

The Age of Retirement

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Executive Summary

Unlike some systems which have a public pension based on contributions over the working life of an individual, the Australian Age pension is generally viewed as a (means tested) entitlement, regardless of years of labour force participation. **The existence of this universal, means-tested, age pension inherently reflects “fairness” considerations**, by ensuring that some minimal level of income support is available to all individuals beyond some age – at which they may no longer be able to generate income through employment.

That does, however, influence perceptions of what is “fairness”. Unlike some other countries where early retirement is permissible after reaching a certain number of years of employment and contributions to the national scheme (albeit with a lower annual pension), **the Australian debate on “fairness” is focused on age *per se* as the critical issue. Shifting the debate to incorporate such considerations is merited, and becomes particularly important when the relationship between the Preservation Age (for access to superannuation savings) and the Official Retirement Age (for eligibility for the age pension) is being considered.**

The current gap between the preservation age of 60 years and the official retirement age of 65 years enables workers to fund early retirement from super balances, shifting their lifetime leisure – consumption profile (with more leisure prior to the official retirement age, and lower lifetime consumption). To the extent that this is a purely voluntary choice, with no consequences for government budgets, it is difficult to see why that should be a concern for society. Ongoing, trend increases in national productivity and real incomes (with real average weekly earnings increasing by around 30 per cent since the start of the millennium) should provide the opportunity for older workers, with consumption habits formed at earlier ages when real incomes were lower, to elect to take some of the gains as increased leisure. With around a third of retirees projected to receive the full age pension even when the superannuation system reaches maturity after 2040, there are many lower income workers whose voluntary early retirement would have little consequences for the government budget. For many of these, financial wealth achieved if they worked till the official retirement age would still be below the assets test requirements for receipt of the full pension. Their early retirement has limited consequences for the government budget – other than loss of tax revenue from their early exit from the workforce.

But, there are two sets of circumstances where this benign scenario does not apply. One is in **the case of “involuntary retirement” where health or job loss considerations lead to early retirement**. ABS survey figures on reasons for retirement, and data from the HILDA survey suggest that such involuntary retirement may comprise a significant fraction of retirees. (One study puts the proportion at over 25 per cent). **For such involuntary retirees, the post-retirement experience is less satisfying both in financial terms and in general wellbeing**. Thus there is the need for the retirement age debate to be cognisant of the fact that a possibly substantial proportion of retirees have not entered that state voluntarily. Measures to facilitate continued workforce participation of older laid-off workers, whose skill sets may not match available job opportunities, as well as to ensure support for those with health issues (such as may be provided for some by the National Disability Insurance Scheme) are thus important issues.

The other caveat is where **early retirees run down super balances and thus** (by virtue of having lower assets at the official retirement balance) **increase their subsequent pension income – at a cost to the government budget. Government retirement incomes policy should, arguably, be designed not to provide incentives to take such actions** – although again questions of what is meant by equity become important. Unfortunately, the means test acts essentially as a disincentive for

continued work and accumulation of retirement savings balances, and is found by some researchers to have significant disincentive effects on continued workforce participation. And while the transition to retirement scheme was established with the sensible objective of enabling earlier access to pension savings to support a shift to part time work and ultimate retirement, the question needs to be asked whether it is achieving that objective or whether it has been driven by tax arbitrage strategies of more wealthy individuals. (Changes to maximum superannuation contribution limits in 2012 should, at least, reduce the opportunities for such tax arbitrage).

But there is scope for policies to do more to provide incentives for deferral of retirement for those who wish or are able to do so. There are two types of financial disincentive to postponing retirement age. One is the effect of **the means test** whereby accumulation of further assets from savings out of wage income above reduces subsequent pension entitlements. The other is the **deferral of receipt of pension income**, which given a constant expected lifetime (and there is no evidence that age of retirement affects mortality), reduces the amount of lifetime pension wealth which the individual can expect to receive. While there is some small financial incentive for continuation of work beyond the official retirement age (the work bonus test), it falls far short of being “actuarially fair” – such that deferring retirement has no effect on the expected level of lifetime pension income to be received.

