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The benefits of an ageing population

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Summary

The Intergenerational Report (Treasurer 2002) released with the 2002 budget papers projected a large rise in the cost of public programs, attributed partly to population ageing, and argued that radical cost constraints were necessary. In Government and elsewhere there is concern that, until the situation rights itself sometime after 2050, population ageing will result in a social and economic crisis that threatens Australia's way of life and burdens the workforce of the future.

There is no doubt that, along with other industrialised nations, Australia will face population ageing over the next half century. The baby boom generation, born during the years 1946 to 1965, added to the high levels of post war immigration, will ensure that by 2051 over 6.4 million people in Australia will be aged 65 years and over compared with 2.3 million in 1999 (ABS 2003c). Whereas today the dependency ratio is five working people per person over 65, by 2041 it is projected to shrink to 2.5 working people per person over 65. Extrapolations from past and current situations *vis a vis* retired populations understandably have the potential to cause concern in the face of such large numbers of ageing Australians, but the question is, will past circumstances repeat themselves?

This paper examines the benefits that an ageing population will bring to many areas of Australian life and concludes that there is a silver lining to the fog of pessimism currently clouding the perceptions of policy makers and governments. While the costs of an ageing population are likely to be lower than has been suggested by some, the silver lining identified in the paper is a product of the many benefits and new opportunities that are likely to emerge as Australia's largest ever generation of retirees approaches the age where they have the time, the money, and the experience to play an active and important role in Australian communities.

Health

An ageing population does not necessarily mean a sicker population burdening the country with large medical and social care costs. In fact, the baby boomer generation is projected to be healthier, more active and more productive than preceding generations. In addition, advances in medical science and easier access to improved therapies will lessen significantly the burden of disease amongst older people. Australia has achieved the second highest life expectancy increase among OECD countries and there is considerable evidence that gains in healthy ageing can be improved still further by reducing risk factors for non-communicable diseases.

On average, over one-quarter of all health care costs over a lifetime are attributable to the last year of life (Wanless 2001) but the cost of this last year does not rise with age; if anything it appears to fall (Graham *et al.* 2003). The most costly patients are those who die young while health costs associated with the last year of life may actually be less in older age groups because elderly people are treated less extensively (Scitovsky 1988). Social care costs, however, do rise with age but in Australia the Government has transferred the long-term care of dependent older people out of hospitals and into less costly residential care and nursing homes. Thus social care expenditure is shifted from

the health budget to the social care budget and, increasingly and controversially, from the public to the private purse.

Wealth

The baby boomer generation is wealthier than were previous generations of retirees. A study conducted by NATSEM found that the average wealth of older Australians almost doubled between 1986 and 1997 due to the high rate of home ownership among this group and the strong growth in share prices and in the value of superannuation (Harding *et al.* 2002). This boost to prosperity has not, however, been equally distributed with the bottom quarter of the income distribution remaining both asset and income poor. Future income retirement needs should not be a major concern in Australia given that 'a sound incomes system, projected growth of superannuation assets and accumulation of private savings will ensure ... adequate retirement incomes' (Minister for Ageing 2002, p.i). With around 90 per cent of workers now in compulsory superannuation schemes, it is anticipated that the cost of pensions will only need to rise from the current three per cent of GDP to around 4.5 per cent by 2051.

Work

Thus the Australian scenario is of a populous group on the cusp of retirement, healthier, wealthier and more active than previous generations with probably a quarter of a century of life ahead of them. What will they do with this time? The Treasurer in his February discussion paper *Australia's demographic challenges* (2004) stated that current Government policy is to halt the trend to early retirement and encourage older people to remain in the workforce, thus continuing to assist productivity and contribute to tax revenue. Many workers currently contemplating early retirement will find it difficult to fund several more decades at the expected comfortable standard of living and it is likely that, given the right incentives, many older people will choose to go on working for longer. Mature age workers today have a greater capacity than previous generations to work beyond a retirement age of 60-65 years as they are healthier and better educated and the nature of work is less physically demanding.

Currently one of the biggest deterrents to older people working is the attitude of employers many of whom want their companies to project a youthful, exuberant image. This preference will, of necessity, undergo change as a result of the diminishing labour force. Some employers and labour market economists are already beginning to reexamine their assumptions that the preference for younger workers is economically rational (Lazear 1995). Age advocacy groups decry the waste of skills and experience associated with the involuntary retirement of mature age people (COTA 2001). A considerable pool of talent and ability is lost in this way because, after controlling for experience, education and type of occupation, it has been found that age does not seriously deplete workers' cognitive, perceptual or psychomotor abilities. Instead older people compensate for any decline in information processing and physical abilities by means of experience and mental and physical load-reducing strategies (Auer and Fortuny 2002).

Benefits of an ageing population

Several areas in the community will benefit from the surge in numbers of retirees who are active and healthy, independent and with time on their hands. Previously, women have provided much of the volunteer work performed in the community but today, women are in the work force in increasing numbers. At a time when the contribution of volunteers is increasingly important given the rising demand for such services, many health and welfare agencies are seeking to recruit from the growing numbers of retirees. And it appears that rates of volunteering among the baby boomers are continuing to rise compared to previous generations (Wilkinson and Bittman 2002). The gross value of all volunteering in 1997 was assessed at \$41 billion (Ironmonger 2000), equivalent to the amount the government spent on all aged care services in that year (Australian Institute of Health & Welfare 2001). Not only does the community benefit from volunteer work contributed by older Australians, but older Australians themselves also benefit. The 'young old' care for the 'old old' and in doing so, report a high level of satisfaction with their volunteer work (Cummins *et al.* 2002b).

Volunteering is regarded as one measure of social capital and thus an indicator to a healthy civil society. Organisations such as the World Bank view social capital as 'not just the sum of the institutions which underpin a society – it is the glue that holds them together' (World Bank 2003). Older people contribute to this 'glue' in other ways as well. They play an important role in supporting and maintaining informal social networks thus binding communities and families within communities.

Far from being net receivers of help and support, older people are, in fact, net providers, at least up to the age of 75 years. They provide childcare, financial, practical and emotional assistance to family members including helping people outside the household with the tasks of daily living. Such unpaid caring and voluntary work adds up to a significant proportion of GDP, around seven per cent on some measures (Ranzijn *et al.* 2002; De Vaus *et al.* 2003). Grandparenting has become an important social role in an age when people tend to have more living parents than children. Not only does it benefit grandparents themselves who find that grandparenthood is an important aspect of their lives, but it also appears to benefit grandchildren substantially.

In addition, it is likely that older communities will be more law abiding communities since older people are less inclined to commit crimes against property and people. The Australian Institute of Criminology (2002b) estimates that homicide rates will fall by around 16 per cent between now and 2050 and there is likely to be less crime altogether resulting in substantial savings in prison and policing costs in the future. Older people are involved in the community as active members of clubs with a large Melbourne survey reporting that one-third of men and one quarter of women aged 55-75 years belonged to a sporting club (Howe and Donath 1997). They also attend musical concerts, theatres and art galleries more frequently than younger people, read more and visit libraries more often. Thus it is probable that the arts will benefit from an older Australia.

Population ageing offers many opportunities for the economy to respond to the needs of older people. The ageing of the consumer market will change the emphasis, for example more golf clubs will be sold than surf boards, but the trends suggest that the mature

consumer will spend less on luxury goods and more on grandchildren, leisure and recreation (Access Economics 2001a). There is considerable market interest in how population ageing will affect urban planning in terms of housing, land use, transport, the urban environment and new technologies such as motorised wheelchairs and 'smart houses' (OECD 2002c).

Contrary to current pessimistic attitudes, satisfaction with life increases as we get older (Headey 1999; Cummins *et al.* 2002a) and the great majority of older Australians are active and view their situation positively (ABS 2003a). The fact that older people are being 'blamed' for the rise in public expenditures is an important reason to counter pessimistic views of ageing. The potential for intergenerational competition to emerge is both dangerous and counter-productive. The ageing of the population should be seen as a transition not a crisis, with opportunities as well as challenges in society's response to the ageing question. The main challenge is to promote healthy and productive ageing and to adjust societal practices and structures to include older people as contributors to society. Australia is a wealthy country with solid social and economic infrastructure. The next 20 years will see significant changes to aspects of the labour market, the health system and the aged care industry, but it will be accompanied by a wide range of personal, social and economic benefits.

1. Introduction

1.1 Transition not crisis

Australia is well-placed to meet the challenges an ageing population presents (Treasurer 2002, p. 1).

As in other industrialised countries, Australia is experiencing a demographic transition due to the large generation which resulted from high fertility and high levels of immigration in the 20 years following World War II. The Australian Bureau of Statistics (ABS) defines the 'baby boomer' generation as those born from 1946 to 1965 (inclusive) when there were 4.2 million births in Australia, the peak year being 1947. The 2001 census counted 5.5 million Australian residents considered part of the baby boom which includes the 33.9 per cent of baby boomers born overseas (ABS 2002b).

Population ageing is inevitable although there is some doubt about precise projections. Australia is distinctive among industrialised countries in having experienced a prolonged post-war baby boom (Falkingham 1997) which produced a populous generation of people who grew up in prosperous times and differ in important ways from both the inter-war generation who came before and those who have come after. Over the next few decades, this generation will begin to retire and move into their next stage of life as the 'young old'. The first wave of baby boomers turns 65 in 2011 and from then onwards there will be a rapid increase in the older age group. The ABS expects the 2.3 million people aged 65 and over in 1999 to triple to over 6.4 million by 2051 (ABS 2000b).

It is concern about this generation that is influencing Australian policies in relation to retirement incomes, health costs and aged care. For, although the projected proportion of older people in the population by 2051 (over 24 per cent aged 65 plus) remains well below that of many other industrialised countries, this shift will slowly but significantly influence Australian society.

The *Intergenerational Report* (Treasurer 2002) released with the Commonwealth Budget Papers in May 2002, projected large rises in the cost of public programs attributed partly to population ageing (the 'social burden' view) and argued that radical cost constraints were necessary to avert a future fiscal crisis. While the report acknowledged that no such fiscal crisis was imminent, it maintained that a steadily ageing population is likely to continue to place significant pressure on Commonwealth government finances (Treasurer 2002). The title of the report in conjunction with the current anxieties about population ageing resulted in much of the attendant publicity attributing rising public sector costs to the growing number of older Australians.

A significant portion of the debate about an ageing 'crisis' is prompted by demographic determinism despite the many other factors that drive societal change and public expenditures. Further, the focus is on the costs to government and the 'problem' of an ageing population while the substantial social and economic contributions of older citizens are ignored (De Vaus *et al.* 2003). The *Intergenerational Report* (Treasurer 2002) argued that increased responsibility for meeting the costs of an ageing population should be shifted from inter-generational transfers (the working population supporting

the retired population) to intra-generational self-sufficiency (people funding their own retirement and old age). This is a significant departure from the implicit 'social contract' of earlier decades whereby the young, by means of taxation, support the old in the expectation that they, in turn, will be supported by future generations. Lately the focus has been upon changing the Australian culture of early retirement. Recent policy papers from the Treasurer call for maintaining productivity growth, improving skills and educational levels and providing incentives to work longer – including ongoing changes to the retirement income system (Treasurer 2004; 2004a).

Projections into the future based upon present trends are problematic. Will future generations of older people exhibit the same characteristics as present and past generations? Or will there be a 'cohort effect' given that successive generations are the products of different experiences? Older people in the future will have encountered a different environment and undergone different experiences and so will not necessarily behave in the same way as present day older people. There are grounds for optimism that future older generations are likely to be more productive and independent than previous generations (Minister for Ageing 2002).

This paper aims to disperse the grey cloud of gloomy predictions that Australia's ageing population will bring economic and social ruin. It contends that ageing should not be equated with decline, disability and dependence; that there are positives associated with an ageing population and opportunities as well as challenges in society's response to the ageing question. Some counter balance is timely since a crisis scenario continues to surround the demographic transition, or in pejorative terms, the 'demographic time bomb', despite arguments to the contrary by many commentators.

Kinnear (2001), for example, argued that claims of unsustainable growth in pension and health care costs are exaggerated and, given prudent policies, Australia can manage the transition well. Others argue that the *Intergenerational Report* (Treasurer 2002) is unduly pessimistic, understating future productivity growth such as unemployment improvement and workforce participation and overstating future health and aged care costs (Dowrick and McDonald 2002). The Minister for Ageing in his 2002 *National strategy for an aging Australia* also took a more reassuring stance:

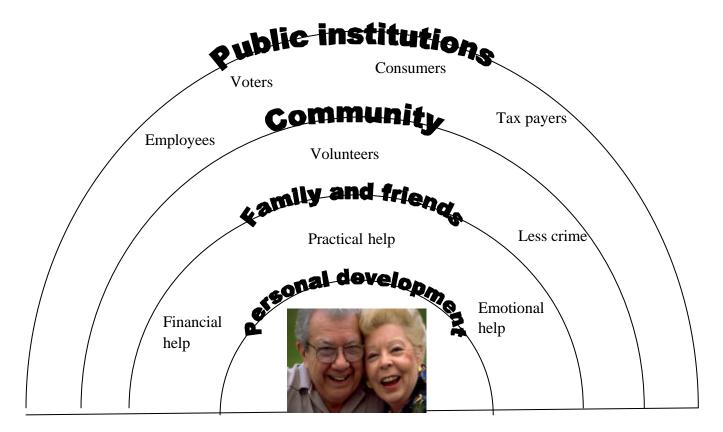
Australia's strong record of economic growth and sound economic fundamentals means that an older population is not expected to be a burden on the community. Our sound retirement incomes system, projected growth of superannuation assets and accumulation of private savings will ensure that adequate retirement incomes and quality health and aged care services will continue to be affordable in the future. Nevertheless, a broadly based strategic framework to address emerging issues associated with an ageing population is necessary to protect and enhance our position in this important policy area (Minister for Ageing 2002, p. i).

The benefits that flow from an older population (depicted in Figure 1) are considered in the discussion paper, including benefits for:

• older people themselves, such as greater personal freedom;

- family and friends, such as the practical and financial help that flows from the old to the young;
- the community, such as more volunteer hours and less crime; and
- public institutions, such as an experienced workforce and wiser consumers.

