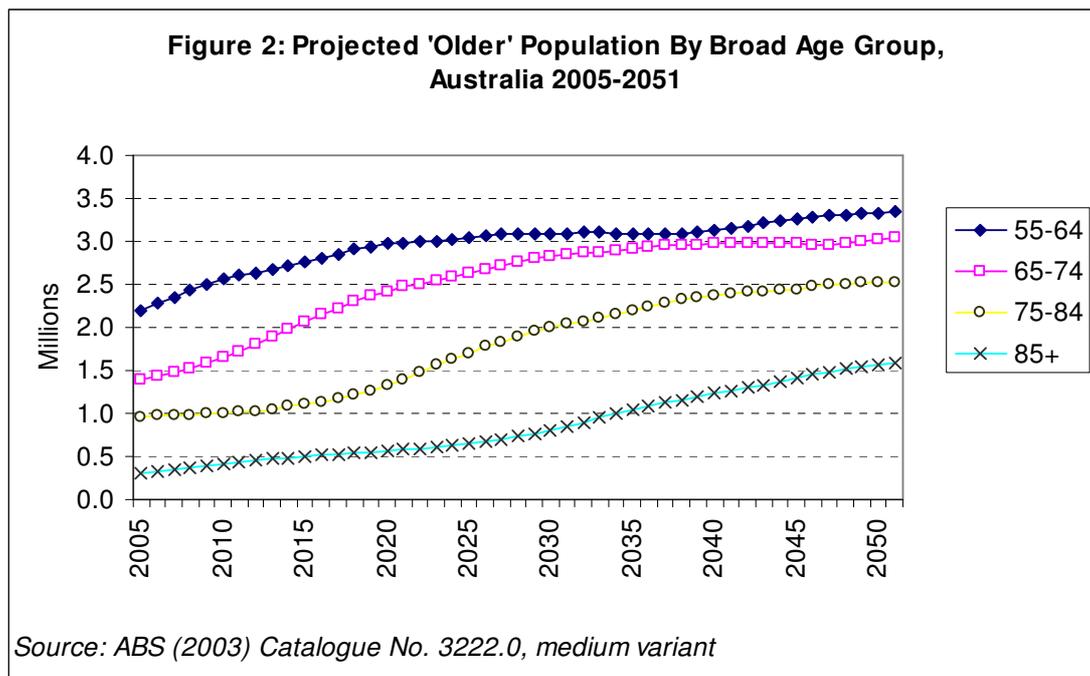


This ‘annual increase in numbers’ perspective is somewhat different to that which is typically presented by way of illustrating population ageing—that is, the increasing *proportions* aged 65+ years, to which we turn shortly. Since it is *numbers* that drive demand for goods and services, their rate of increase (or decrease) is extremely important for strategic planning.

Similarly, it is important to be aware that while the absolute numbers of 65+ year olds will continue to grow in total Australia and most States and Territories throughout the projection period (to 2051), those in the two oldest states, Tasmania and South Australia, are projected to peak and begin to decline during the 2030s. Similar disparities will be experienced across Australia at local government level,

because, as implied, population ageing is unfolding at very different rates across the country.

Also of assistance for planning is that the elderly will come in ‘age waves’. These is clear when the classic ‘65+’ population is disaggregated into broad age groups. Figure 2 gives these data, along with the projected increase in the 55-64 year population. The latter is currently the second fastest growing age group, because the leading edge baby boomers are moving through it. As they reach 65 years of age, that age group will swell disproportionately, while growth at 55-64 years of age will steady off. Ten years later, the leading edge boomers will move into the 75+ population, and the numbers aged 65-74 will steady off, and so on. This disaggregated picture is extremely useful because each age group implies different resource needs, different ‘generational’ attitudes, and different time-frames for planning.



However of most immediate import to this story is the growth occurring in the 85+ year age group. This growth is significantly greater than that at 55-64 years and can be expected to have the more profound impact. Over the next ten years alone, numbers at age 85+ will increase from 310,000 to 520,000, an increase of 59 per cent. At 55-64 years the numerical increase will be greater, from 2.2 to 2.8 million, but the percentage increase will be less than 26 per cent (see Table 2).

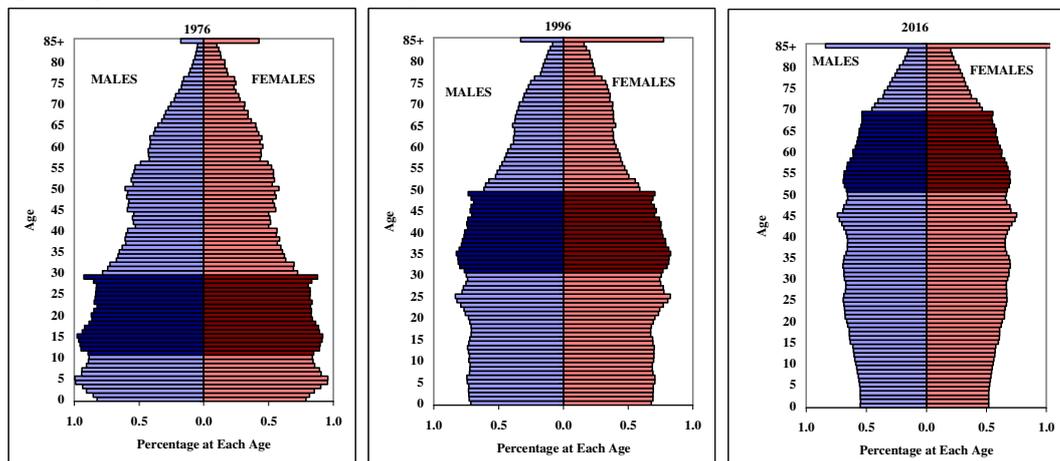
Table 2: Projected Change at 55+ Years by Broad Age Group, 2005-2015