Another important consideration is the observation of a significant increase in the proportion of households approaching retirement age who still have **outstanding mortgage debt**. There is anecdotal evidence of this reflecting decisions to fund higher consumption levels pre-retirement (including providing financial support to other family members for house purchase) with the intention to use superannuation balances to pay down the mortgage. Some part of that higher consumption may also be “trading up” to higher value dwellings to enjoy the amenity benefits in retirement, influenced by the exclusion of the family home from the assets test for the pension. **This potential cause of distortion to asset allocation, and also disincentive to “downsizing” in retirement warrants attention.** While (significantly) increasing the allowable amount for the assets test and simultaneously including the value of the family home would be one way of rectifying such distortions, it would require significant political will.

This report also raises the question of what is meant by “retirement”. As well as meaning different things to different people, it is also important to recognise that a significant number of retirees subsequently become “unretired”, re-entering the workforce for financial or other reasons. In Australia, that figure is around 10 per cent of retirees (based on ABS survey data) – which is considerably less than in the USA, where the retirement safety net is much less robust.

The report also examines international evidence on **determinants of actual retirement decisions.** **The actual retirement age** (which on average is generally below the official retirement age) **had been declining internationally until prior to the Global Financial Crisis, but is now increasing) is influenced by changes in the official retirement age.** That reflects both financial considerations but also “anchoring” of perceptions about what is the “normal” retirement age. But in Australia, **there is some evidence that the preservation age may be more relevant for influencing expectations regarding age of retirement.** In examining the motivations for retirement, it would appear that the financial incentive is especially strong for males, who indicate that access to pensions and superannuation are the strongest reason to retire from age 55. It is less so for females until after

age 65, with reasons such as health and family being stronger at earlier ages. **The appropriate relationship between, and levels of the official retirement age and the preservation age, warrant much more study, and more consideration also needs to be given to equity and lifestyle choice considerations than is implied by the current focus on primarily national output and budgetary considerations.**

1. Introduction

One of the major challenges for governments in developed economies is the need to ensure the sustainability of retirement systems. Demographic forces such as lower birth rates and increased longevity have resulted in increasing demands on governments to provide for the needs of an ageing population. To reduce the rapidly increasing burden on the public purse, and thus improve the sustainability of retirement systems, governments around the world are implementing options such as mandating retirement savings contributions, encouraging voluntary contributions and other forms of private retirement savings, promoting workforce participation for older workers, and increasing the retirement age at which individuals become eligible for a public pension.

Similar developments have occurred in Australia. Since 1992, the vast majority of the working population has participated in a mandated retirement savings plan through the superannuation guarantee contribution (SGC) and received tax incentives to encourage further voluntary contributions to the scheme.

To enhance the sustainability of the Australian system, policy changes have been implemented which will eventually lead to an increase in the pension eligibility age - hereafter referred to as the official retirement age (ORA) - to 67 for both men and women born after January 1st 1957. Further, mandatory contribution rates for superannuation are scheduled to increase from the current 9 per cent of employee's wages to 12 per cent by July 2019. There is also ongoing discussion regarding increasing the age (and/or rate of withdrawal) at which individuals can access accumulated superannuation savings. That age of access is referred to as the "preservation age" (PA).

These developments raise a number of questions which this report seeks to address:

- What is the meaning and consequences of "retirement" for individuals? (Box 1 addresses the issue of the meaning of retirement)
- What role do the ORA and PA play in influencing individual "retirement" decisions relative to other considerations such as health, employment options, wealth etc.?
- What are the equity/distributional consequences of changes to the ORA and PA?

Answers to these questions can help to address important policy questions such as:

- Is the current emphasis on "retirement" as a well-defined event involving exit from the work force appropriate? If the age pension is viewed as an age related entitlement conditional on wealth or income characteristics, what is the appropriate set of conditions which might induce optimal continuation in the workforce while in receipt of some age pension, or induce individuals to retire at an "optimal" age?
- Should the ORA differ in response to individual characteristics such as: length of workforce participation; gender; or occupational characteristics which are correlated with effective working life and expected life span?
- What should be the relationship between the ORA and PA and drawdown arrangements or constraints on use of superannuation savings?