Figure 1 Older people and their contributions to the nation



1.2 Countering negative stereotypes

A 'life course' perspective considers old age as part of life. Although his view of old age is decidedly gloomy, Shakespeare expressed this vividly in the 'seven ages of man', reminding us that old age, as well as youth, is a normal stage of life:

... Last scene of all, That ends this strange eventful history, Is second childishness, and mere oblivion, Sans teeth, sans eyes, sans taste, sans everything.

These days older people protest about ageism such as 'second childhood' societal views, negative portrayals by the media, and stigmatising and condescending attitudes and treatment (Family and Community Development Committee Parliament of Victoria 1997; Minister for Aged Care 2000; Minister for Ageing 2002). Age stereotypes are countered by positive articles claiming that 'almost everything gets better after fifty', and high-achieving role models are suggested such as Mick Jagger, 60-year-old rock

star, John Howard 65-year-old Prime Minister, John Glenn, astronaut, who blasted into space for the second time aged 77 years, and octogenarians such as Emeritus Professor Frank Fenner, recipient of the Prime Minister's award for science in 2002. Growing older does not necessarily mean an end to achievements and enjoyment of life.

As a result, public policy pronouncements now seek to counter negative stereotypes by using terms such as 'successful', 'productive', 'healthy' and 'positive' ageing. Since the term 'successful ageing' appears to imply some fault on the part of those ageing 'unsuccessfully', a Victorian parliamentary enquiry preferred the term 'positive ageing' (Family and Community Development Committee Parliament of Victoria 1997, p. 15). This positive approach is the theme of current Australian government policy and thus the National Strategy for an Ageing Australia (Minister for Ageing 2002) emphasises healthy and successful ageing. Further, the country's research effort will now focus on this topic since of the four current national research priorities, the second is 'promoting and maintaining good health, with a sub-theme of 'ageing well, ageing productively' (Prime Minister 2002).

Commentators point out that population ageing has been seized upon by economic rationalists as a pretext for claims that welfare states are increasingly unaffordable, that more costs should be shifted from the public to the private purse, and that big government should be downsized (Mendelsohn and Schwartz 1993; Saunders 1996). Thus the World Bank in the early 1990s pointed to a 'looming old age crisis' with an 'increasingly heavy burden of providing for the aged' and urged that costs be shared across the 'pillars of society' (World Bank 1994, p. xiii). Conservative commentators predict an impending economic collapse arising from heavier dependency ratios and the 'burden' of supporting an ageing population (Thurow 1996). Given the range of estimates on the impact of the demographic transition upon government budgets, the OECD has canvassed strategies for the future that seek to steer a prudent course on sustainable social and economic spending (OECD 1988; OECD 2000).

The fact that older people are 'blamed' for the rise in public expenditures is an important reason to counter pessimistic views of ageing. The spectacle of intergenerational competition rather than cooperation looms. How much is the working population willing and able to pay to support a rapidly increasing older population? Such questions have seen the debate over ageing in industrialised countries become more ideological over the last decade (Peterson 1999).

Active older people and higher expectations

The societal burden view, based on previous generations of older people, is now outdated. Future generations of older people will have higher expectations of life than previously and are less inclined, as in the poem by Dylan Thomas, to 'go gentle into that good night'. The post-war baby boomer generation in most industrialised countries, being better educated, more prosperous and arguably healthier than previous generations, will age with life experiences and expectations different from earlier cohorts (Evandrou 1997). These people should be viewed as a societal resource rather than a societal burden since older people are mostly leading independent, productive and socially useful lives. For example, the great majority of people aged 65 years and over are fit, well and independent (Australian Institute of Health & Welfare 2002b).

Ageing is partly a social construct and the definition of what it is to be 'elderly' has shifted upwards as more people survive into old age. Many societal structures, however, have lagged behind demographic change. For example, the pensionable age of 65 years for men was set early in the 20th century when European life expectancy was below 50 years (Auer and Fortuny 2002). Views of old age, whether positive or negative, thus differ over time and across cultures, reflecting demographic, economic and social influences. In 18th century America, older people supposedly were treated with deference and respect (Achenbaum 1985), in part because it was rare to live into one's 70s but also because in an agricultural society, older men controlled property (the family farm). This economic control gave them the power to dominate key institutions: the family, the church, the economy, and local politics. The argument here is that economic power determines the social status of the elderly and influences perceptions on the contributions they make to society (Hooyman and Kiyak 1988).

The economic power argument implies that the more affluent Australian post-war baby-boomer generation, when compared to previous generations, will have a higher social status and exert more power as they move into old age. The baby boomers can expect to retire with substantial assets including housing, savings and superannuation all of which will provide higher disposable incomes than were available to previous generations of retirees (Access Economics 2001a; Harding *et al.* 2002). They may also exercise their 'grey power' electorally, since by 2031 over a quarter (27 per cent) of all Australians of voting age (18 years and over) will be 65 years or older (ABS 2003a).

1.3 Population ageing

Longevity should be a matter for congratulation since long life expectancy is regarded as an indicator to a successful society and an effective health care system (World Health Organization 2000). Australia, whether by good luck or good management, is among the longest living nations in the world. We can expect to live beyond our biblical span of threescore years and ten, with life expectancy for men being 76 years and for women 82 years. Life expectancy at birth increased by eight years between 1960 and 2000, from 71 to 79 years, and these added years were mostly in later life (Australian Institute of Health & Welfare 2002b). For example, mortality rates among men aged 65-69 years fell from 4.1 per 1000 in 1961 to 1.8 per thousand in 2000 (Australian Institute of Health & Welfare 2002a).

The ABS estimates (see Table 1) that the proportion of people aged 65 years and over, 12.4 per cent in 2001, will increase to 24.2 per cent by 2051, with the median age of the population rising from 35 to 44 years (ABS 1998b; ABS 2003a). Other researchers suggest that these projections are under-estimates and that the elderly population will be substantially larger. For example, if by 2027 life expectancy for women were to increase to 88.1 years rather than 85.4 years, and for men to 82.9 years rather than 81.4, then the proportion of the population aged 65 years plus will be 24.9 per cent by 2031 not 21.3 per cent (Booth and Tickle 2003).

Table 1 Age composition of the population, estimates and projections

Year	Total population (million)	Median age	Under 15 (% pop)	15-64 (% pop)	65+ (% pop)
2001	19.3	35.5	20.3	67.3	12.4
2011	21.0	38.3	18.3	67.7	14.0
2031	23.7	42.2	16.5	62.2	21.3
2051	24.9	44.1	15.6	60.2	24.2

Notes: Data for 2001 to 2051 are projections (series ii).

Source: ABS 2003a

Because scenarios for modelling population numbers and dependency ratios are based upon factors such as mortality rates, fertility levels and migration, all of which may change over time, projections far into the future are problematical. Whatever strategies are put in place, however, population ageing is inevitable and it is likely that any differences will be minor:

... [A]n increase in net immigration from 70,000 per year to 90,000 would only reduce the age dependency ratio attained in 2051 by 1 percentage point. Similarly, stable instead of rising life expectancy would lower the age dependency ratio reached in 2051 by less than 1 percentage point. The ageing of Australia's population is therefore inevitable (OECD 1999).

The challenge for the 21st century is to make these added years of life in old age as healthy and productive as possible, a challenge of global significance since by 2020 the world population of people aged 65 years and over is expected to treble (UN Population Division 2001). The environmental consensus is that the combination of population growth and intensified economic activity is outstripping the world's carrying capacity and needs stabilising as a matter of urgency (Raven 2002). The world is set on an ageing course and governments will need to include, not exclude, older people when developing socially satisfying and economically sustainable societies.

Population projections pose significant questions as to the optimal population size and demographic pattern for a country and its environmental 'carrying capacity' (Cocks 1999). Does Australia want to raise its below-replacement level fertility (currently 1.7 children per woman of reproductive age), extend life expectancy further (currently 76 years for men and 82 years for women), or increase migration above the 90,000 net migrants in recent years? An increase in the fertility rate, if that could be achieved, would raise dependency levels and take 20 years for children to reach working age, while an increase in migration levels would bring in more young adults who would age over the next 30-40 years.

This 'greying' of the population is unprecedented for Australia and thus requires new approaches, but there are international precedents in countries already successfully

managing such population shifts. For example, in 2000 all European Union countries (except Ireland) possessed older population structures than Australia (OECD 2002a). The current ten oldest countries in the world are shown below in terms of the median age of their populations (Table 2). In 2000, 40 per cent or more of the populations of these countries were aged 60 years plus compared to 16 per cent in Australia, and the median age was above 38 years compared to 35 years in Australia. Japan, Switzerland, Sweden and Denmark are not poverty-stricken or socially disrupted countries and, in 2000, they enjoyed GDP per capita above US\$25,000. The speed and extent of population ageing depends on a country's history. By 2050 others will have moved into the top ten while Australia expects to remain below the median age of these countries.

Table 2 Ten oldest countries, 2000 and 2050 (medium variant)

2000			2050	
Country	GDP per capita US\$	Median age	Country	Median age
Japan	37,544	41.2	Spain	55.2
Italy	18,500	40.2	Slovenia	54.1
Switzerland	33,303	40.2	Italy	54.1
Germany	22,814	40.1	Austria	53.7
Sweden	25,822	39.7	Armenia	53.4
Finland	23,453	39.4	Japan	53.1
Bulgaria	-	39.1	Czech Republic	52.4
Belgium	22,225	39.1	Greece	52.3
Greece	10,722	39.1	Switzerland	52.0
Denmark	30,057	38.7	Macao China	51.9
Australia	20,225	35.2	Australia	43.7

Source: UN Population Division 2001 Tables 8, 14; OECD Health data 2002 (2002a)

An anti-ageing elixir?

Although life expectancy has increased, it is unclear how long this trend will continue. Some researchers believe that the rate of human ageing can be slowed further in the future with people surpassing the modern longevity record of 122 years. The limits to life are thus uncertain and provoke a lively debate among gerontologists (Olshansky *et*

al. 1990). One definition of biological ageing is '... the accumulation of random damage to the building blocks of life – especially to DNA, certain proteins, carbohydrates and lipids (fats) that begins early in life and eventually exceed the body's self-repair capabilities' (Olshansky *et al.* 2002). These authors argue that there are probably no 'death genes' and no single mechanism of biological ageing waiting to be discovered, but rather that various interventions may prolong the duration of healthy life.

To what extent can we stave off the adverse effects of ageing? The public is often gullible about claims of an 'elixir of life' that can halt the ageing process. The frequency of such advertisements by companies promoting 'a cure for ageing' provoked the article by Olshansky *et al.* (2002) in the *Scientific American* and a statement signed by 51 top scientists on the journal website refuting such claims:

Our language on this matter must be unambiguous: there are no lifestyle changes, surgical procedures, vitamins, antioxidants, hormones or techniques of genetic engineering available today that have been demonstrated to influence the processes of ageing. We strongly urge the general public to avoid buying or using products or other interventions from anyone claiming that they will slow, stop or reverse aging.

The sombre conclusion for individuals, therefore, is that ageing is inevitable. And according to an American study (Levy *et al.* 2002), worrying about growing old may take years off your life. This study of 660 people aged 50 years and older found that people who had positive views about ageing when younger (up to 23 years earlier) lived an average of 7.5 years longer than those with negative expectations. Self-perceptions of ageing had a greater impact upon survival than a range of other factors. Thus the conclusion drawn from the above study is that encouraging positive societal views of ageing, and therefore more positive self-perceptions, may prolong life expectancy. Further, many of the chronic diseases and conditions associated with ageing (although not biological ageing itself) are, to a considerable extent, preventable or can be delayed (as discussed later) with small and achievable improvements in risk factors promising significant returns in terms of better health for individuals and a longer, healthier life.

2. Personal development

Laslett argued that we need 'a fresh map of life' to take account of 'the third age', the greatly expanded post-retirement years, indeed retirement decades now, when individuals are free from the responsibilities of child-rearing and paid employment and can expect to be healthy, fit and relatively prosperous. He saw this stage of life as offering enormous opportunities for personal development for individuals with resulting advantages for society (Laslett 1991). As lines from a poem by Robert Browning promise 'Grow old along with me, The best is yet to be'.

2.1 Satisfaction with life

Contrary to the gloomy view expressed by some, satisfaction with life increases with age; in other words, life appears to get better as we get older (Headey 1999; Cummins *et al.* 2002a). Thus a survey of 1400 older Australians aged 55-74 years reported that they identified many positive aspects of ageing: having more time and freedom; being able to do what they want; and enjoying experience, wisdom and knowledge (Howe and Donath 1997).

One such life satisfaction survey, the Australian Unity Wellbeing Index, conducts regular telephone interviews with a representative national sample of 2000 adults. The Personal Wellbeing component averages scores (on a ten-point scale) on seven aspects of people's personal lives: overall satisfaction with life, standard of living, health, achievements in life, personal relationships, how safe you feel, whether you feel part of the community and financial security (Cummins *et al.* 2002a). A recent survey showed that people's satisfaction increases with age, rising to nearly 80 per cent among the most elderly group, those aged 76 years and over (see Figure 2). Notably, this group, contrary to stereotype, expresses the most satisfaction with life, a trend that holds for all seven aspects of life satisfaction (except health) and is particularly marked in the case of personal relationships. Further, the survey shows that older people consistently score higher than other age groups where satisfaction with relationships with spouse, family and friends is concerned. The personal relationships factor is very important since it is most strongly associated with overall scores of personal wellbeing (Cummins *et al.* 2002a).

The National Wellbeing component of the Index averages the levels of satisfaction with respect to six aspects: life in Australia, the economy, the environment, social conditions, how Australia is governed, business and social security. In general, people in Australia (and also in other western nations) express less satisfaction with the situation in their country than with their personal lives. But again, despite a dip during middle age, the age groups over 55 years are generally the most satisfied (over 60 per cent satisfaction rates) with life in Australia. This contradicts the stereotype that older people are more inclined to grumble about the state of the world – on the contrary it is the middle-aged.