	2005	2015	Change (Per Cent)
	Millions		
55-64	2.2	2.8	25.7
65-74	1.4	2.1	47.9
75-84	1.0	1.1	16.0
85+	0.3	0.5	59.3

Source: ABS (2003) Catalogue No. 3222.0, Medium Variant

Structural ageing: In contrast to numerical ageing, which is a dimension observed for the older population only, structural ageing affects the entire age spectrum. Figure 3 illustrates the phenomenon in terms of the shift in the proportions at each age since 1976, and projected through to 2016. With the driving force of these changes being Australia’s below-replacement birth rate³ delivering declining numbers of children (exacerbated from this point on by there being proportionately fewer women at reproductive age), the population ‘pyramid’ contracts at the youngest ages and concomitantly expands at the older ages. The increasing numbers of baby boomers approaching the older ages will soon *add* to this situation, but they are not its primary cause (note the location of the baby boomers—shown as shaded bands—at each observation).

Figure 3: Age-Sex Structure of the Australian Population, 1976, 1996 and 2016



Source: 1976, 1996: ABS Census of Population and Dwellings; 2016 ABS (2003) Catalogue 3222.0, Medium Variant
Notes: Shaded area = Baby Boomers (born 1946-65)

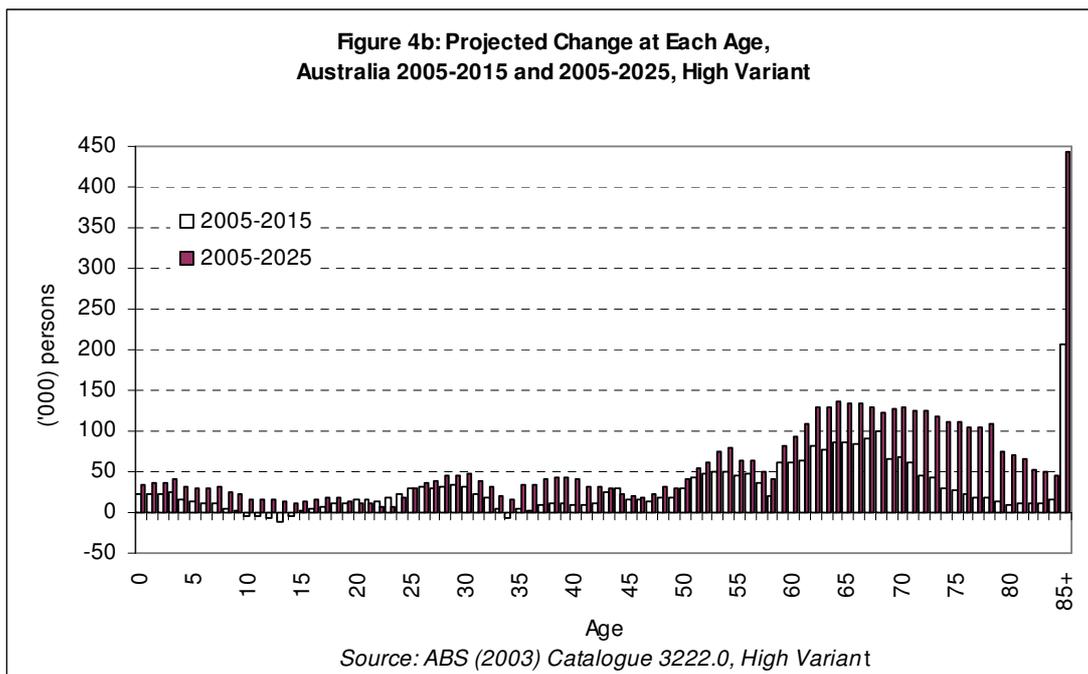
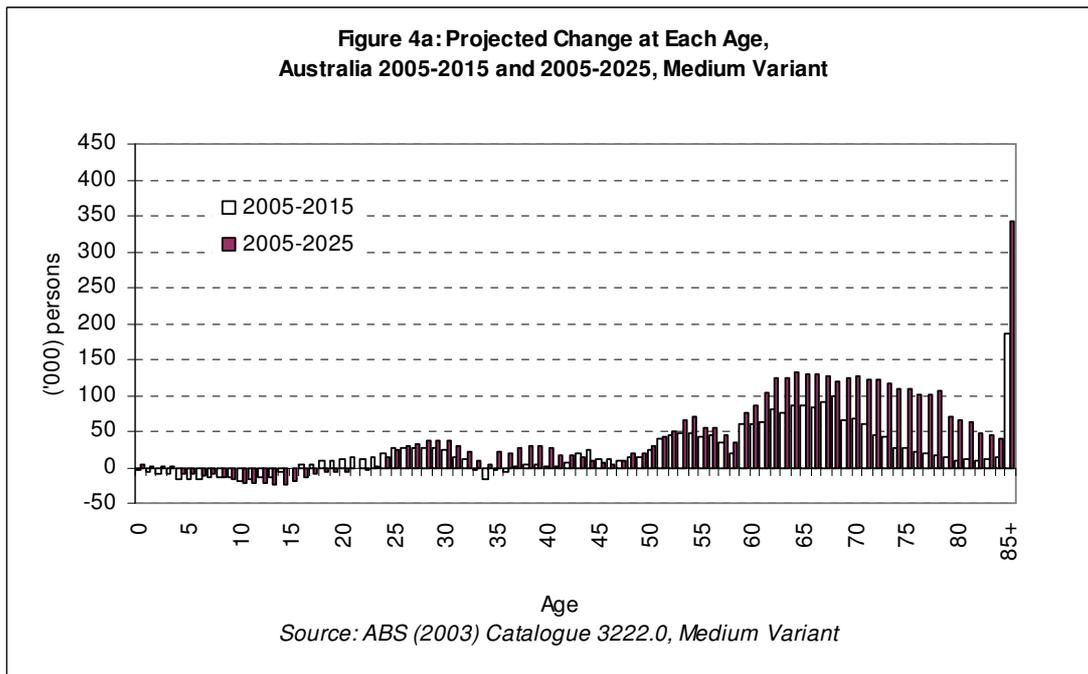
³ The ‘intergenerational replacement’ birth rate is 2.1 births per woman. The Australian birth rate is currently 1.7 and has been falling steadily since the 1960s.