- What are the potential consequences for other components of the Government budget (such as health and disability expenditures) from changing the ORA and PA?

BOX 1: What is Retirement?

One of the complexities in analysing retirement issues lies in determining a suitable definition of retirement. While the official retirement age (ORA) is relatively easy to determine – as the age at which an age pension or other government benefits become available, identifying the actual age of retirement is less straightforward. Some individuals below the official retirement age who are no longer in the workforce may be treated as retired, but may be part of the “hidden unemployed” (or may be in de facto retirement due to eligibility for other government unemployment or health benefits). Others may regard themselves as “retired” by virtue of having left their long term career occupation, and taken up full or part time employment of some different type (and possibly drawing down accumulated superannuation or other savings). Conversely, individuals above the ORA may be employed full or part time, possibly drawing down superannuation or other savings (with some part time employees in receipt of some level of age pension benefits).

An important consideration is whether retirement is voluntary or “involuntary” – effectively forced upon individuals earlier than expected due to health problems or loss of employment. The post-retirement experience of the involuntary retired can be expected to differ significantly from those who retire voluntarily.

In practice, for many individuals, “retirement” is not a unique event. US data suggests that only around half of “retirees” cease work permanently – with around a quarter of retirees subsequently becoming “unretired” by returning to the workforce for some further period (Maestas, 2010). In Australia, survey data collected by the ABS in 2007 indicated that there were 310,000 former retirees in the workforce relative to 3.1 million retired individuals. The main reasons given for returning to work were: financial need (36% for males and 42% for females) and bored (31% for males and 14% for females). The apparent difference between the USA and Australian “unretiring” experience is no doubt influenced by differences in the nature of the retirement income support safety net between the two countries.

Such policy related questions are best considered in the context of available evidence about relationships between labour force participation experience, occupational choice, retirement age, income and wealth, gender, post retirement activities, health, and longevity. Consequently the available evidence is considered later in this report. Prior to that, however, to provide context, section 1 provides a brief overview of the historical development of Australian retirement incomes policy and of the current Australian economic and social setting within which these questions need to be addressed, while section 2 provides some international comparisons of policy arrangements and trends regarding retirement age.

Section 3 examines evidence on individual decision-making regarding retirement and the roles of labour force experience, effective working life, longevity and health. Section 4 considers how retirement age influences post-retirement experience, including mortality. Section 5 summarizes and considers policy implications.

2. The Australian Situation

2.1 The History of Social Perspectives on Retirement Incomes Policy in Australia¹

The Age pension was introduced in Australia around the start of the 20th century reflecting “increased community acceptance of the notion that support for the aged was not solely the responsibility of the individual, but a collective responsibility for the whole community” (Dixon, 1977). A means test (income and/or assets) has been applied since inception reflecting both a “needs” perspective and a budgetary cost perspective, and the family house was excluded from the test in the early years of Federation. While initially the eligibility age was common for males and females, it was reduced in 1910 to 60 for women “on the grounds that women generally became ‘incapacitated for regular work at an earlier age than men’ (Kewley, 1973, p 75) “ (Treasury, 2001). In 1997, the commitment to keep the single pension at 25 per cent of average weekly earnings was enshrined in legislation, and the rate for married individuals set at a slightly lower level.

While there were several attempts to introduce a universal national part-contributory pension scheme (most recently recommended by the Hancock Report in 1976) this approach was never supported by government. Ultimately the current superannuation scheme, involving (mandatory and voluntary) private, tax – favoured, retirement savings was introduced and operates alongside of the government-provided, budget funded, age pension arrangements.

The Australian retirement income arrangements mean that there is no actual, or widely perceived, link between an individual’s taxation contributions during their working life and pension entitlements, unlike in some other nations. Pension payments are funded out of current government budget revenues (“pay as you go”).² The age pension is generally viewed as a (means tested) entitlement, regardless of years of labour force participation.