76.7 76.4 80 74.5 73.1 67.2 70 63.1 62.9 61.3 59.8 58.8 58.7 60 satisfaction 50 40 30 20 10 n 18-25 26-35 36-45 66-75 46-55 56-65 76+ Personal Wellbeing National Wellbeing

Figure 2 Personal Wellbeing and National Wellbeing Indices, per cent satisfied by age group

Source: Cummins et al. 2002b

Several interpretations are possible for the observed rise in life satisfaction among older people and these may operate differently in each of the three older age groups (Cummins *et al.* 2002a).

- Life pressures begin to ease as people move into their late fifties: children have left home, career pressures have peaked and financial pressures have eased.
- As people age they are more easily satisfied, either because they become calmer or because they lower their expectations. Theories of adaptation argue that people come to terms with life as they grow older, a phenomenon accompanied by a dampening effect upon each of the extremes of happiness and unhappiness.
- People with high subjective wellbeing (happier and more optimistic people) live longer and thus are over represented in the 76 plus group.

The effect is a generational rather than an ageing one in that people from earlier generations may be more easily satisfied than future older generations who may have higher expectations and so be more easily disappointed. The Australian Unity Wellbeing Index surveys have been running since 2001 only – not long enough to test the cohort effect.

2.2 Active ageing

Past social theories of ageing, such as 'role theory' and 'disengagement theory', are currently being discarded in favour of a more positive view based on the recognition that psychological, social, economic and environmental factors determine ageing

trajectories (Hooyman and Kiyak 1988). The earlier theories tended to be negative about the ageing process, equating it with loss of status and social isolation. For example, role theory postulates that throughout their lives people play many roles to assist with developing self-concepts, setting norms of behaviour and defining the individual. These roles change as people, their circumstances and environments change. Role theory suggests that older people suffer net 'role loss' when their identity as a worker or nurturing parent is lost and they fail to substitute new roles.

But positive interpretations show that different roles emerge which allow older men and women to experience 'role release' in that they are less bound by social expectations and can dare to be different (Riley *et al.* 1994). New role models are evolving and redefining 'appropriate' behaviour in old age. A woman in her 70s is no longer expected to be like Whistler's mother in the portrait, sitting in a chair, apparently solitary and disengaged from life. The characters in *Alice's Adventure in Wonderland*, by Lewis Carroll, would be less disapproving:

'You are old, Father William,' the young man said, 'And your hair has become very white; And yet you incessantly stand on your head – Do you think, at your age, it is right?'

'Disengagement theory' postulates that normative ageing involves people withdrawing from active participation in life and was based originally on a longitudinal study of older people in Kansas City which found that, although in the minority, very active people were generally happier, healthier and better adjusted than the less active (Havighurst 1963). Thus the concept of 'active ageing' has long provided an important perspective in social gerontology and urges the promotion of better physical and mental health, including participation in physical activities as well as economic, social, cultural, spiritual and civic affairs. This perspective has been bolstered by physiological evidence of the efficacy of active ageing for mental and physical health and cognition. For example, people who preserve cognitive vitality (in other words, use their brains), including undertaking mentally challenging paid or unpaid work, playing bridge or doing crossword puzzles, are less likely to decline in cognitive performance (Fillit *et al.* 2002), although it is difficult to prove which comes first (Mackinnon *et al.* in press).

Lifelong learning

The increasing numbers of older people offer a growing market for education and training. Lifelong learning is important, not only for staving off cognitive decline and furthering personal development, but also for upgrading knowledge and skills that can be used in paid employment, voluntary work or in managing one's own affairs. Research findings contradict negative stereotypes, such as the saying that 'you can't teach an old dog new tricks'. Older adults can learn and generally show no real decline in their capacity until after 75 years of age and even then can compensate, for example making up in concentration for what they might lack in speed (Mason and Randell 1997). Further, many studies demonstrate a positive impact upon both physical and mental health among those who engage in various types of further education (Minister for Aged Care 2000).

The formal education sector has been slow to respond to demographic change however. Among people aged between 35 and 64 years of age, participation rates in formal education have increased only slightly over the last decade from four per cent to five per cent for men and from six per cent to seven per cent for women (ABS 2000a). In 2001, only about three per cent of all university courses were completed by people aged 50 years and over. As discussed later, participation rates in education must be increased if older people are to adapt to a rapidly changing workplace. Mature age workers are up to the challenge but typically are offered fewer opportunities to upgrade skills or to retrain than are younger workers (Minister for Aged Care 1999c). The Universities of the Third Age (U3As) provide an impressive example of very successful programs much in demand by older people. Over 46,000 older people were enrolled in U3A in April 2002 through 153 providers (U3A 2003).

Science and technology

Science and technology also promise ways for older people to increase their active participation in society (FIAPA 2001) by:

- Providing better health care, thus extending life and arguably reducing health costs;
- Extending working life, thus increasing productivity and reducing pension costs;
- Enabling participation in society, thus strengthening civil society;
- Compensating for loss of function, thus supporting independence; and
- Facilitating people's involvement in social networks, thus strengthening family and community ties.

Information technology, such as computers and Internet access, can open up opportunities for older people. The use of computers and access to the Internet has spread quickly in Australia but a great deal more could be done to close the 'digital divide' between age groups so that older Australians can access information technology (ABS 2001b). By the end of 2000, around 66 per cent of all adults in Australia used a computer (either at home or at work), and 50 per cent accessed the Internet, but of those aged 55 and over, only 32 per cent used computers and only 19 per cent accessed the Internet. Australia lags behind some other countries, such as Sweden, in Internet access for older people (National Office for the Information Economy 2002).

Internet access can overcome functional and geographic barriers and open up many avenues, including business, banking and leisure, as well as access to health information (Yellowlees 2001). Thus seniors advocacy groups are campaigning for technology expansion, financial support and training opportunities to allow older people to take advantage of information technology (Scott 1999). Several state Councils on the Ageing (COTAs) are supporting or setting up classes for teaching older people how to use computers and access the Internet. The view that older people are technophobes is misplaced since, for example, the baby boomer generation, with decades of technical

experience, do a considerable amount of their shopping from home over the telephone or via the Internet (Minister for Ageing 2002).

2.3 A healthier life?

Developed countries are concerned to lighten the demographic 'burden' associated with greater numbers of people living longer in old age by promoting their health and independence and hence reducing claims on pension and health budgets. In April 2002 the Second World Assembly on Ageing, one of a number of international forums, called upon countries to implement strategies to ensure that older people remain healthy and productive members of society for as long as possible (United Nations 2002). Australia's *National Strategy for an Ageing Australia* calls for the promotion of 'healthy ageing' which implies 'both protection from disease and the achievement of optimal well-being in spite of specific conditions or disability' (Minister for Aged Care 1999a). A recent government report called for strategies to produce an additional ten years of healthy and productive life expectancy by 2050:

This paper presents a vision for an active and productive Australia in which people not only live longer but live longer in good health, staying mentally and physically active and able to participate and enjoy life until they die at an advanced old age (Prime Minister's Science Engineering and Innovation Council 2003, p. 2).

Self-rated physical and mental health

Contrary to stereotypes, the great majority of older Australians are active and healthy and view their health positively (ABS 2003a). Table 3 shows that even among people aged 75 plus, 67 per cent of women and 66 per cent of men rated their health as good, very good or excellent, although high ratings do decline with age. Despite this measure of health being self-rated, it is a valid and reliable indicator of actual health status. Meta-reviews of over 40 studies have found that older people's perceptions of their own health are as significant predictors of their later mortality as more objective measures of health status (Idler and Benyamini 1997; Benyamini and Idler 1999).

Table 3 Self-rated health, by age and sex, per cent

	Females				Males			
Rating	45-54	55-64	65-74	75+	45-54	55-64	65-74	75+
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Excellent/very good	58.2	48.7	41.2	38.2	54.7	45.0	36.8	34.6
Good	26.7	31.9	35.5	29.0	28.9	30.7	33.3	31.2
Fair/poor	15.2	19.4	23.2	32.8	16.4	24.2	30.0	34.2

Total	100	100	100	100	100	100	100	100

Source: Australian Institute of Health & Welfare 2002b, Table A12.1.

Excluding the high rates of dementia that afflict about one-quarter of people aged 85 years and over, mental health surveys reveal fewer mental disorders among the old than the young. During the 12 months prior to the 1997 ABS National Survey of Mental Health and Wellbeing, the reported prevalence of mental disorders was generally lower in older age groups (as shown in Table 4). Older people suffer fewer anxiety disorders such as panic attacks and obsessive-compulsive symptoms, fewer affective disorders such as depression and bipolar conditions, and less substance abuse such as harmful alcohol use and drug dependence. Some researchers argue, however, that the prevalence of depression among older people is under-estimated, while suicide rates do increase among elderly men (Australian Institute of Health & Welfare 2002b).

Table 4 Prevalence of mental disorders, per cent of age group

Age groups	18-24	25-34	35-44	45-54	55-64	65+
	(%)	(%)	(%)	(%)	(%)	(%)
Anxiety disorders	11.2	9.8	11.4	11.9	7.8	4.5
Affective disorders	6.7	6.6	7.2	6.4	5.0	1.7
Substance use disorders	16.1	11.3	8.2	5.3	3.2	1.1

Source: Australian Institute of Health & Welfare 2002b, Table A16.2.

Better health

Australia has achieved the second highest life expectancy gain (after Japan) among OECD countries with a 44 per cent decline in age-standardised mortality since 1970 (OECD 2001). There is considerable evidence that gains in healthy ageing can be made by reducing risk factors for non-communicable diseases and by promoting protective effects, thereby reducing the burden of disease (the number of years of life lost to premature mortality and disability) and its cost (Mathers *et al.* 1999). While better treatment is available in old age, preventing or delaying disease and disability is even more desirable. The aim of promoting healthy lifestyles is to counter the increase in non-communicable disease in a rapidly greying world (United Nations 2002).

Australia has identified seven National Health Priority Areas that are amenable to interventions likely to produce health improvements: cardiovascular health, cancer, mental health, injury prevention, diabetes mellitus, asthma and arthritis (Australian Institute of Health & Welfare 2002a). The main causes of death among people 55 years and over are cardiovascular diseases and cancers while the main causes of disability are mental disorders, central nervous system and sensory deficits and chronic respiratory diseases (Australian Institute of Health & Welfare 2002a). The generally declining health status associated with ageing clearly must count as a negative but at least some

conditions do improve with age, notably schizophrenia, and the incidence of a few diseases such as multiple sclerosis declines.

The National Health Priority Areas aim to reduce mortality and morbidity rates further in areas such as stroke, some cancers, and diseases of the digestive system. For example, cardiovascular disease, despite health gains over the last few decades, remains Australia's leading health problem and the main cause of premature adult mortality. Of this group of diseases, ischaemic heart disease (mainly heart attacks and angina) accounts for the major share of the burden of disease among those aged 65 years and over (33 per cent of the disease burden for men and nearly 23 per cent for women). Over 80 per cent of the adult population demonstrate some risk factor, for example elevated plasma cholesterol, that could be improved (Australian Institute of Health and Welfare 2002c). In a second area of potential improvement, much can be done to reduce the sensory losses in vision and hearing that account for around 25 per cent of the disability burden of those aged over 75 and include the early onset of myopia associated with later vision losses (Australian Institute of Health and Welfare 2002c).

Among adults, the main risk factors associated with chronic diseases are poor diet and nutrition, low physical activity, tobacco use, alcohol misuse, high blood pressure, high blood cholesterol and excess weight (Australian Institute of Health and Welfare 2002c). The prevalence of these factors generally increases with age (except for smoking and heavy drinking) and thus offers some scope for a reduction in these risks. Age-related trends over time have improved for some risk factors, such as smoking, but not for others, such as excess weight (Figure 3).

Table 5 Health risk factor trends among the older population

Positive trends	Negative trends
Less smoking	Rising levels of obesity
Less risky alcohol consumption	Less physical activity
Declining prevalence of high blood pressure	Little improvement in high blood cholesterol
Higher consumption of fruit and vegetables	Impaired glucose tolerance
Greater prosperity	Greater income inequality

Smoking, of all the risk factors, has the greatest adverse impact upon health. Tobacco smoking increases the risk of lung cancer, heart and respiratory disease and various other diseases and it is encouraging that fewer adults now smoke and increasingly quit smoking as they get older. Between 1989 and 1995, the prevalence of smoking among older people dropped from 17 to 14 per cent for men and from 11 to nine per cent for women (Australian Institute of Health and Welfare 2002c). Preliminary results from the National Health Survey 2000 indicate that around 36 per cent of males and 28 per cent

of females aged 18-34 years smoked compared with seven per cent of males and five per cent of females aged 75 years and over (ABS 2002c). Given the lengthy time lag between exposure and disease, the challenge for the future is to reduce smoking among younger people who are accumulating damage that will manifest itself mostly after age 45.

In contrast to positive trends on smoking, rising levels of obesity are a negative factor. Being overweight or obese is an underlying risk factor for many conditions such as heart disease, some types of cancer and adult onset diabetes. Around 60 per cent of the adult Australian population is overweight or obese with dramatic gains in weight levels occurring in all ages over the past 15 years: being overweight currently peaks in the 50s and 60s, and threatens to undo some previous health gains (Australian Institute of Health and Welfare 2002c, Table 15.1). More exercise and better nutrition (more output and less input) offer scope for a considerable health gain but involve changes in both personal behaviours that impact adversely upon health and disability in old age and the environment that militates against healthy behaviours. In 2000, 46 per cent of older Australians failed to undertake physical activity at a level sufficient to achieve health benefits including the optimal protective effects for a variety of disability conditions such as falls prevention, musculoskeletal strength, osteoarthritis and osteoporosis (Australian Institute of Health and Welfare 2002c).

It is not known how the positive and negative trends in health-related behaviours will play out over time. Will our modern 'obesegenic' environment (motor cars, calorieladen foods) produce in the future more non-communicable disease such as cardiovascular disease and diabetes? Or will a fitter, more active and better-educated population stave off the effects of ageing with less disease and disability in old age than previous generations?

Better treatment

Older people have benefited from greatly expanded treatment opportunities over the last few decades and these advances are likely to continue, thus extending life expectancy and hopefully quality of life. Significantly improved medical treatments are available given the greatly expanded range of drugs, such as for high blood pressure, and safer opportunities for less invasive surgical treatments, such as 'key-hole' surgery. Thus older people are benefiting from new health technologies, less invasive treatments, and less 'ageism' where the availability of these treatments is concerned. In addition, a new era in diagnostics will facilitate prevention and early treatment of the non-communicable diseases associated with ageing.