In contrast to guaranteed growth in the numbers of elderly outlined above, the future extent of structural ageing depends upon the future birth rate. However, even here there can be a fairly strong degree of confidence in the future ‘shape’ of the projected population, since—as with numerical ageing—most of those in it are already born, or accounted for in the migration assumptions. The only ‘missing’ members in the graph for 2016 for example are those aged 0-11 years who have not yet been born, but who have been added in at the ‘medium’ birth rate of 1.6 births per woman, a fairly conservative estimate when compared with Australia’s counterparts.

These changing age structure provide a very clear indication of the profound nature of structural ageing. However, it is equally useful to examine the shift in terms of the absolute changes at each age. Figures 4a and 4b show this for Australia for the periods 2005-2015 and 2005-2025. The projected lack of growth—indeed decline—at the younger ages contrast markedly with the situation at the older ages. The picture is little different whether the ‘medium’ (Figure 4a) or ‘high’ variant (Figure 4b) projections are used—the latter delivers modest growth at the younger ages, but the majority of growth still takes place at the older ages. It should also be understood that the high variant projections assume a significant increase in the birth rate—to 1.8, a scenario that is highly unlikely in the short- to medium term.

Thus, again with a fair degree of confidence, we can assume that the near future will look much like that depicted in Figures 3 and 4, which vividly illustrate the changing *ratio* of young to old. It is this picture that is informing the growing government interest in the phenomenon of structural ageing; specifically, the minimal growth at the ‘working age population’ years (15-64 years) *vis-à-vis* that at the elderly and potentially dependent ages. Drawing the numerical and structural dimensions of population ageing together, it can be understood that it is numerical ageing that is driving up the demand for elder-oriented goods and services, while it is structural ageing that is the constraining factor (in terms of the ability of governments to fund them).⁴ That is, even if the working age population (read primary tax-base) were to remain constant in size, it will soon decline in relative terms (*vis-à-vis* the increased proportions at older ages).

⁴ That is, it is the numbers of people at the older ages that drive demand, not their proportions. It would in fact be technically possible for the numbers at the older ages to be declining, while, as a proportion of the population, they could be increasing—this could occur if the birth rate was to decline low enough.



The information in Figure 4 can also be drawn upon to indicate a broad range of other implications arising out of structural ageing. For example, there will soon be larger numbers of working age people approaching retirement age than labour force entry age. This situation foreshadows not only a relative contraction of the labour market but also an absolute contraction (see also Productivity Commission 2004). The trends will be further compounded by the fact that—as noted earlier—they are not

unfolding in Australia alone. Data for a range of OECD countries indicate that over the next 25 years, around 70 million workers will retire, to be replaced by just 5 million labour market entrants—and this takes account of medium levels of net migration for these countries. The situation contrasts markedly with the past 25 years, during which around 45 million people in OECD countries retired, but were replaced by 120 million baby boomers.

For Australia, with its somewhat younger age structure and relatively high levels of net migration (gain), labour market ‘entry:exit ratios’ are likely to remain positive—above one entrant per exit—over much of the next twenty five years, with around 7 million entrants and 6.4 million exits expected (measured as ‘people turning 19 years of age’ to ‘people turning 65’ - ABS Medium Variant).⁵ However this index depends upon the numbers within each broad age group—say 15-24 and 55-64 years—that are actually entering and leaving the labour market, and when calculated accordingly indicates a shift to a negative ratio (0.9 entrants per exit) around 2018.