While eligibility age has traditionally been defined by “years since birth”, recent increases reflecting increased longevity could be interpreted as an implicit shift towards definition by “years of remaining life expectancy” as discussed by Foreman and Chen (2008). While that could be implemented at an aggregate level, it raises the issue of whether individual differences should be taken into account. Foreman and Chen also note that the official retirement age could alternatively be defined using other concepts. These include: mortality risk (age at which risk of death within one year exceeds some critical level such as 2 per cent); or a constant working life to expected retirement years ratio (e.g. 3 to 1) based on mortality tables (and other information) such that individuals commencing work at an earlier age could, *ceteris paribus*, retire earlier.

It is important to note that attitudes towards retirement policy may be shaped by the institutional context within which individuals have been brought up. For example, the French pension system involves eligibility for receipt of a full pension after a specified number of years of employment related contributions have been made. In Australia, where there is no formal designation of some part of labour income taxes as contributions to a retirement provision, there is less attention paid to length of working life as an eligibility criterion, rather than age *per se*.

¹ This section draws heavily on The Treasury (2001) and Nielson (2010)

² In fact, Nielson (2010) reports that the Chifley Government in 1945 established a National Welfare Fund, which received some part of budget tax receipts, as part of planning for a national superannuation scheme, but that this operated solely as an accounting device until its abolition in 1985.

Particularly relevant to these considerations is the concept of “fairness”. The existence of a universal, means-tested, age pension, inherently reflects “fairness” considerations, by ensuring that some minimal level of support is available to all individuals beyond some age – at which they may no longer be able to generate income through employment or running down of accumulated savings. But, it can be argued, current arrangements mean that it is not “actuarially fair”, potentially biasing retirement decisions. (See Box 2)

BOX 2: Actuarially Fair Pension Arrangements

A relevant concept for considerations of alternative policies is an “actuarially fair” pension. This is based on thinking of the pension as a “lifetime annuity” which, subject to some wealth related eligibility conditions, should be available and of equal expected value to all recipients. The expected value for any individual will depend on the number of years from commencement of the pension to expected death. Thus, an individual who works to an older age should expect to receive a larger annual pension than one who retires earlier. (This type of approach applies for the US Social Security System and in reforms in the 1990s to Italian and Swedish schemes, which adopted “notional defined contribution schemes” (Hairault et al, 2010)). Compounding the inequity, if this is not the case, individuals who retire later and/or who have had more years in employment can be expected to have, on average, contributed more to the taxation revenue needed to sustain the pension system.

An arrangement of this sort was introduced by the Howard Government in the 1997-98 Budget, providing that those who “deferred age pension take-up while continuing to work a minimum of 25 hours per week, accrued a cumulative tax exempt bonus entitlement of 9.4 per cent of his or her basic pension entitlement for each full year of employment past pension qualifying age (maximum 5 years deferral)” (Treasury 2001). This scheme was closed to new entrants who had not qualified for the age pension by 20 September 2009. It was replaced by a “Work Bonus” scheme³ whereby an increased allowance was made for income earned in calculating the income test for pension eligibility. (Only 50 per cent of earned income up to a maximum of \$500 per fortnight was included initially. Recent changes to this were announced in 2012⁴).

The Age pension in Australia is now supplemented by superannuation savings. Institutionalised employee superannuation began in Australia in September 1985 when the Australian Council of Trade Unions (ACTU) sought a three per cent employer contribution as part of its National Wage Case claim. This principal was approved in 1986 and subsequently new industrial awards were progressively negotiated under these guidelines.

It was not until 1 July 1992, that the superannuation guarantee was introduced requiring employers to make tax-deductible superannuation contributions on behalf of their employees. From a base of three per cent, higher levels of contributions were phased-in over a ten-year period, reaching the maximum of nine per cent in 2002/03. Mandatory contribution rates for superannuation are scheduled to increase from the current 9 per cent of employee’s wages to 12 per cent by July 2019.