Health gains are achieved by means of both population health interventions and better clinical treatment. While the life expectancy gains earlier this century, mainly among the young, have been attributed in large part to public health interventions such as clean water and immunisations, the life expectancy gains in recent decades, mainly among older people, are in part due to improved medical knowledge and technology, although the relative contributions are a matter of debate. For example, a US study has estimated that 25 per cent of the decline in deaths from heart disease over the last three decades can be attributed to primary prevention and 71 per cent to improved treatment (Fett 2000). The decline in deaths from conditions amenable to medical care has contributed

substantially to an overall improvement in life expectancy in recent decades, although the middle-classes have benefited more than the poor (Mackenbach 1999). Around two-thirds of the seven-year gain in US life expectancy since 1950 is attributed to improved medical treatment (Bunker *et al.* 1994).

Will we live longer but enjoy it less?

To what extent will the extra eight years of life in Australia be healthy and productive years? The answer to this question will have a profound impact upon older people and their families as well as upon public expenditure. The current policy focus aims to reduce the ill-health and disabilities that mar those later years of life. Currently, Australian men can expect that 13 years, mostly at the end of life, will be affected by ill-health and disability, and women can expect 24 years to be so affected (Australian Institute of Health & Welfare 2002a).

Two contrary views predict what might be in store for people living to an increased old age. The optimistic view, the 'compression of morbidity' thesis, postulates that disability and illness will occur only in late old age just prior to death (Fries 1989). This prognosis suggests less prolonged medical care in old age and less consequent expense. On the other hand, the 'Medawar hypothesis' predicts that a longer life expectancy will allow late-acting deleterious genes to take effect and that old age will be a time of 'deferred degenerative disease' (Olshansky and Ault 1986). This pessimistic view proposing the 'expansion of morbidity' theory (Brody 1985) postulates that these extra years will be marred by illness and disability.

Are disability levels among successive older cohorts falling, remaining the same or rising? The outlook is optimistic. Research from the US predicts that levels of chronic disability among the elderly population will decline by 1.5 per cent per year because many risk factors for chronic diseases are showing improvements (Singer and Manton 1998). A recent projection for the UK, based on changing levels of fitness in successive generations, predicted that the total burden of disease would fall by two thirds by 2051 (Khaw 1999). International research, using a range of data, concludes that rates of moderate and severe disability, but not mild disability, among older people are static or declining and hence there is no evidence for the 'expansion of morbidity' thesis (Crimmins *et al.* 1997; Jacobzone 1999; Evans *et al.* 2001).

Disability surveys in Australia, however, have produced little evidence so far of a decline in age-specific disability rates (Australian Institute of Health & Welfare 2002b). The number of years expected to be disability-free at age 65 years remained static between 1988 and 1998, at around 6.7 years for men and slightly increased at 8.6 to 9.0 years for women (ABS 2003a). Recent research re-analysing the last three Australian disability surveys conducted between 1988 and 1998, suggests that two-thirds or more of the increase in life expectancy over that decade was accompanied by disability (Davis *et al.* 2002). The Australian trend is not consistent with that of other industrialised countries, although, given that definitions and measures of disability vary, it is difficult to establish similar baselines for cross country comparisons. Thus it is not yet clear to what extent the extra years of life in Australia will be disability-free years.

3. Family and friends

Older people place great value on their relationships with spouse, family and friends. Since added years of life prolong a person's relationships with others whose lives are also extended, the result is an important and continuing source of fulfilment (Hooyman and Kiyak 1988). This belies the myth that older people are typically lonely and alienated from family and friends. Older people play an important role in supporting and maintaining informal social networks and thus provide the 'social glue' that binds three and even four generation families. 'Family ties, the giving and receiving of support, having fulfilling family roles, and caring are core family concepts for older Australians' (Minister for Aged Care 2000, p 9). Over 70 per cent of older people live with others usually a spouse, 20 per cent live alone, and the eight per cent who live in non-private dwellings including residential care are mostly aged 75 years and over (Australian Institute of Health & Welfare 2002b).

The demographic balance between generations is shifting. For the first time in history, the average married couple in the US has more living parents than children (Preston 1984). Further, a pattern of mutual obligation may be arising with children dependent for longer on their parents, and older people dependent for longer on their families as their life span increases (Minister for Aged Care 2000). Family patterns in Australia are changing with the significant demographic shifts that include the rapid growth of the multi-generational family, later marriages and fewer children, and increased family breakdown and re-formation, all over a much longer lifetime.

These are complex trends and the inter-play of factors is difficult to interpret or to project far into the future. This section therefore concentrates upon three positive areas with respect to family relationships in an ageing population. First, a great deal of community care is by older people for older people. Second, assistance flows mainly from older people to their adult children. Third, older people greatly value their role as grandparents and are appreciated in turn.

3.1 Older people caring for older people

Married couples expect to enjoy their retirement years together. Earlier research suggested that retirement involved some marital dissension, given the scenario that the man retires from work to become an intruder in his wife's domestic domain, but times are changing. First, longitudinal studies show that the initial conflict following retirement resolves as a couple re-negotiates territorial issues and the majority of both men and women report experiencing the same or greater marital harmony a few years after retirement (De Vaus and Wells 2003). Second, an increasing number of older women are in the workforce, which may blur the traditional division of labour where the wife runs the home, considering it 'her domain', and resents the intrusion of her retired husband and the disruption he causes. However, time use surveys indicate no significant re-working of gender roles among the current generation so far, and no greater equality in the way domestic tasks are performed. With their increased leisure status, retired married men spend more time on outside domestic work and other leisure pursuits but do very little extra housework, while women increase the time they spend on domestic work and other leisure pursuits (Healy 1988; De Vaus and Wells 2003).

An ageing population will require increased formal services such as home help and residential care, but only for the minority and usually only towards the end of life, a need that will, however, create workforce opportunities by expanding service jobs. The rates of severe activity restriction are quite low, under 25 per cent, until after age 75 years but by age 85 years have risen to over 50 per cent (Australian Institute of Health & Welfare 2002b). In 2001, the number of people receiving assistance through the Home and Community Care Program (such as home help and delivered meals for dependent people living in their own homes) equated to about 23 per cent of people aged 75 years and over, the biggest group of users being elderly women (Australian Institute of Health & Welfare 2002b). To some extent, these services are a substitute for family care and health and welfare policies over the last two decades have stressed the importance of supporting the informal care provided by family, friends and neighbours. Community care is predominantly family care, provided mostly by people in their late 50s and above to an elderly parent or a spouse and consists, therefore, of older people caring for older people.

The Survey of Disability, Ageing and Carers estimated that most primary carers of older people were over the age of 65 years, with 39 per cent aged 65 years plus and 82 per cent aged 45 years. According to the ABS definition, these people provide informal assistance to someone with a disability who has needed help with self-care, mobility or verbal communication for at least six months (Australian Institute of Health & Welfare 2002b, p.42). Most carers aged 65 years and over provide care to another older person, 75 per cent care for their partner and ten per cent for a parent. Over two-thirds of primary carers of older people are women, partly because of their socially conditioned role as carers and partly because they outlive men so that an elderly wife is likely to look after her husband when he is disabled or terminally ill. Increasing life expectancy does make it more likely that one partner will outlive the other and be left alone at more advanced years.

3.2 Providers of help to adult children

Contrary to the belief that older people are recipients rather than providers of help, intergenerational transfers of various kinds flow substantially from older people to their adult children. According to a large Sydney survey conducted in 1981 (Kendig 1986), older people were more inclined to be the providers rather than the recipients of many kinds of support. They were more likely to have given financial support, were twice as likely to have been providers as recipients, and nearly half helped someone outside the household with the tasks of daily living. Data from a more recent survey of Australian families also show that adult children are more likely to receive help from their older parents than to give it (De Vaus and Qu 1998).

The ages between 55-64 years are the peak years for providing financial support to other family members (Minister for Aged Care 2000). On average, people aged 65-74 are net providers of private financial transfers, only becoming net receivers when past the age of 75 years. Families therefore establish patterns of reciprocity for financial, practical and emotional help between older and younger family members, with the balance changing over the life course. American studies, for example, have found that parents are the most important sources of support for adult children coping with a variety of life crises such as divorce, early widowhood and grief (Hooyman and Kiyak 1988).

Extrapolating from interviews with nearly 400 South Australians aged 65 and over, one study estimated that the value of the work that all older South Australians performed for others outside the household amounted to \$1.38 billion, not far below the \$1.8 billion cost of aged care in that state (Ranzijn *et al.* 2002). Of this sample, over ten per cent made direct financial loans mostly to children, 15 per cent paid directly for items such as car repairs, and 29 per cent provided child care, mostly for grandchildren. The study found that older people devoted substantial time to productive work, around 44 hours per week among those aged 65-74 years. Researchers from the Australian Institute of Family Studies similarly estimated that people aged over 65 years across Australia contribute almost \$39 billion per year in unpaid caring and voluntary work, or, if one includes those aged 55 to 64 years, \$74.5 billion, an amount which compares to a total GDP for Australia in 1997 of around \$550 billion (De Vaus *et al.* 2003). Thus older people are very busy looking after themselves and other people, both within and without the household, and many are active in voluntary work in the community. The authors conclude that:

These results show that older people are not a drain on society. The evidence shows that most older people of all ages are capable of making substantial contributions, and there is no reason to suppose that the generations of the presently middle-aged will not likewise contribute as they themselves become older (Ranzijn *et al.* 2002).

3.3 Grandparenting

Families with grandparents are now the norm rather than the exception as was the case a century ago. With an extending life span, older people generally expect to become grandparents although they have fewer grandchildren. Conversely, children in increasing numbers of families now have the advantage of contact with grandparents. Australian statistics are not available, but the majority of older people in the US are grandparents and over 75 per cent see at least one grandchild every week or so (Hooyman and Kiyak 1988). The increasing importance of grandparents has meant that this long-neglected role is beginning to receive some research attention both in Australia and internationally.

Contemporary grandparents are more active, healthier and wealthier than their own grandparents were and have more time, energy and money to devote to their personal interests including grandchildren. Although few grandparents now live with grandchildren, they are often called upon to 'help out' with their care. Further, studies report that grandparents generally offer grandchildren unconditional love, which their parents, perhaps because of their parental roles and other responsibilities, may be less able to do (Hooyman and Kiyak 1988).

ABS childcare surveys point to the social and economic importance of grandparents in child rearing since they provide a substantial amount of informal childcare. In 2002, 49 per cent of children aged under 12 years received some kind of formal or informal childcare in the week prior to the survey interviews, with an earlier survey revealing that the main providers of informal care were grandparents, particularly where younger children and infants are concerned (ABS 2003b). Indeed, many grandparents in Australia are bringing up their grandchildren since more than 27,000 children under the

age of 15 years live exclusively with their grandparents, more than twice the number of children living in foster care (COTA National Seniors 2003).

Research from the US and the UK (discussed below) highlights the mutual benefits of this situation for both grandparents and grandchildren. Surveys of older people report that the great majority value grandparenthood as one of the most important aspects of their lives, are in contact with grandchildren at least once a week, are involved in a range of activities, and provide practical, financial and emotional support. The relationship also appears to confer a substantial benefit on grandchildren and, while largely untested, is said to bring to grandchildren the experience of being loved and accepted, a sense of security and warmth, an historical sense of self, and a role model for the future.

A telephone survey of 1500 member-grandparent respondents, conducted by the American Association of Retired Persons (2002), reported that the great majority are in regular contact with grandchildren every one or two weeks:

- Sixty eight per cent see a grandchild;
- Eighty per cent talk to a grandchild on the telephone;
- Fifteen per cent provide child care while parents are at work; and
- Twenty four per cent provide child care while parents are not at work.

In addition, 52 per cent help with educational expenses and 45 per cent help with living expenses. The roles they shared with parents included teaching children values, entertaining children and listening to their problems. The most popular activities were having grandchildren over for dinner (86 per cent), going out for dinner (84 per cent), watching TV (76 per cent), going shopping (75 per cent) and reading to them (75 per cent), while 53 per cent said they had exercised or played sports with grandchildren in the last six months

A study funded by The Economic and Social Research Council (ESRC) Growing Older program in Britain undertook a nationally representative telephone survey of 870 grandparents and concluded that most rated grandparenthood as one of the most important aspects of their lives. Eighty six per cent considered that it contributed 'enormously' or 'a lot' to their quality of life. Seventy per cent of younger grandparents saw a grandchild at least once a week but only 46 per cent of grandparents aged 70 and above did so since contact declines rapidly after children reach ten years of age. Proximity was the strongest predictor of contact, and British grandparents see more of the children of their daughters than their sons (Clarke 2003).

4. Community

The Biblical Book of Job states that 'With the ancient is wisdom; and in length of days understanding'. The proposition that older people are to be valued because they have accumulated knowledge and wisdom is still accepted in some modern societies (arguably Japan) but it is more doubtful that Australians associate wisdom and experience with old age. The 'wisdom of age' sentiment is often expressed in settings including business and politics, but just as often countered.

Older people are regarded as socially more responsible, however, and as having stronger links with their communities. The concept of a strong civil society as an antidote to crime and alienation is presented in the literature on communitarian values (Etzioni 1995) and thus an older Australia may be more law-abiding and socially cohesive. International organisations such as the World Bank see social cohesion as 'critical for societies to prosper economically and for development to be sustainable' and view social capital as 'not just the sum of the institutions which underpin a society – it is the glue that holds them together' (World Bank 2003). Social capital is defined as arising from networks of reciprocity and mutual support based on trust (Putnam 1993). People must be willing to form new associations between themselves, both horizontal and vertical, which depend upon 'trust' that others ('strangers') mean no harm and that mutual assistance can be relied upon. Persons living in communities with highly developed social capital are said to feel less isolated and less fearful and more in control of their lives (Flick *et al.* 2002).