Moreover, the demographic diversity both within different industries and occupations, and across Australia’s States, Territories and local government areas adds a significant degree of complexity to the overall situation. Entry:exit ratios are expected to fall below 1.0 in South Australia and Tasmania within a decade, with those for Victoria and New South Wales becoming negative before that of Total Australia.

Ratios are already negative in several industries and occupations, with significant implications for ‘organisational renewal’ – the ability of businesses (and government agencies) to recruit and maintain sufficient employees to offset those leaving (Management Advisory Committee 2003). Australia’s fourth and fifth largest industries, Health and Community Services, and Education, for example, already have ratios of 0.8 and 0.6 respectively. That is, the Health and Community Services Industry has eight people at labour market entry age for every 10 approaching retirement age, while the Education industry has just six.

As also implied these institutional disparities differ by region. One result of the regional differences could be a relative increase in demand for labour in the ‘older’ regions, a situation that should (*all else remaining equal*) see a reduction in

⁵ The high variant projections indicate around 7.3 million entrants and 6.4 million exits. Similar to the situation in most OECD countries, the past 25 years in Australia saw around 6.7 million labour market entrants, but only 3.4 million retirements.

unemployment levels. This may be expected to occur because the production of many goods and services related to population ageing will not be able to be shipped offshore, as occurred during the 1980s and '90s with the manufacturing industry (McDonald and Kippen 2000).

Yet another implication could be an additional increase in competition for the participation of the same young (and presumably older) workers, played out between the labour market and the tertiary education institutions. That is, the same decline in the numbers of people at labour market entry age will also impact upon university and other tertiary education populations (Jackson and Thompson 2001), while it could be assumed that the 'managers' of both will wish to keep their respective numbers constant for as long as possible. It takes little imagination to consider other possible outcomes of such competition, such as an increase in the earnings of workers, especially younger workers, even if these imply an initial increase in labour costs.

A closely related but much less publicised significance of the changing ratio of elderly to young is a forthcoming crossover in the numbers of elderly to children. Expected to occur at the national level in just over a decade (2016), this unprecedented situation will again be marked by its regional and sub-regional manifestations (Table 3). Both South Australia and Tasmania will experience it within five to six years, while Victoria, New South Wales, Queensland and Western Australia will not experience it until around 2014-2016, nor the ACT until around 2020. Australia's 'youngest' region, the Northern Territory, is not expected to experience negative elderly/children ratios until after 2051. At the same time, many local government areas within the 'older' States and Territories are, and will remain, relatively 'young', with low elderly to child ratios, while several in the 'younger' States and Territories will have high elderly to child ratios. These shifts will undoubtedly be characterised by 'intergenerational tensions' as the increasing proportions of elderly and the decreasing proportions of young (or the latter's parents) battle it out for resources—for example, walking paths or skateboard parks. Further on (from the 2020s) the shifts will be characterised by the more numerous elderly seeking to sell their homes (and other assets) to the less numerous young, with important implications for the property and capital markets (Kuné 2003).

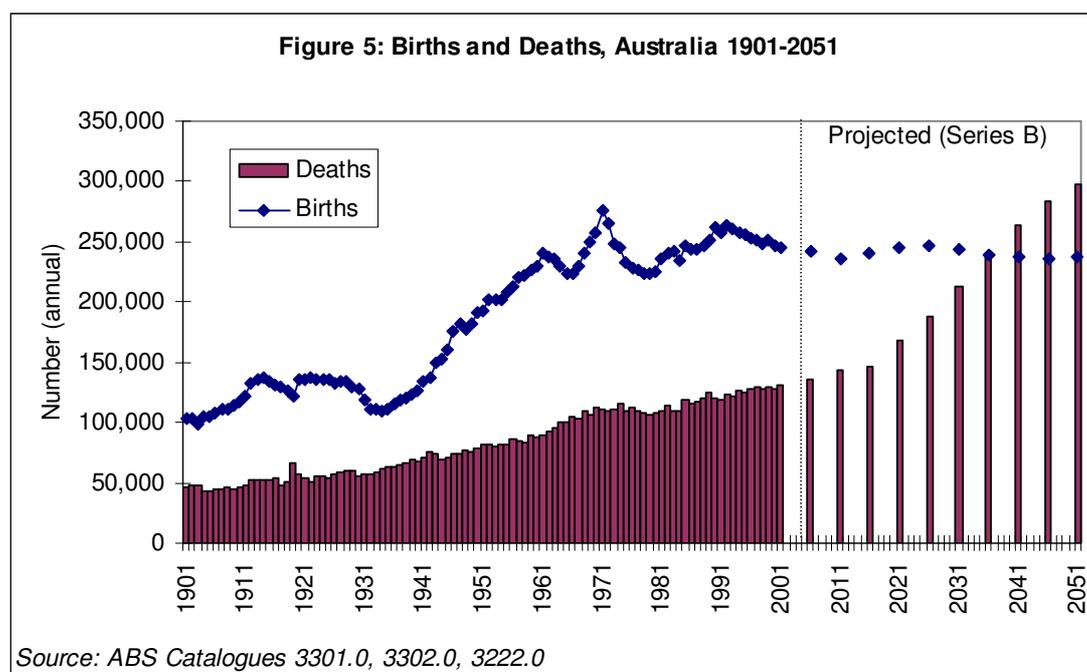
Table 3: Ratio of Elderly (65+ Years) to Children (0-14 Years), 2005 and Projected to 2025, By State/Territory, Medium Variant