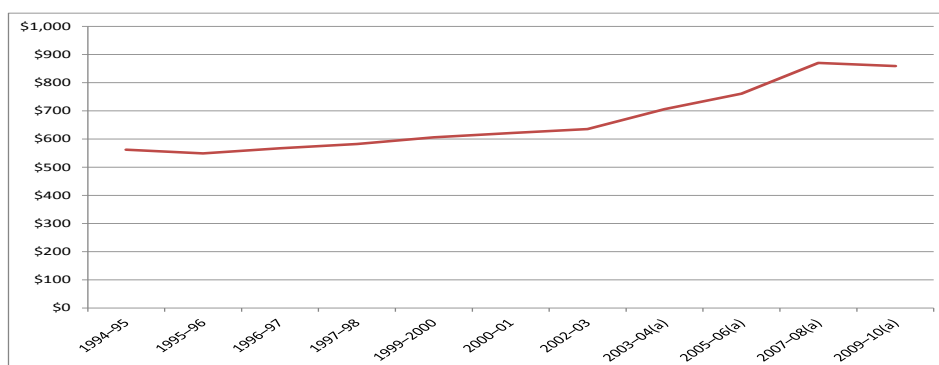
³ According to <http://www.superguide.com.au/how-super-works/goodbye-pension-bonus-hello-work-bonus>

⁴ <http://jennymacklin.fahcsia.gov.au/node/1974>

2.2 The Economic and Social Setting

Since the introduction of the SGC, economic growth and technological change have led to increased average income levels (See Figure 1) and wealth accumulation, suggesting scope for better living standards in retirement. As Table I indicates, average household real disposable income has increased consistently over the past two decades, before declining slightly with the onset of the Global Financial Crisis.

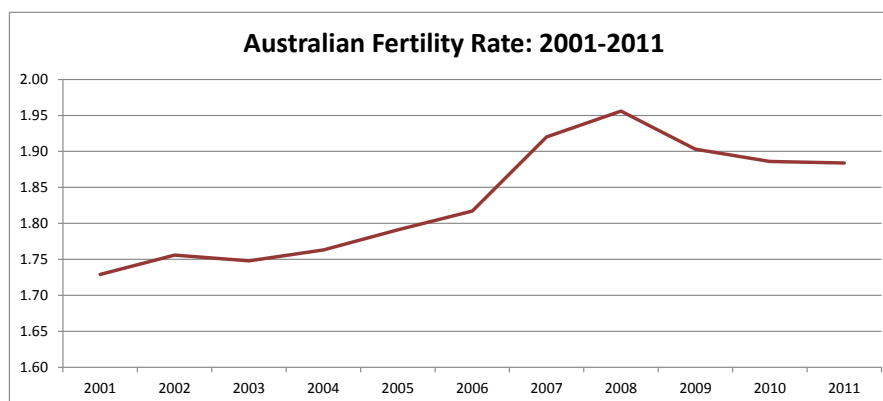
Figure 1 Household Average Real Disposable Income⁵: 1994-2010



Source: ABS, CAT 6523.0 Household Income and Income Distribution, Australia - Detailed tables, 2009-10

These economic gains have been offset to some extent by demographic changes such as increased longevity, a low birth rate⁶ and consequent decline in the working-age population relative to those of non-working age (young and elderly).

Figure 2: Australian Fertility Rate 2001-11



Source: ABS, CAT 3301.0 Births Australia, 2011

With better standards of living, better health care and lower mortality rates, average longevity over the past century has increased significantly. Life expectancy has increased from around 47 years for a male born in the 1890s to 79 years for one born in 2007-2009. The natural consequence of this has been a commensurate increase in years of life post-retirement, with remaining life expectancy at age

⁵ Disposable income is measured as Gross income less income tax, the Medicare levy and the Medicare levy surcharge

⁶ The fertility rate represents the number of children an average woman has during her lifetime, and the replacement rate for a developed country is estimated to be around 2.1. The most recent statistics from the ABS show that Australia's fertility rate is reasonably flat at around 1.88.