Putnam (1993) argued that with the passing of the 'long civic generation' born between 1910 and 1940, younger American cohorts are less interested in engaging in a civil society. But other commentators disagree with the proposition that social capital has declined in industrialised countries. For example, indicators over a 20-year span in the US show some decline in trust in individuals but no decline in trust in institutions or associations (Paxton 1999). Volunteering is taken as a key indicator of social capital and using this litmus test, Australia (as discussed below) appears to have a large store of social capital residing particularly among its older people.

4.1 Volunteers

The extent of voluntary work in society has received attention over the last decade or so for several reasons:

- Volunteers contribute a substantial amount of unpaid work in terms of person hours to a variety of community and public sector agencies;
- Women in their middle years, the traditional pool of volunteers, are increasingly in the paid workforce but recent retirees offer a growing reservoir of potential volunteers:
- The contribution of volunteers is increasingly important given the devolution of responsibilities from government to the 'charitable' sector and demands upon public sector budgets (Healy 1998); and

• The extent of volunteering is regarded as one measure of social capital and thus an indicator to a healthy civil society.

The future of volunteering in an ageing society is of critical importance in view of the rising demand for volunteers. The ABS defines a volunteer as 'someone who willingly gave unpaid help, in the form of time, service or skills, through an organisation or group' (ABS 2001a, p. 3). Despite pessimistic predictions of a weakening civil society, the last two ABS surveys reported an increase in volunteer activity among both men and women and across all age groups. In 1995, 24 per cent of the adult population (aged 18 years and over) engaged in voluntary work, and this had risen to 32 per cent in 2000 (excluding volunteer work for the 2000 Sydney Olympics) (ABS 2001a). But many health and welfare agencies report difficulty in recruiting and retaining enough volunteers (Family and Community Development Committee Parliament of Victoria 1997) and centres have been set up over the last decade in each of the states of Australia, funded mainly by government, to help manage supply and demand and to look after the interests of volunteers.

Australians aged 65 years and over performed 163.9 million hours of voluntary work during 1995 and 261.4 million hours in 2000 (ABS 2001a) thus making an enormous contribution to societal productivity. Assessments of the value of this work to the economy vary depending upon the estimated number of volunteer hours and the method of valuing the contribution. For example, the work done by volunteers in the human services industry in the mid 1990s was judged to be the equivalent of 50,000 full-time workers (Industry Commission 1995). The best estimate, using ABS time use data and a dollar value of \$17.10 per hour, assessed the gross value of all volunteering in 1997 to be \$41 billion (Ironmonger 2000), equivalent to the amount the government spent on all aged care services in that year (Australian Institute of Health & Welfare 2001).

Volunteers perform a range of tasks including fundraising, management, teaching and administration. As in the workforce generally, volunteering involves 'men's work' and 'women's work', with women more likely to prepare and serve food and men more likely to undertake maintenance work. However, volunteers are increasingly engaged in skilled tasks, including demanding work such as crisis counselling, which makes for satisfying volunteer work but requires training programs (Noble *et al.* 2003). Thus the divisions between paid and unpaid tasks, and professionals and volunteers, are increasingly blurred.

Volunteers contribute their efforts particularly to sport and recreation and community and welfare organizations, with those aged 55 years plus being more involved in the latter. Volunteer rates vary only slightly between men and women but markedly across age groups as shown in Figure 4. The peak volunteering years are between 35-44 years (40 per cent rate) largely reflecting family commitments since these volunteers are more likely to be married and undertaking sport and recreation volunteer activities involving their children. Rates then drop to 35 per cent of those aged 45-54 years, 33 per cent of those aged 55-64, 30 per cent of those aged 65-74 years and 18 per cent of those aged 75 years and over. The 'young old' in their post-retirement years thus constitute an important pool of volunteers, with around one-quarter to one-third engaged in volunteer work.

45 40 35 30 % age group 25 20 15 10 1995 5 2000 0 18-24 25-34 35-44 45-54 55-64 65-74 75 +

Figure 3 Volunteer rates by age group, 1995, 2000

Source: ABS 2001a

The ABS estimates the median hours of voluntary work at 1.4 hours per week or 72 hours per year. The key point here is that older people contribute more time with the median hours of voluntary work increasing steadily with age up to 2.5 median hours per week among those in the 65-74 years age group as shown in Figure 5. Persons aged 65-74 years thus account for approximately 15 per cent of all 'highly committed' volunteers in Australia in terms of the number of median hours worked (Lyons and Hocking 2000).

Future volunteers

An analysis of volunteering in Australia by sex and age, using ABS survey data on time use over the last few decades, suggests that rates of volunteering among the post-war baby boom cohorts, using samples born in 1952 and 1962, have continued to rise compared to earlier cohorts born in 1932 and 1942 (Wilkinson and Bittman 2002). Throughout the 1990s the proportion of volunteers among men and women aged 60 years and over rose as did the average number of volunteer hours. In addition to long-term volunteers who continue to volunteer, the next generation of retirees has also taken up voluntary work. These trends are confirmed by the last two ABS surveys. Thus there is no Australian evidence to suggest that successive older generations are disengaging from voluntary work, contrary to the Putnam thesis on the passing of a 'civic generation' (Flick *et al.* 2002). Since the numbers of people aged 55 plus is projected to increase, the supply of volunteer hours is also likely to increase assuming the commitment to volunteering continues.

3.5 3 2.5 Median hours 2 1.5 1 Males 0.5 □ Females 0 18-24 25-34 35-44 45-54 55-64 65-74 75+

Figure 4 Median weekly hours of voluntary work, age and sex

Source: ABS 2001a

Given rising demand and the shrinking traditional pool of married women (since more are in the workforce), many community organizations seek to recruit volunteers from the expanding numbers of retirees (WA Department of the Premier and Cabinet 2001). For example, Meals on Wheels organizations, mainly staffed by volunteers, now rely upon the 'young old' to help the 'old old' (Healy 1998). This older population group is therefore likely to continue to make a substantial contribution to civil society through volunteer work in the future.

Volunteering is good for you

The principal reason given for volunteering by 47 per cent of people, particularly older volunteers, is 'helping the community', with personal satisfaction also a key reason (ABS 2001a). The rationale for volunteering thus involves both altruism and self-interest with older volunteers more likely to state altruistic reasons. But, as proposed by activity theory, in addition to being good for society, volunteering may be good for individuals, although cause and effect are difficult to separate. Does volunteering make people happier and healthier or do happier and healthier people volunteer?

Submissions to a Victorian inquiry into positive ageing asserted that volunteers who perceive themselves as leading useful lives make fewer demands upon health and welfare services (Family and Community Development Committee Parliament of Victoria 1997). Some evidence for the enhanced wellbeing hypothesis comes from the Australian Unity Wellbeing Index surveys, where volunteers (the majority of whom are aged 55 years and over) report a high level of satisfaction with their volunteer work (85 per cent satisfaction level) compared to paid workers' satisfaction with their paid work (73 per cent satisfaction level) (Cummins *et al.* 2002b).

4.2 A law-abiding society

Young people are responsible for by far the most crime. For example, people aged 15-19 years have five times the rate of offending than other age groups, and nearly two-thirds of all prisoners are aged less than 35 years (Australian Institute of Criminology 2002b). Persons aged 65 years and over represent only one-fifth of the national average of victims of violent assault and are very rarely the perpetrators (Carcach *et al.* 1998). An older society is thus likely to be a more law-abiding society since older people are less inclined to commit crimes against property and people. An Australian Institute of Criminology estimate is that population ageing will result in a fall in homicide rates of around 16 per cent between now and 2050, from 1.82 to 1.53 per 100,000 (Australian Institute of Criminology 2002b). There are likely to be proportionately fewer assaults, robberies and vehicle thefts and fewer activities such as drug abuse (both illegal drugs and alcohol), which occur more frequently among the young than the old. Population ageing, therefore, will mean a substantial savings in prison costs in the future.

Older people worry more, however, about being the victims of crimes such as assaults or robbery, although the research is clear that they are among the least represented groups in the community in crime and victimisation statistics (Australian Institute of Criminology 2002a). Apprehension about crime amongst older people certainly needs to be addressed since this concern may cause some to become 'prisoners in their own homes', fearful to venture out.

5. Public institutions

An ageing population requires different patterns of public social expenditures. Social expenditure on the young (family payments, single parent pensions and school education) is reduced but may be offset by increased expenditure on the old (age pensions, health and social care). While families meet much of the costs of children, over the last few decades the state has taken greater responsibility for the health and care costs of the elderly through the tax/transfer system.

Will the next generation of older people be financially more independent and have a reduced need for health and social care? The baby-boomer generation in old age can be expected to have potentially longer working lives, higher levels of private wealth and better health than earlier generations thus improving projections on future rates of economic growth, productivity and taxation revenue. This section argues, therefore, that population ageing is not unalloyed bad news for public institutions in relation to health costs, an ageing workforce, and older taxpayers and consumers.

5.1 Ageing is not the main driver of health costs

Population ageing is often regarded as the main driver of health costs since a growing number of older people implies a growing demand for health care and the requirement for health care systems to respond better to the needs of older patients (McKee *et al.* 2003). At first sight, pointing the finger at older people seems logical given their higher use of GPs, medicines and hospitals. Older patients are admitted to hospital more often than younger patients, stay longer and account for a large share of hospital workload measured in terms of bed-days. For example, in Australia in 2000-01, people aged 65 years and over comprised 12 per cent of the total population but accounted for 24 per cent of GP consultations, 33 per cent of all hospital separations and 48 per cent of all hospital bed-days (Australian Institute of Health & Welfare 2002b). However, the view that a future ageing population will greatly increase health care costs is misguided on several counts as discussed below.

Population structure and health costs

No relationship is evident between population ageing and the level of health costs in industrialised countries, according to analyses using OECD data (Castles 2001). Figure 6 illustrates this conclusion by comparing the percentage of the population aged 65 years and over (bar graph on left axis) with the GDP percentage share of total health expenditure (line graph on right axis). Australia with 12 per cent of its population aged 65 and over spends 8.6 per cent of GDP on health, the OECD average, but there is considerable variation across OECD countries. For example, Germany and Switzerland, with around 16 per cent of the population aged 65 years and over, spend over ten per cent of their GDP on health, while Italy and Japan with much older populations spend much less.

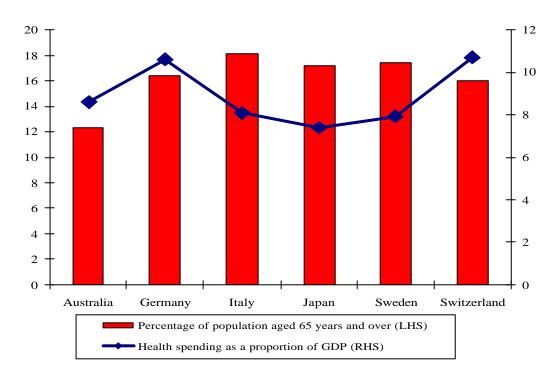


Figure 5 Percentage of population aged 65 years and over and total health expenditure as percentage of GDP by country

Source: OECD 2002a

Supply and demand factors

Health expenditure is driven largely by two sets of factors:

- supply-side factors that have little to do with the age of populations and include the availability and cost of medical technology; and
- demand-side factors, such as physician and patient expectations that treatment will be provided (Zweifel *et al.* 1999).

The Wanless Report on the future of the UK National Health Service (NHS) listed the main cost drivers as technology and workforce spending (two-thirds of NHS spending is on salaries) with population increase being a lesser factor (Wanless 2001, p. 155). Some new technologies will reduce the average cost of a procedure or treatment but overall technology has enabled more people to be treated and new procedures and new drugs have opened up new areas of treatment and thus increased health expenditure.

One estimate of Australian health care expenditure anticipated a more than four-fold rise (in constant dollars) from \$28.66 billion in 1990 to \$126 billion in 2051 (Clare and Tulpule 1994). Of this projected increase, Goss has attributed 40 per cent as being due to total population growth and 41 per cent to the assumed increase in health expenditure at all ages, leaving only 19 per cent arising from population ageing alone (Goss 1994). A more recent estimate judged that only 22 per cent of the total increase in health costs

over the last two decades (1975-76 to 1996-97) could be attributed to older people (Australian Institute of Health & Welfare 1998).

While noting that health costs are difficult to predict, given the many contributing factors, the Treasurer's *Intergenerational Report* projected a doubling of Commonwealth expenditure on health from around 4.3 per cent of GDP in 2011-12 to 8.1 per cent by 2041-42. The report recognised, however, that over the last two decades, non-demographic factors such as new technology accounted for most of the growth in Commonwealth health spending as shown in Table 5. Although it considered ageing to be an important factor, the Treasurer's *Intergenerational Report* concluded that other factors constitute the main drivers:

... [W]hile population change is expected to be a significant driver of future health spending, new technology and increased use and costs of services are projected to have an even more significant influence (Treasurer 2002, p. 40).

Table 6 Real growth rates for Commonwealth health spending, per cent

.1	3.2
.2	1.2
.5	0.5
.8	4.9
	.5

Source: Treasurer 2002, p. 36

Proximity to death

People do not incur health care costs simply by being old: in the main, health costs are incurred at the beginning and end of life. Thus the crucial factor is not how long one lives but how long one takes to die. On average, over one-quarter of all health care consumed in a lifetime is attributable to the last year of life. Since we all must die, the effect of an ageing population will be to postpone rather than to increase health service costs (Wanless 2001).

The cost of the last year of life does not rise with age; if anything, it appears to fall (Graham *et al.* 2003). In the US (Lubitz *et al.* 1995) and in Germany (Brockmann 2002), health costs associated with the last year of life may actually be less in older age groups because elderly people are treated less intensively. The most costly patients are those who die young (Scitovsky 1988). A recent study from Canada examined separately the costs of acute medical care, nursing home care and social care and found that although nursing home and social care costs increase with patient age, acute care costs relevant to the period of proximity to death do not (McGrail *et al.* 2000). Whether less intensive treatment in very old age is humane or ageist is currently a matter of some debate.

Social care costs do rise with age. Data from the Netherlands showed that the total cost of health and social care rose exponentially with old age (Meerding *et al.* 1998). Health sector costs also depend upon whether a country has transferred, as Australia has done, the long-term care of dependent older people out of hospitals and into less costly residential care and nursing homes, thus shifting expenditure from the health to the social care budget, and, controversially, from the public to the private purse.