	2005	2010	2015	2020	2025
SA	0.8	1.0	1.2	1.4	1.7
TAS	0.7	0.9	1.2	1.4	1.7
VIC	0.7	0.8	1.0	1.2	1.4
NSW	0.7	0.8	1.0	1.1	1.3
QLD	0.6	0.8	1.0	1.3	1.5
WA	0.6	0.7	0.9	1.1	1.3
ACT	0.5	0.6	0.8	1.0	1.1
NT	0.2	0.2	0.3	0.4	0.4

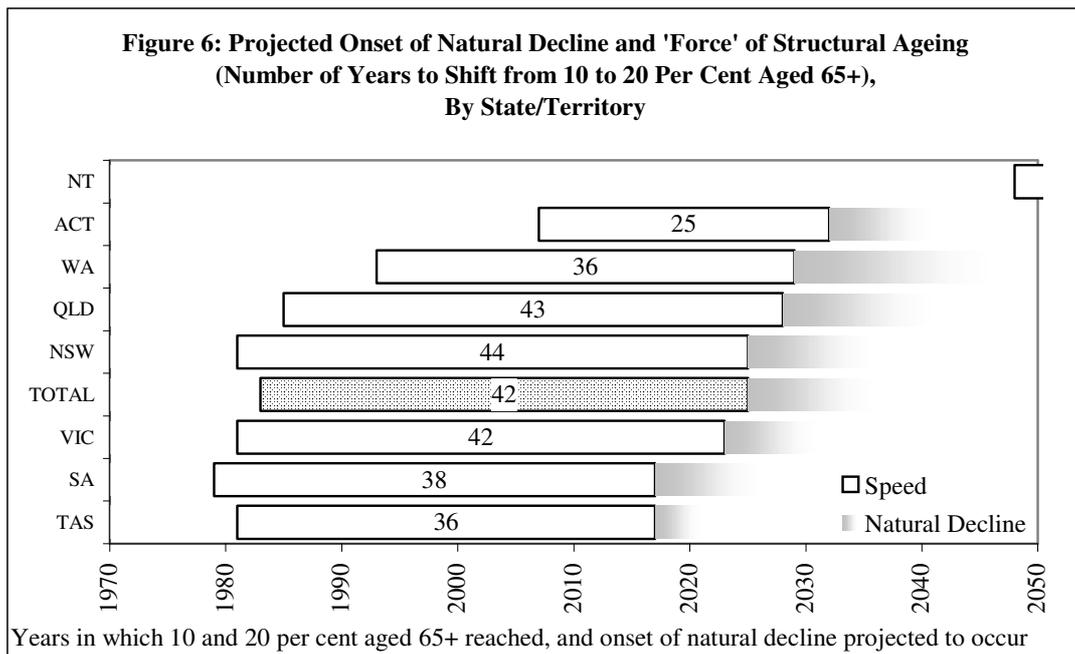
Source: ABS (2003) Catalogue 3222.0, Medium Variant

Notes: Shaded cells denote more elderly than children

Natural Decline: The shift to more elderly than children foreshadows the third dimension of population ageing, that of natural decline. As can be seen from Figure 5, the initial driving force of natural decline is not low fertility *per se*, but rather the increased numbers of deaths *vis-à-vis* the slowly declining numbers of births that will arise as population ageing unfolds. The significant increase in numbers of deaths from the mid-2020s reflects the arrival of the baby boom generation at old age (75+). Again it should be recalled that these data include the effects of migration, inclusive of around 100,000 net international migrants per year (medium variant), and any births they may generate. Thus it would take a substantial increase in net international migration to prevent the Australian population entering natural decline.



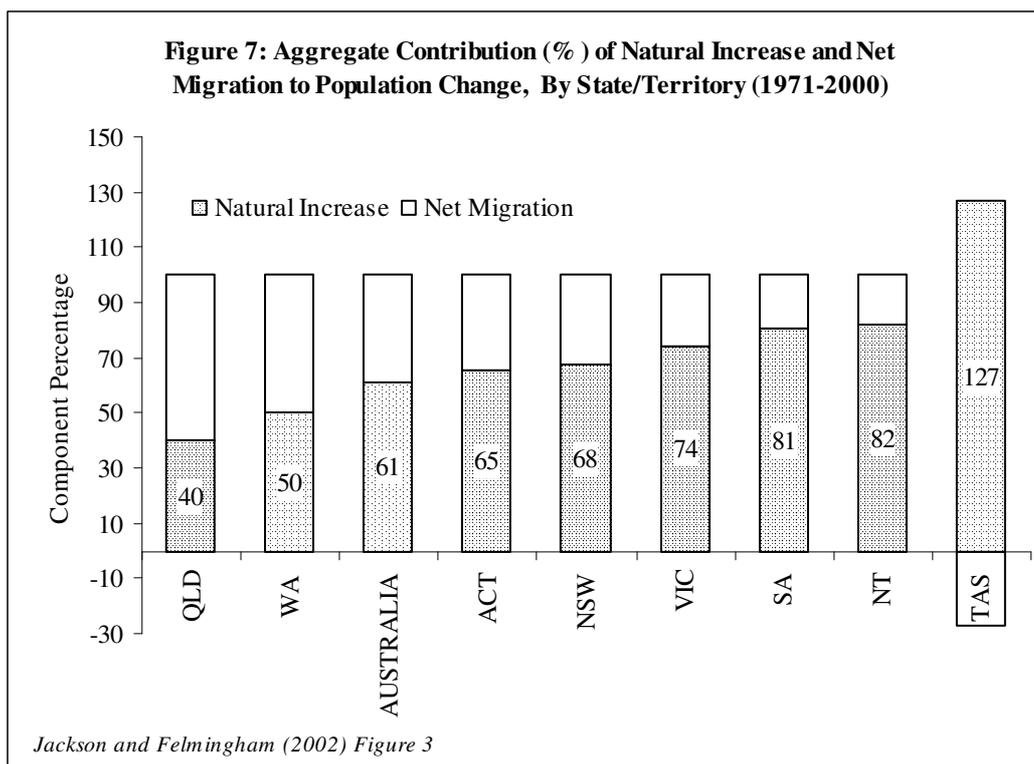
The demographic diversity of Australia's States and Territories will again come into play as the shift to natural decline unfolds. Reflecting the 'ageing line up' of States and Territories indicated in Table 2, the crossover will occur somewhat earlier in South Australia and Tasmania, and much later in the Northern Territory, the ACT, and Western Australia. Figure 6 gives an indication of these timeframes. The shaded area to the right of the bar for each state indicates the shift from natural increase to decline, while the bar itself and the number noted on it pertains to the 'force' of ageing (the speed with which each state/territory will transit from 10 to 20 per cent aged 65+ years). As noted earlier, these timeframes span a number of decades, an important feature of Australia's population ageing which is not at all well understood. Instead, population ageing is generally perceived of at the national level. The reality of this situation will probably not become clear until the first regions begin to enter natural decline, whereupon it will become clear that all future growth will depend upon migration. The situation will be particularly pertinent for Australia's two oldest regions, South Australia and Tasmania, as neither has had strongly positive experiences of migration over the past several decades. It will also be acutely felt by the first local government areas to experience natural decline, in many cases well ahead of the bulk of other local governments in their regions. Among many others, the changes have important implications for the funding arrangements currently overseen by the Commonwealth Grants Commission and Local Government Grants Commissions, in particular the fact that population-related funding is based on current (or recent) population data that does not build in projected change.



Source: Jackson and Felmingham 2002, Figure 2

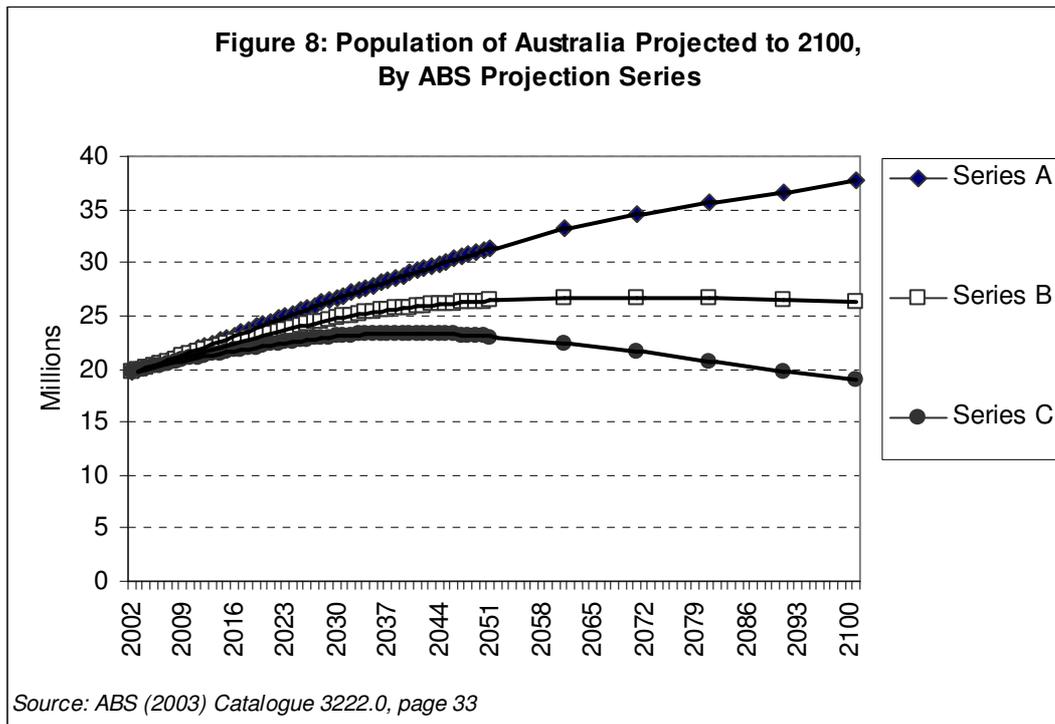
Notes: Constructed from ABS Population Estimates, Catalogue 3235.0, various years; and ABS (2000) Population Projections, Catalogue 3222.0, Medium Variant
Force' not shown for the Northern Territory as it will only reach 10 per cent around 2047