5.2 Retaining older workers

Annual labour force growth in Australia is projected to slow to 0.4 per cent by 2016 when the baby-boom generation moves out of the labour force and into retirement (ABS 1999). A shrinking labour force means a higher dependency ratio of retired people to workers and for this reason ageing societies require older people to remain in the workforce for longer both as workers and as tax-payers. Currently, employers prefer younger workers but employer attitudes will need to change in the face of diminishing numbers of employees. Labour shortages in future will mean that employers will offer financial and other workplace incentives to retain and attract older workers.

The striking paradox in industrialised countries is that, although people live longer, they also retire earlier; the retirement years have become retirement decades. A recent government report (House of Representatives 2000) points out that there is cause for optimism that this trend can be reversed because:

- Many older people would continue in the workforce for longer if there were structural incentives to do so and less discrimination.
- Mature age workers today have a greater capacity than previous generations to work beyond a retirement age of 60-65 years, since they are healthier and better educated and the nature of work is less physically demanding.
- Research shows that mature age workers do not differ significantly from younger workers on measures of productivity and accuracy, and indeed, are more reliable in terms of lower turnover.

Countries with an ageing labour force must adopt flexible retirement policies and put in place work practices that take more account of the needs of older workers (United Nations 2002). Australian public and private sector bodies are beginning to consider strategies to reverse the trend towards early retirement (Encel 2003), while OECD governments generally are discussing how their countries could promote active ageing by removing disincentives to labour force participation and by lowering barriers to flexible and part time employment (OECD 2002b).

Active ageing reforms are those that remove undesirable constraints on life course flexibility and that strengthen support to citizens in making life time choices. An example of the former is the removal of incentives to early retirement. An example of the latter is lifelong learning which will help people to maintain autonomy as they grow older (OECD 1998).

Retirement trends

Retirement is an area where social and institutional structures lag behind demographic change. In 1900, when the current retirement age of 65 years was adopted, people spent only three per cent of their adult lives in retirement whereas they now spend about one-quarter (Hooyman and Kiyak 1988). While the age of retirement varies considerably across OECD countries, few people currently work after age 60 and almost none after age 65 (Auer and Fortuny 2002). Half of Australian men have left the full-time workforce by age 60 (ABS 2002a). In earlier decades Australian men typically worked full-time until they reached age 65 when they were awarded a gold watch and left work to live modestly on the age pension. Since then, however, there has been a major cultural shift in the view of what constitutes an appropriate age to retire and the challenge for Australia is to roll back the trend to early retirement evident over the last few decades.

Currently, every person aged 65 plus is supported, in statistical terms, by five people of traditional working age. By 2041 the projected ratio will be one to 2.5 (Minister for Aged Care 1999c). Thus the labour force dependency ratio (people aged 65 years and over to those aged 15 to 64 years) will double in Australia over the next 40 years. But as often pointed out (Kinnear 2001), a dependency ratio is a crude measure for the following reasons:

- Productivity is rising so that fewer workers are needed;
- Many people of 'working age', a socially constructed category, are not in the labour force and would like to be;
- Many who have 'retired' may wish to continue working;
- Women are increasing their workforce participation; and
- Women in part-time employment might wish to expand their hours were it practical to do so.

Currently older Australians have a low rate of participation in the workforce as shown in Figure 7. In 2000, about 73 per cent of men aged 55-59 years, 47 per cent of those aged 60-64 and ten per cent of those aged 65 plus were in full-time or part-time work. Of women, about 49 per cent aged 55-59 and 25 per cent of those aged 60-64 were in full-time or part-time work (Australian Institute of Health & Welfare 2002b). The downward trend in labour force participation rates for men over the previous few decades levelled out during the 1990s, while participation rates for women returning to the workforce after raising a family have continued to rise from a low base (Ingles 2000). The biggest increase in workforce participation has been among women; from 47 per cent in 1978 to 68 per cent in 2000 for those aged 45-54 years and from 29 per cent to 46 per cent in the same period for those aged 55-59 years (House of Representatives 2000). The challenge is to retain men in the workforce into their 60s and to encourage rising participation among women.

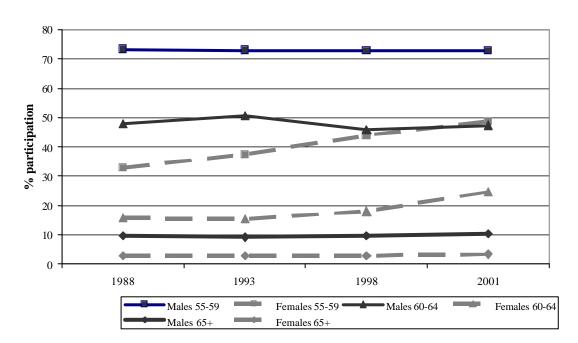


Figure 6 Labour force participation (full and part-time) by age and sex, selected vears

Source: Australian Institute of Health & Welfare 2002b

In previous decades, particularly during the economic downturn and industrial restructuring of the 1980s, older people were encouraged to retire early with pension and taxation policies offering incentives for them to do so. The three peaks of retirement for men coincide with:

- the superannuation preservation age of 55 years (although this is being shifted upwards);
- the retirement age in many superannuation schemes of 60 years; and
- the pension eligibility age of 65 years (being shifted upwards from 60 to 65 for women) (Ingles 2000).

However, the loss of experienced people from the workforce is wasteful and mature-aged workers are a fast-growing employment resource. The extent to which these workers will remain in the workforce depends upon incentives and disincentives to retire and their state of health, job satisfaction and lifestyle decisions.

Over the last decade, anti-ageist legislation in Australian states has overturned the compulsory retirement age and the 1996 Workplace Relations Act provides that an employer cannot discriminate on the basis of age. Despite these incentives, most people are retiring from full-time work early, some time during the five years preceding their eligibility for the age pension. Given an ageing population and a shrinking labour force, OECD countries including Australia are rethinking their retirement policies. A key recommendation in the Treasurer's *Intergenerational Report* calls for encouraging

mature age participation in the labour force (Treasurer 2002). It may prove difficult currently to retain people over 60 years, since this is the socially accepted retirement age, but many 'mature age' workers between 55 and 60 would prefer to continue working. There is plenty of opportunity, given low labour force participation rates and future rising employer demand, to expand employment among mature age workers (Access Economics 2001a), and only a small increase of one in ten older persons is sought:

It has been estimated that an increase in workforce participation of 10 percentage points by Australians aged 55 to 70 would largely cancel out any extra costs from an ageing population (Minister for Ageing 2002, p.1).

Is retirement voluntary?

Do people 'choose' to retire early or are they pushed out of the workforce? A variety of push and pull factors, including health problems, cause people to leave the workforce early. An ABS cross-sectional survey reported that 63 per cent of people over 45 years attributed involuntary early retirement to health and injury problems (ABS 1998a) but, in general, three out of five workers who have been made redundant wish to continue working (Access Economics 2001a). Once mature age workers become unemployed the probability of their regaining employment is significantly lower than for younger workers (House of Representatives 2000, p.19). Age advocacy groups, such as the Council on the Ageing, condemn the waste of skills and experience of mature age people associated with involuntary retirement (COTA 2001).

While the unemployment rate for older people is lower than for people under 35 years, there are many 'discouraged workers' among the older age group (VandenHeuval 1999; Evans *et al.* 2001). People in their 50s and 60s who are unwillingly jobless thus may use 'retirement' as a euphemism for 'unemployment'. Mature age job seekers encounter many age specific barriers (Encel 2000), for example not being offered a job interview or employers wanting a 'young image' (House of Representatives 2000). Negative employer practices are a major reason why many older people retire early or do not remain beyond the optional retirement age (Encel 1997). The actual work practices of many employers often belie their supposedly positive attitudes (Bittman *et al.* 2001).

Some companies, however, are beginning to modify their workplace practices in order to retain older workers for longer. For example, some personnel agencies recruit former executives to take on short-term projects since they offer experience and expertise plus transferable skills (House of Representatives 2000, p.108). Currently legislation requires that employers not discriminate but, as the labour supply becomes tighter and as the consumer market becomes greyer, market pressures will force employers to retain or seek mature age workers. Some employers and labour market economists are therefore beginning to re-examine their assumptions that the preference for younger workers is economically rational (Lazear 1995).

Changing nature of work and retirement

The nature of employment for mature age workers has changed over the last few decades given globalisation, technological advances and microeconomic reform (House

of Representatives 2000). More opportunities have opened up in the shift away from physically demanding manual work to skilled jobs and jobs in service industries. Rapid change means that the workplace needs people who regularly update their skills and adapt to new working arrangements. Returns on training investments can be realised in the short term so that there is less premium placed upon training younger workers for a long working life.

A second important shift in the nature of work has been from full-time to part-time and casual work. The majority of new jobs created in Australia over the last decade have been part-time or casual (House of Representatives 2000, p.92). Again, this opens up opportunities for older workers as well as parents with dependent children for whom flexible work options, part-time work, job sharing, home-based work, career breaks and family leave, may be attractive.

There is evidence of a trend towards a retirement transition rather than a complete break from the workforce. For example, there has been a small increase in part-time work among older Australian men. The Retirement Income Modelling Unit (RIM) in Treasury estimates that among employed men aged 45-64 years, the proportion in part-time work has risen from four per cent in 1978 to nine per cent in 1999, with a corresponding small rise among women from 41 per cent to 43 per cent (Minister for Aged Care 1999c, p.13). This trend to retirement via transitional or bridging employment is likely to continue since a sizeable proportion of workers aged 45 years and over (30 per cent of men and 44 per cent of women) say that they intend to retire early from full-time work although some would like to continue part-time (ABS 1998a). Thus greater opportunities for part-time work may persuade more people to retain their workforce attachment.

Older workers are productive

A common view is that older workers are more expensive than younger workers because of higher remuneration, fringe benefits and social contributions. While wages and fringe benefits often rise with age, the question is whether performance and experience compensate for the higher cost; in other words, whether productivity is higher. A second question is whether the workplace will allow an older worker to 'downshift' in terms of hours of work and levels of responsibility and hence remuneration, as is the practice in Japan (Auer and Fortuny 2002). One controversial suggestion is that, in order to make themselves more competitive and in return for more flexible jobs, older Australians be permitted to negotiate lower wages and conditions.

An ILO discussion paper (Auer and Fortuny 2002) concludes that the productive potential of older people is not substantially impaired by age *per se*, since a decline in performance may be falsely attributed to age when in fact it may be due to skill obsolescence or burn out, both of which can occur at any age and be remedied through training practices. Continuing technological progress, including automated processes, information technology and robotics, will also help to make older people capable of sustained productivity. The main message is that the workplace must adapt its structures and processes to accommodate older workers, by upgrading skills progressively as the workplace and technology changes for example.

Age accounts for only a small percentage of the variance in workers' cognitive, perceptual and psychomotor abilities when experience, education and type of occupation are controlled. Older workers compensate for declines in information processing and physical abilities by means of experience and mental and physical load-reducing strategies (Auer and Fortuny 2002). For example, in a study of typists aged between 19 and 72 years, older typists performed as fast as younger ones by means of looking ahead and processing longer chunks of material. Thus although younger typists performed better in separate speed tests, the superior anticipation of the older typists enabled their work performance to be equivalent (Auer and Fortuny 2002).

There are advantages associated with an older and more experienced workforce as argued in a government report (Minister for Aged Care 1999c, p.34), which lists the key reasons for employing and retaining mature age workers:

• Productivity: Declines little with age

• Quality of work: Improves with age

• Corporate memory: Should not be discarded

• Job turn over: Twenty five per cent higher for younger

workers

• Recruitment costs: Turnover is reduced

• Training costs: The young are five times more likely to

change jobs

• Absenteeism: No observable difference

Loyalty, work ethic and reliability: Usually higher for mature age workers

• Company structure: Should reflect the customer base

5.3 Better off baby boomers

Future retirement income needs are not a major concern in Australia given that a 'sound retirement incomes system, projected growth of superannuation assets and accumulation of private savings will ensure ... adequate retirement incomes' (Minister for Ageing 2002, p.i). Approximately 55 per cent of people aged 65 years and over receive a full pension, 25 per cent are part-pensioners and 20 per cent are self-funded (Australian Institute of Health & Welfare 2002b). With around 90 per cent of workers now in compulsory superannuation schemes, the workforce is slowly moving towards funding retirement from superannuation so that by 2050 the proportion receiving the full age pension is expected to fall to around one-third (Treasurer 2002). Thus it is anticipated that the rise in the cost of pensions will be modest. The current outlay on pensions of three per cent of GDP is expected to rise to 4.5 per cent by 2051 (Minister for Aged Care 1999b). The OECD considers this level of increase to be modest and manageable, especially compared to increases in other countries (OECD 1999).

Baby boomers in Australia will retire with both savings and superannuation providing higher disposable incomes than was the case with previous retirees. Thus they will be in a better position than the current older generation to contribute to funding their own retirement rather than relying on the age pension. Over the last few decades many (although certainly not all) have accumulated significant assets such as superannuation, the family home, investment property and shares. Those on lower incomes or with discontinuous work histories, however, will never accumulate enough superannuation to replace the age pension as the main source of income in retirement. Retirement incomes are not examined further in this discussion paper since this topic is discussed at length in Kinnear (2001).

Taxpayers and investors

The National Commission of Audit, set up by the incoming Howard Government in 1996, was concerned that population ageing would mean less income tax relative to gross domestic product (National Commission of Audit 1996). In the next decade or so, however, the passing of the baby boom generation through the peak income tax paying age bracket (30 to 50 years) is likely to moderate any revenue loss from the increase in the aged population (Family and Community Development Committee Parliament of Victoria 1997, p.41).

Access Economics has argued that the introduction of the GST in July 2000 was a sensible policy for the future in that it widened the tax base from PAYE to consumption and thus captured the growing number of retirees. Furthermore, it covers services as well as goods, which is significant given the rapid growth of the services sector in Australia in recent years (Access Economics 2001b).