Absolute decline: The shift to natural decline will for many regions usher in the fourth dimension of population ageing, absolute decline (or at least, zero growth). This occurs when the numbers of migrants are insufficient to counter the loss of natural increase. As Figure 7 indicates, during the past three decades (and indeed for most of Australia's history), natural increase has been the dominant cause of growth for most states and territories. The loss of this component will almost certainly see those regions that have been most dependent on it, enter zero growth or absolute decline.



As in the case of endeavouring to project the approximate date of onset of natural decline, projecting that of absolute decline is similarly an exercise that is fully dependent on whether the underlying assumptions about birth, death and migration rates actually prevail. However, as Figure 8 indicates (and with reference to the preceding discussion), there can be a fairly high degree of confidence that it will occur—it is just ‘when’ that is uncertain. According to the Australian Bureau of Statistics (2003: 32-33), if the Australian birth rate falls to 1.6 by 2011 and then remains constant, if life expectancy continues to improve, but at a decelerating rate, and if Australia can gain around a net 100,000 international migrants every year, the population will peak around the 2070s (at around 26.7 million), and then begin a very slow decline (Series B). Alternatively, if the birth rate falls to around 1.4, if life expectancy continues to improve, but at a decelerating rate, and if Australia gains a net of only 70,000 international migrants each year, the population will peak in the 2030s (at around 23.3 million) and then steadily decline, falling to 18.8 million by the end of the century (Series C). Only if migration levels and/or the birth rate can be raised substantially can the population be expected to grow significantly, or to continue to grow over the longer-term. For example, a combined birth rate of 1.8 and

an annual net international migration gain of 125,000 would see the population grow to some 37 million by the end of the century (Series A). However, even under these conditions, the annual growth rate would slow to a mere 0.27 per cent per year by 2100, and absolute decline soon thereafter is implied. In short, Australia's population clock cannot go on ticking for much longer.



Projecting the onset of absolute decline for the States and Territories is somewhat more fraught, as this depends additionally on the distribution of migrants to each region. However (and referring back to Figure 7), it can be fairly confidently assumed that where natural increase has been the major contributor to growth, such as in South Australia, Tasmania, and Victoria, the 'threat' of absolute decline will become a reality within a matter of decades. Only a substantial increase in migration to these regions could avert this scenario. Indeed, the fact that natural decline will soon affect even Victoria, which typically receives around one-quarter of Australia's international migrants, is a useful illustration of the inexorable force of population ageing.

Table 4 gives an indication of the approximate onset of absolute decline for the States/Territories, according to the ABS (2003). Only under the Series C scenario of 70,000 net international migrants (and birth rates falling to around 1.4) would most

Australian States/Territories be experiencing this outcome by mid-century. However its projected onset under Series B for both Tasmania and South Australia, and even under Series A for South Australia, is evidence of its ‘nearness’. As implied earlier, growing numbers of publications attest to the long-term (and even medium-term) impossibility of resolving ‘the problem’ via migration (e.g. United Nations 2000a; Wilson 2001; Lutz, Sanderson and Sherbov 2001). Still others question why smaller populations will be a problem (e.g. McNicoll 2000). However, in the short-term, while government policies value and reward population growth, and too-rapid population decline would mean unmanageable diseconomies of scale, it is clear that the near future will be one of enormous competition for migrants, especially the skilled (Annan 2004; United Nations 2000b). The question is, will there will be enough (skilled migrants) to go around.

Table 4: Projected Onset of Absolute Decline by State/Territory and ABS Projection Series

	Series A	Series B	Series C
Tasmania	...	2021-2031	2001-2011
South Australia	2041-2051	2031-2041	2021-2031
Victoria	2041-2051
Western Australia	2041-2051
New South Wales	2031-2041
ACT	2021-2031
Northern Territory	2031-2041
Queensland
Australia	...	2071-2081	2041-2051

Source: ABS (2003) Catalogue 3222.0

Notes: Projections for states go to 2051 only, thus ... denotes population not projected to enter absolute decline before 2051. Total projections go to 2100, thus ... denotes total population not projected to enter absolute decline before 2100.

Conclusion—main implications of the four dimensions:

In lieu of a summary section, Table 5 provides a brief outline of the main implications of each of the four dimensions of population ageing. Note that the items listed are in no way definitive; rather they should be used to assist in the identification of specific implications for specific institutions.