The National Centre for Social and Economic Modelling (NATSEM) has examined trends in the income and assets of older Australians, where the household head is aged 65 years and over, using ABS income data (Harding *et al.* 2002). It found that over the last decade, the average wealth of older Australians almost doubled (a 90 per cent increase) between 1985-86 and 1996-97 from \$106,000 to \$204,000 (in constant prices). The high rate of home ownership among older Australians (over 75 per cent) who benefited from the nominal doubling in house prices over this period and the strong growth in share prices and in the value of superannuation constitute the principal reasons for this rising prosperity. The period also saw a major intergenerational shift in the distribution of wealth, with net increases for older Australians but net decreases for younger Australians who were less likely to be home-owners and shareholders.

The NATSEM study showed that people aged between about 45 and 52 years in 1997 had enjoyed a substantial increase in their average net wealth over the 11 years between 1986 and 1997. Many in this group will thus have a greater capacity to fund their own retirement but the overall increase in assets and income masks increasing inequities. While the incomes of those older people in the top 25 per cent of the income distribution rose, the incomes of the bottom 25 per cent remained stable after inflation during the period 1986 to 1997. Despite the great socio-economic diversity among the older population, the emergence of the well-off older person (WOOPIE) in many industrialised countries has given rise to a new stereotype.

The drop in the share market in the late 1990s and the recent slowing of house prices have dimmed this scenario, at least for current retirees, but most of the baby boomer generation will have a greater capacity than previous ones to fund their old age. The question is whether people are investing enough to meet their concept of a comfortable retirement. In 2002 the Senate Select Committee on Superannuation called for increased savings to fund a desirable income target of around 62 per cent of gross pre-retirement income, a target quite beyond the reach of those with a patchy employment record.

Consumers

A market transformation is underway with manufacturers and retailers contemplating a demographic shift to mature consumers. The over 55s account for 21 per cent of the population but own 39 per cent of the nation's household wealth, while the over 65s head up households owning almost half of all deposits in the nation's financial institutions. These mature consumers will be the wealthiest in the nation and indeed in history (Access Economics 2001a).

The baby boomer generation has largely grown up in affluent times and the first of that generation, those born in 1946 and now turning 58 years old, are at the peak of their earning power. They have paid off their mortgages and are expected to have considerable discretionary income and savings. Given the ageing of the population, the spending of mature consumers over the next ten years is projected to grow by 61 per cent compared to the national average of 32 per cent. The increasing number, prosperity and spending habits of older consumers will shape production and retail markets as described in 'the silver market goes platinum' report from Access Economics (2001a).

In order to market goods and services to the ageing consumer market, market research firms are re-evaluating their emphasis on youth and young adults and are turning increasingly to older adults as models. Some consider that the wealth of Australia's mature consumers promises a spending bonanza.

For many mature consumers the kids have left home, the mortgage has largely been repaid and other commitments are at an all time low. That means they have more time and money on their hands than at any other stage of their lives. It is not surprising, therefore, that they spend their consumption dollar differently. Retailers and manufacturers with an eye to the future will know the value of staying one step ahead of the mature dollar, redirecting their efforts to the needs of tomorrow's consumers. (Access Economics 2001a, p.49).

The question is whether older people will spend or save, and if they spend, what will they buy? One group of marker researchers expects that baby boomers in their retirement years will seek to maintain their affluent lifestyles rather than pass on their wealth to the next generation; these are the SKINS, Spend the Kids' Inheritance Now (The Australian 2002).

Population ageing offers opportunities for the economy to respond to the needs of older people, for example through 'age friendly' urban planning. Goods and services, currently designed with younger consumers in mind, may require modifications to cater for older consumers and new markets will open up as these goods and services become

available. Most elderly people in industrialized countries live in urban areas and have different requirements from the young for housing, shopping, recreation and more accessible transport systems. There is considerable interest, therefore, in how population ageing will affect urban planning in terms of housing, land use, transport, the urban environment and the growing role of new technologies such as motorised wheelchairs and 'smart houses' (OECD 2002c).

The ageing of the consumer market means that there will be a growing demand for such goods as smaller, better designed and 'smarter' houses, domestic appliances better suited to older consumers, smaller, safer and more energy-efficient cars. A range of services will experience increased demand, including health products and services, home maintenance and personal services such as home help, and financial services. The market implications are enormous, for example more golf clubs will be sold and fewer surf boards, and there will be a greater emphasis upon quality and safety.

Will older people be wiser consumers who influence the market in economically and environmentally sustainable ways? The trends suggest that the mature consumer will spend less on luxury goods but more on grandchildren, leisure and recreation (Access Economics 2001a). Time use surveys report that older people, as a result of their greater opportunities for leisure pursuits, spend more time on recreation and leisure activities than younger people do – 6.5 hours compared to 4.5 hours (Australian Institute of Health and Welfare 2002b). The leisure industry already caters for affluent and healthy older people with a consequent boom in 'retirement travel'. A 1999 survey of people over 60 years found that 75 per cent had travelled domestically in the previous year, \$986 million was spent on domestic travel annually and 80 per cent intended to travel now or in the future (Minister for Aged Care 2000, p.33). Travel guides and tourism operators are gearing themselves increasingly to the 'seniors market'.

Older people are also involved in the community as active members of clubs: a large Melbourne survey reported, for example, that one-third of men and one-quarter of women aged 55-75 years belonged to a sporting club (Howe and Donath 1997). An older Australia is likely to benefit the arts since growing numbers of older people promise an increase in audience numbers. Older people attend musical concerts, theatres and art galleries more frequently than younger people; they read more and visit libraries more often. According to social surveys of time use, people over 65 years visit libraries five times more per year on average than do younger people (Minister for Aged Care 2000).

6. Conclusion

The world as a whole, and industrialised countries in particular, are moving through a demographic transition to 'greyer' societies, a process involving slower population growth and hence a more sustainable global population. The challenge is to promote healthy and productive ageing in these added later years of life, and to adjust societal practices and structures to include older people as contributors to society. The good news is that in industrialised societies, such as Australia, older people are active and productive rather than 'a burden' upon society and will continue to play a valuable role in the future. Ageing should be viewed as a natural part of the life course and population ageing as a transition not a crisis. According to both the Treasurer and the Minister for Ageing, Australia is well-placed to meet the challenges of an ageing society.

In Australia, the first wave of baby boomers will turn 58 years old in 2004. The members of this large generation have lived in prosperous times and are healthier, better educated and wealthier than those of previous older generations. They also have greater economic and electoral power and higher expectations of their place in society: they will not be prepared to 'go gentle' into a resigned and disengaged old age. The baby boomers, despite recent stock-market losses, expect to retire with substantial assets such as housing, and with savings and superannuation that will provide higher disposable incomes than those enjoyed by previous generations of retirees. They do have the ability, given the opportunities, to work for longer to help fund a comfortable standard of living in retirement.

Pessimistic projections of dropping productivity and rising public expenditures attribute much of the cause to Australia's ageing population. While it is prudent to consider future policy options and to respond to population ageing, it is unfair to 'blame' older Australians for rising public sector costs. In childhood the baby boom generation was not 'blamed' for rising education costs so why now for rising aged care costs? Policy makers seize upon population ageing as a reason to apply the brakes to public spending, although the Treasurer does acknowledge that no fiscal crisis is imminent given continuing sound policies. While Treasury emphasises the negatives to population ageing, other government reports, and the Minister for Ageing, emphasise the positives and promote 'successful', 'productive' and 'healthy' ageing.

We can expect future generations of older people to continue for longer in the work-force, to contribute more through taxation, and to fund more of their own retirement and health and social care. Australia is now rethinking assumptions that people can expect the retirement years to stretch to retirement decades accompanied by comfortable living standards. But currently there is a gap between government exhortations to work for longer and employer willingness to retain workers into their late 50s and 60s let alone their 70s. Australia needs to offer structural incentives to working longer, make work more attractive, flexible and manageable for older workers, and revise the ageist attitudes of many employers. Positive and equitable policies must be designed to ensure that all older Australians, not just a prosperous minority, are financially secure in their old age.

There is a tendency to blame rather than congratulate the older generation for living longer. Inciting inter-generational dissension is a dangerous strategy. People need to rely on social solidarity across the generations when they are old as they do when they are young. The main reason that the Australian 'baby boomer' generation will not be a 'burden' is that they have enjoyed good opportunities throughout life. Australia needs to maintain socially equitable policies since reducing access to education, employment, housing and health care will only serve to produce inequalities and hence greater dependence in later life.

The *International Plan of Action on Ageing 2002* produced by the United Nations calls for the enormous potential of ageing in the 21st century to be fulfilled. The aim is to ensure that 'persons everywhere are able to age with security and dignity and to continue to participate in their societies with full rights' (United Nations 2002).

References

Access Economics 2001a, *Population ageing and the economy*, Commonwealth Department of Health and Aged Care, Canberra.

Access Economics 2001b, *The tax base and an ageing Australia*, Access Economics, Canberra.

Achenbaum, W. 1985, 'Societal perceptions of aging and the aged', *Handbook of aging and the social sciences*, eds. E. Shanas and R. Binstock. Van Nostrand Reinhold, New York.

American Association of Retired Persons 2002, *The grandparent study*, AARP, Washington DC.

Auer, P. and Fortuny, M. 2002, Ageing of the labour force in OECD countries: economic and social consequences, International Labour Office, Geneva.

Australian Bureau of Statistics 1998a, *Retirement and Retirement Intentions*, Australian Bureau of Statistics, Canberra, (No. 6238.0).

Australian Bureau of Statistics 1998b, *Population projections 1997 to 2051*, Australian Bureau of Statistics, Canberra (No. 3222.0).

Australian Bureau of Statistics 1999, *Labour force projections, Australia, 1999-2016*, Australian Bureau of Statistics, Canberra, (No. 6260.0).

Australian Bureau of Statistics 2000a, *Australian social trends* 2000, Australian Bureau of Statistics, Canberra, (No. 4102.0).

Australian Bureau of Statistics 2000b, *Population projections, Australia, 1999 to 2101*, Australian Bureau of Statistics, Canberra, (No. 3222.0)

Australian Bureau of Statistics 2001a, *Voluntary Work, Australia*, Australian Bureau of Statistics, Canberra, (No. 4441.0)

Australian Bureau of Statistics 2001b, *Use of the internet by householders, Australia*, Australian Bureau of Statistics, Canberra, (No. 8147.0).

Australian Bureau of Statistics 2002a, *Labour Force Australia: December 2001*, Australian Bureau of Statistics, Canberra, (No. 6203.0).

Australian Bureau of Statistics 2002b, 'Baby boomers and the 2001 census', *Age Matters* 2, 1.

Australian Bureau of Statistics 2002c, *National Health Survey: summary of results Australia*, Australian Bureau of Statistics, Canberra, (No. 4364.0).

Australian Bureau of Statistics 2003a, *Australian social trends 1999*, Australian Bureau of Statistics, Canberra (No. 4102.0).

Australian Bureau of Statistics 2003b, *Child care, Australia*, Australian Bureau of Statistics, Canberra, (No. 4402.0).

Australian Institute of Criminology 2002a. *Crime and older Australians*, Australian Institute of Criminology, Canberra. www.aic.gov/au/research/olderaust. Accessed 2003.

Australian Institute of Criminology 2002b, *Australian crime: Facts and figures*, Australian Institute of Criminology, Canberra.

Australian Institute of Health & Welfare 1998, *Australia's health 1998*, Australian Institute of Health & Welfare, Canberra.

Australian Institute of Health & Welfare 2001, *Australia's welfare 2001*, Australian Institute of Health & Welfare, Canberra.

Australian Institute of Health & Welfare 2002a, *Australia's Health 2002*, Australian Institute of Health & Welfare, Canberra.

Australian Institute of Health & Welfare 2002b, *Older Australia at a glance*, Australian Institute of Health & Welfare, Canberra.

Australian Institute of Health and Welfare 2002c, *Chronic Diseases and Associated Risk Factors in Australia*, Australian Institute of Health & Welfare, Canberra.

Benyamini, Y. and Idler, E. 1999, 'Community studies reporting association between self-rated health and mortality: additional studies', 1995 to 1998, *Research on Aging* 21, 392-401.

Bittman, M., Flick, M. and Rice, J. 2001. *The recruitment of older Australian workers: a survey of employers in a high growth industry*, Social Policy Research Centre, University of New South Wales.

Booth, H. and Tickle, L. 2003, 'The future aged: new projections of Australia's population', *Working Papers in Demography* 90, 1-21.

Brockmann, H. 2002, 'Why is less money spent on health care for the elderly than for the rest of the population?' Health rationing in German hospitals, *55*, 593-608.

Brody, J. 1985, 'Prospects for an aging population', *Nature* 315 6, 463-466.

Bunker, J., Frazier, H. and Mosteller, F. 1994, 'Improving health: measuring effects of medical care', *Millbank Memorial Quarterly* 72, 225-58.

Butler, R. and Jasmin, C. (eds) 2002, *Longevity and quality of life: opportunities and challenges*, Klewer Academic/Plenum, Dordrecht.

Carcach, C., James, M. and Grabosky, P. 1998. *Homicide and older people in Australia*, Australian Institute of Criminology, Canberra.

Castles, F. 2001, Population ageing and the public purse: Australia in comparative perspective', *Australian Journal of Social Issues* 35 4, 301-15.

Clare, R. and Tulpule, A. 1994, *Australia's ageing society*, Office of Economic Planning Advisory Council, Canberra.

Clarke, L. 2003, 'Grandparenthood in Britain', 8th Australian Institute of Family Studies Conference, Melbourne.

Cocks, D. 1999, *Future makers, future takers: life in Australia 2050*, University of New South Wales, Sydney.

COTA 2001, Investing in the future: Australia's ageing workforce: submission to Federal Budget 2001-02, Council on the Ageing (Australia), Melbourne.

COTA National Seniors 2003, *Grandparents raising grandchildren*: a report of the project commissioned by the Hon Larry Anthony, Minister for Children & Youth Affairs, COTA National Seniors, Melbourne.

Crimmins, E., Saito, Y. and Ingegneri, D. 1997, 'Trends in disability-free life expectancy in the United States', 1970-1990, *Population Development Review* 23, 555-572.

Cummins, R., Eckersley, R., Pallant, J., Okerstrom, E. and Davern, M. 2002a. *The impact of personal relationships and household structure on the wellbeing of Australians:* Australian Unity Wellbeing Index Report No. 3.2, Australian Centre on Quality of Life, Deakin University, Melbourne.

Cummins, R., Eckersley, R., Lo, S., Okerstrom, E. and Davern, M. 2002b, *The wellbeing of Australians: 1. work and leisure; 2. the impact of September 11 one year later:* Australian Unity Wellbeing Index Report No. 4.0, Australian Centre on Quality of Life, Deakin University, Melbourne.

Davis, B., Heathcote, C., O'Neill, T. and Puza, B. 2002, 'The health expectancies of older Australians', *Working papers in Demography* 87.

De Vaus, D., Gray, M. and Stanton, D. 2003, *Measuring the value of unpaid household, caring and voluntary work of older Australians*, Australian Institute of Family Studies, Melbourne.

De Vaus, D. and Qu, L. 1998, 'Intergenerational family transfers', *Family Matters* 50, 27-30.

De Vaus, D. and Wells, Y. 2003. 'I married him for better or for worse but not for lunch: retirement and marriage', 8th Australian Family Research Conference, Melbourne, 12-14 February 2003.

Dowrick, S. and McDonald, P. 2002. *Comments on Intergenerational Report*, 2002-03. Unpublished paper, Australian National University, Canberra.

Encel, S. 1997, 'Work in later life', *Ageing and Social Policy in Australia*, eds. S. Encel, A. Borowski, and E. Ozanne. Cambridge University Press, Cambridge.

Encel, S. 2000, 'Later-life employment,' *Journal of Ageing & Social Policy* 11, 7-13.

Encel, S. 2003, *Age can work: the case for older Australians staying in the workforce*, report to the Australian Council of Trade Unions and the Business Council of Australia, University of New South Wales, Sydney.

Etzioni, A. 1995, The spirit of community: rights, responsibilities, and the communitarian agenda, Fontana Press, London.

Evandrou, M. (ed) 1997, *Baby boomers: ageing in the 21st century*, Age Concern, London.

Evans, D., Cooper, K. and Barron, W. 2001, *An aging world: 2001*, US Department of Commerce, Washington.

Falkingham, J. 1997, 'Who are the baby boomers? A demographic profile', *Baby boomers: ageing in the 21st century*, ed. M. Evandrou. Age Concern, London.

Family and Community Development Committee Parliament of Victoria 1997, *Inquiry into planning for positive ageing*, Victorian Government Printer, Melbourne.

Fett, M. 2000, *Technology, health and health care*, Commonwealth Department of Health and Aged Care, Canberra.

FIAPA 2001, *Les cahiers de la FIAPA: seniors+ and new technologies*, Federation Internationale des Associations de Personnes Agées, Paris.

Fillit, H., Butler, R., O'Connell, A., Albert, M., Birren, J., Cotman, C., Greenough, W., Gold, P., Kramer, A., Kuller, L., Perls, T., Sahagan, B. and Tully, T. 2002, 'Achieving and maintaining cognitive vitality with aging', *Mayo Clinical Proceedings* 77 7, 681-696.

Flick, M., Bittman, M. and Doyle, J. 2002, *The community's most valuable (hidden) asset: volunteering in Australia*, Social Policy Research Centre, Sydney.

Fries, J. 1989, 'The compression of morbidity: near or far?' *The Milbank Quarterly* 67 2, 208-32.

Goss, J. 1994. *Population ageing and its impact on health expenditure to 2031*, Australian Institute of Health & Welfare, Canberra.

Graham, B., Normand, C. and Goodall, Y. 2003. *Proximity to death and acute health care utilisation in Scotland*, Information and Statistics Division, NHS, Scotland.

Harding, A., King, A. and Kelly, S. 2002. *Trends in the Incomes and Assets of Older Australians*, NATSEM, University of Canberra.

Havighurst, R. 1963, 'Successful aging', *Process of aging*, eds. R. Williams, C. Tibbits and W. Donahue, Atherton Press, New York.

Headey, B. 1999, 'Old age is not downhill: the satisfaction and well-being of older Australians', *Australian Journal on Ageing* 18 (supplement), 32-37.

Healy, J. 1988, 'Elderly couples and the division of household tasks', *Australian Journal of Sex, Marriage and the Family* 9 4, 203-14.

Healy, J. 1998, Welfare options: delivering social services, Allen & Unwin, Sydney.

Hooyman, N. and Kiyak, H. 1988, *Social gerontology: a multidisciplinary perspective*, Allyn and Bacon, Boston.

House of Representatives 2000, 'Age counts: an inquiry into issues specific to mature-age workers', *Standing Committee on Employment, Education and Workplace Relations*, Parliament of Australia, Canberra.

Howe, A. and Donath, S. 1997, Wellbeing and outlook on ageing: a study of attitudes of Australians aged 55-75, National Ageing Research Institute, Melbourne.

Idler, E. and Benyamini, Y. 1997, 'Self-rated health and mortality: a review of twenty-seven community studies', *Journal of Health and Social Behaviour* 38, 21027.

Industry Commission 1995, *Charitable Organisations in Australia*, Australian Government Publishing Service, Canberra.

Ingles, D. 2000, Structural ageing, labour market adjustment and the tax/transfer system, Family and Community Services, Canberra.

Ironmonger, D. 2000, 'Measuring volunteering in economic terms', *Volunteers and volunteering*, J. Warburton and M. Oppenheimer. Federation Press, Sydney.

Jacobzone, S. 1999, 'Ageing and care for frail elderly persons: an overview of international perspectives', *OECD Labour Market and Social Policy Occasional Papers* 38, OECD, Paris.

Kendig, H. 1986, 'Intergenerational exchange', *Ageing and families: a social networks perspective*, ed. H. Kendig. Allen & Unwin, Sydney.

Khaw, K. 1999, 'How many, how old, how soon?' British Medical Journal 319, 1350-2.

Kinnear, P. 2001, *Population Ageing: Crisis or Transition?* Australia Institute, Canberra.

Laslett, P. 1991, *A Fresh Map of Life: The Emergence of the Third Age*, Harvard University Press, Harvard.

Lazear, E. 1995, *Personnel economics*, MIT Press, Cambridge.

Levy, B., Slade, M., Kunkel, S. and Kasl, S. 2002, 'Longevity increased by positive self-perceptions of aging', *Journal of Personality and Social Psychology* 83 2, 261-270.

Lubitz, J., Beebe, J. and Baker, C. 1995, 'Longevity and medical care expenditures', *New England Journal of Medicine* 332, 999-1003.

Lyons, M. and Hocking, S. 2000, 'Australia's highly committed volunteers', *Volunteers and Volunteering*, eds. J Warburton and M. Oppenheimer. The Federation Press, Sydney.

Mackenbach, J. et al. 1999, 'Socioeconomic inequalities in mortality among women and among men: an international study', American Journal of Public Health 89 12, 1800-6.

Mackinnon, A., Christensen, H., Hofer, S., Korten, A. and Jorm, A. in press, 'Use it and still lose it? The association between activity and cognitive performance established using latent growth techniques in a community sample', *Aging, Neuropsychology and Cognition*.

Mason, R. and Randell, S. 1997, 'Education policy for an ageing society', *Ageing and social policy in Australia*, eds. A. Borowski, S. Encel and E. Ozanne. Cambridge University Press, Cambridge.

Mathers, C., Vos, T. and Stevenson, C. 1999, *The Burden of Disease and Injury in Australia*., Australian Institute of Health & Welfare, Canberra.

McGrail, K., Green, B. and Barer, M. 2000, 'Age, costs of acute and long-term care and proximity to death: evidence for 1987/88 and 1994/95 in British Columbia', *Age and Ageing* 29, 249-53.

McKee, M., Healy, J., Edwards, N. and Harrison, A. 2003, 'Pressures for change', *Hospitals in a changing Europe*, eds. M. McKee and J. Healy. Buckingham, UK.

Meerding, W., Bonneaux, L., Polder, J. *et al.* 1998, 'Demographic and epidemiological determinants of healthcare costs in Netherlands: cost of illness study', *British Medical Journal* 317, 111-15.

Mendelsohn, D. and Schwartz, W. 1993, 'Effects of aging and population growth on health care costs', *Health Affairs (Millwood)* 12, 119-25.

Minister for Aged Care 1999a, *The National Strategy for an Ageing Australia:* healthy ageing discussion paper, Commonwealth of Australia, Canberra.

Minister for Aged Care 1999b, *The National Strategy for an Ageing Australia:* independence and self provision discussion paper, Commonwealth of Australia, Canberra.

Minister for Aged Care 1999c, *The National Strategy for an Ageing Australia*: employment for mature age workers issues paper, Commonwealth of Australia, Canberra.

Minister for Aged Care 2000, *The National Strategy for an Ageing Australia*: attitudes, lifestyle & community support discussion paper, Commonwealth of Australia, Canberra.

Minister for Ageing 2002, National Strategy for an Ageing Australia: an older Australia, challenges and opportunities for all, Commonwealth of Australia, Canberra.

National Commission of Audit 1996, *National Commission of Audit Report to the Commonwealth Government*, Australian Government Publishing Service, Canberra.

National Office for the Information Economy 2002, *The current state of play: Australia's scorecard*, National Office for the Information Economy, Canberra.

Noble, J., Rogers, L. and Fryar, A. (eds) 2003, *Volunteer management: an essential guide*, Volunteering SA, Adelaide.

OECD 1988, Effects of ageing populations on government budgets, OECD, Paris.

OECD 1999, OECD economic surveys: Australia, OECD, Paris.

OECD 2000, Reforms for an Ageing Society: Social Issues, OECD, Paris.

OECD 2001, OECD Health Data 2001: A Comparative Analysis of 29 countries, OECD, Paris.

OECD 2002a, OECD Health Data 2002: A Comparative Analysis of 30 Countries, OECD, Paris.

OECD 2002b, 'Increasing employment: the role of later retirement', *OECD Economic Outlook* No 72, OECD, Paris.

OECD 2002c, Aging, housing and urban development, OECD, Paris.

Olshansky, S. and Ault, A. 1986, 'The fourth stage of the epidemiologic transition: the age of delayed degenerative diseases', *Milbank Memorial Fund Quarterly* 64, 355-91.

Olshansky, S., Carnes, B. and Cassel, C. 1990, 'In search of Methuselah: estimating the upper limits to human longevity', *Science* 250, 634-40.

Olshansky, S., Hayflick, L. and Carnes, B. 2002, 'No truth to the fountain of youth', *Scientific American* 286 6, 92-95.

Paxton, P. 1999, 'Is social capital declining in the United States? A multiple indicator assessment', *American Journal of Sociology* 105 1, 88-127.

Peterson, P. 1999, Gray Dawn: How the Coming Age Wave will Transform America and the World, Time Books and Random House, New York.

Preston, S. 1984, 'Children and the elderly in the US', Scientific American, 59-85.

Prime Minister 2002. *Building Australia's Research Priorities*, Department for Education, Science and Training, Canberra.

Prime Minister's Science Engineering and Innovation Council 2003, *Promoting healthy ageing in Australia*, Department of Education, Science and Training, Canberra.

Putnam, R. 1993, *Making democracy work: civic traditions in modern Italy*, Princeton University Press, New Jersey.

Ranzijn, R., Hartford, J. and Andrews, G. 2002, 'Ageing and the economy: costs and benefits', *Australasian Journal of Ageing* 21, 145-151.

Raven, P. 2002, 'Science, sustainability, and the human prospect', Science 297, 954-958.

Riley, M., Kahn, R. and Foner, A. (eds) 1994, Age and structural lag: society's failure to provide meaningful opportunities in work, family and leisure, Wiley, New York.

Saunders, P. 1996, Dawning of a new age? The extent, causes and consequences of ageing in Australia, SPRC Discussion Papers No. 75, University of New South Wales, Sydney.

Scitovsky, A. 1988, 'Medical care in the last twelve months of life: the relation between age, functional status, and medical care expenditures', *Milbank Memorial Fund Quarterly: Health and Society* 66, 640-660.

Scott, H. 1999, Seniors in cyberspace: older people and information, Council on the Ageing, Melbourne.

Singer, B. and Manton, K. 1998, 'The effects of health changes on projections of health service needs for the elderly population of the United States', *Proceedings of the National Academy of Sciences* 95 26, 15618-22.

The Australian, 5 November 2002.

Thurow, L. 1996, *The future of capitalism*, Allen & Unwin, Sydney.

Treasurer 2002, *Intergenerational Report 2002-03*, Commonwealth of Australia, Canberra.

Treasurer 2004, *Australia's demographic challenges*, Commonwealth of Australia, Canberra.

Treasurer 2004a, A More Flexible and Adaptable Retirement Income System, Commonwealth of Australia, Canberra.

UN Population Division 2001, World Population Prospects: the 2000 Revision, United Nations, New York.

United Nations 2002, 'International Plan of Action on Ageing 2002', Second World Assembly on Ageing, Madrid, Spain, 8-12 April 2002.

VandenHeuval, A. 1999, 'Mature age workers: are they a disadvantaged group in the labour market?' *Australian Bulletin of Labour* 25 1, 11-12.

WA Department of the Premier and Cabinet 2001, *BOOMNET: Capturing the baby boomer volunteers*, Department of Premier and Cabinet and Office of Senior Interests, Perth.

Wanless, D. 2001, *Securing our future: taking a long-term view:* an interim report, UK Treasury, London.

Wilkinson, J. and Bittman, M. 2002, *Volunteering: the human face of democracy*, Social Policy Research Centre, University of New South Wales, Sydney.

World Bank 1994, Averting the old age crisis: policies to protect the old and promote growth, World Bank, New York.

World Bank 2003. 'What is social capital?' www.worldbank.org/poverty/scapital/whatsc.htm.

World Health Organization 2000, The world health report 2000: health systems: improving performance, WHO, Geneva.

Universities of the Third Age www.u3aonline.org.au

Yellowlees, P. 2001, Your guide to E-health: third millennium medicine on the internet, University of Queensland Press, St Lucia.

Zweifel, P., Felder, S. and Meiers, M. 1999, Ageing of population and health care expenditure: a red herring? *Health Economics* 8 6, 485-96.



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