Table 5: Broad implications of the four dimensions of population ageing	
Numerical Ageing	<ul style="list-style-type: none"> • Guaranteed sizeable increase in the <i>numbers</i> of elderly. • In the short to medium term, the ‘young old’ will seek leisure activities/goods and services. They may seek investment properties and/or to change houses—there could be a ‘baby boomer effect’ behind the current housing boom. • Irrespective of improvements in health (i.e. declines in the proportion of each successive age group with ill health), there will be an enormous increase in demand for health and age care services—there will simply be more older people. • Demand is likely to increase for many goods/services, such as heating, air conditioning, public transport (note that the elderly use the transport system at different times of day to the working age population).
Structural Ageing	<ul style="list-style-type: none"> • While fertility continues to fall, an increase in the <i>proportion</i> of the population at older ages and decline in the proportion (and number) at younger ages is assured. • The supply of numbers entering primary and secondary school, then higher education, will decline, with broad implications for the education industry. • There will be more people leaving the labour market at older ages than entering it at younger ages; problems for recruitment and succession; contraction of the labour market (both relative and absolute); probable competition between labour markets and tertiary institutions (for the same young people) that could see participation in higher education fall; neighbouring regions may have increasing difficulty recruiting their labour force(s) from each other. • Increased demand for elder-oriented goods/services from numerical ageing could see local employment situations for working age people improve—unemployment should fall and incomes (and initially labour costs) should rise. • The more numerous older generation may have increasing difficulty selling homes (and shares?) to the less numerous younger generation. • Intergenerational tensions will develop between the demands of the elderly (for walking paths) and the young (for playgrounds)
Natural Decline	<ul style="list-style-type: none"> • Once natural decline begins, populations will grow—or remain constant—from migration only. Most international migrants will not come from historical sources (e.g. Europe)—this will cause an acceleration in change of Australia’s ethnic composition. Australia already has one of the highest <i>per capita</i> annual migration intakes (5 per 1,000; the US takes less than 1.5/1000). This has implications for increased racism/intolerance; also settlement issues. • States and local governments are generally ‘rewarded’ for growth. These policies (developed during natural growth) need to be revisited, as natural decline will bring rapid diseconomies of scale. Funding is also based on ‘recent past’ population data—regional differences in the speed of ageing will disadvantage many regions.
Absolute Decline	<ul style="list-style-type: none"> • Same as natural decline, only more pronounced

It goes without saying that these changes will present enormous challenges to all levels of Australian government and business. Approaching them by considering population ageing in its four dimensions provides a useful basis for strategic planning. Most importantly it permits us to have confidence in the extent to which each dimension is likely to unfold, and when. From such a position we can understand Jackson and Thompson's (2002) argument that the best way forward is via an A-B-C understanding of population ageing. **A**cept that it is coming to an institution (or other entity) near you, that there is not going to be a return to a youthful population in the life time of (at least most) people alive today. **B**uffer the transition by developing appropriate short, medium, and long-term policies that will ameliorate the 'worst' effects, and maximise the opportunities, and **C**elebrate. What an achievement! The world has never before seen (or maybe we should say, 'achieved') societies in which there are more elderly than children. Let's stop wringing our hands about how we are going to 'cope' with 'the problem', and start coming up with innovative ideas.

According to Kuné (2003), most of the costs (i.e. 'problems') of population ageing should be able to be offset by either a small increase in employment levels—which in Australia should be relatively easy to attain given that little more than half of the working age population is currently 'working', or a minor increase in labour market productivity (for the European Union, for example, in the vicinity of 0.3 per cent per year). However neither will 'just happen'; they will require proactive rather than reactive policies, among which must be 'objective, thorough and comprehensive reassessments of many established economic, social and political policies and programs' (United Nations 2000a: 4). For Australia these policies need to include an amalgamation of the currently-separate employment and immigration portfolios, so that in the future the two do not work against each other.

At State and regional level, for example as regards Commonwealth Grants Commission and Local Government Grants Commissions funding arrangements, modelling also needs to incorporate population projections, which it currently does not.⁶ The speed with which certain age groups—for example 85+ years—will grow will make it very difficult for local governments and other agencies to respond to the associated challenges in a timely manner. To adequately prepare for population ageing it will be necessary for local governments (and states) to be funded *ahead* of

⁶That is, the base populations on which the CGC's and LGGC's fiscal equalisation packages are calculated are those of the previous year; there is no inclusion of population projections.

demand, rather than after the fact. The idea may sound outlandish, but much consolation can be gained from the fact that the massive *numerical* ageing of the population is both inevitable and inexorable, and it is numerical ageing that will drive age-related demand—and opportunity. It is only the extent to which structural ageing (caused by low/falling fertility) will also continue to occur that is unknown—but even this phenomenon can be all but guaranteed to continue for some time. It is also important that responsible agencies (or their agents) learn to distinguish between these two dimensions of ageing, as the current focus on ‘population ageing’ (*per se*) as something pertaining only to (and even ‘caused by’) the elderly ignores the potentially more significant implications of structural ageing, in particular the declining proportions *and numbers* of young. Unless these dimensions are teased out and understood we have little chance of understanding, and responding *positively* to, the two final dimensions of ageing that they presage: natural and absolute decline.

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