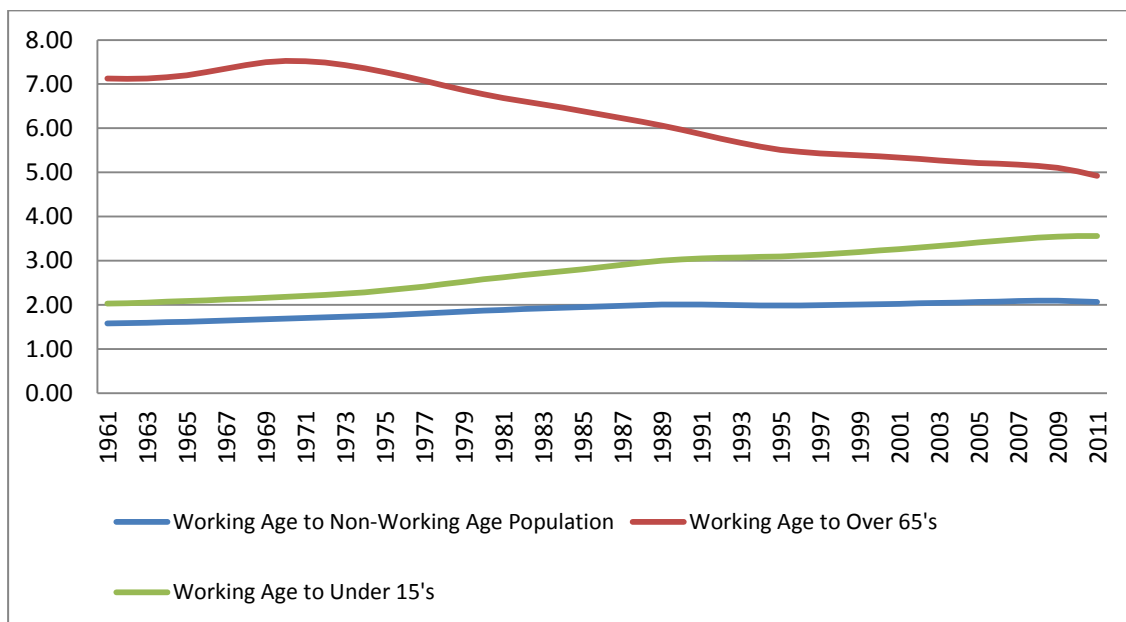
65 increasing from 11 years to 18 years over the same period. The challenge for retirement systems, therefore, is to provide for individuals through this extended non-working period.

Table 2 Life expectancy (additional years of life) for people at selected years of age

	Males		Females	
	At birth	At age 65	At birth	At age 65
1881–1890	47.2	11.1	50.8	12.3
1891–1900	51.1	11.3	54.8	12.8
1901–1910	55.2	11.3	58.8	12.9
1920–1922	59.2	12	63.3	13.6
1932–1934	63.5	12.4	67.1	14.2
1946–1948	66.1	12.3	70.6	14.4
1953–1955	67.1	12.3	72.8	15
1965–1967	67.6	12.2	74.2	15.7
1975–1977	69.6	13.1	76.6	17.1
1985–1987	72.7	14.6	79.2	18.6
1995–1997	75.6	16.1	81.3	19.8
2004–2006	78.7	18.3	83.5	21.5
2007–2009	79.3	18.7	83.9	21.8

As Figure 3 shows, in the early 1970s there were around 7 workers for each person of retirement age, with this declining to 5 by 2011. While the ratio of working age population to those under 15 has increased from 2 to around 3.5 over the same period, this portends a slower growth in the working age population over the longer term – when the aged population is increasing.

Figure 3 Working Age/Non-Working Age Population, Australia 1961-2011



Source: World Bank, <http://data.worldbank.org/country/australia>

An ageing population and higher longevity of those in retirement means that, with relatively fewer of working age, meeting retiree needs involves substantial intergenerational income and wealth consequences. Family arrangements have also been changing, with later family formation and increased longevity leading to increased age of inheritances and bequests from parents, and family

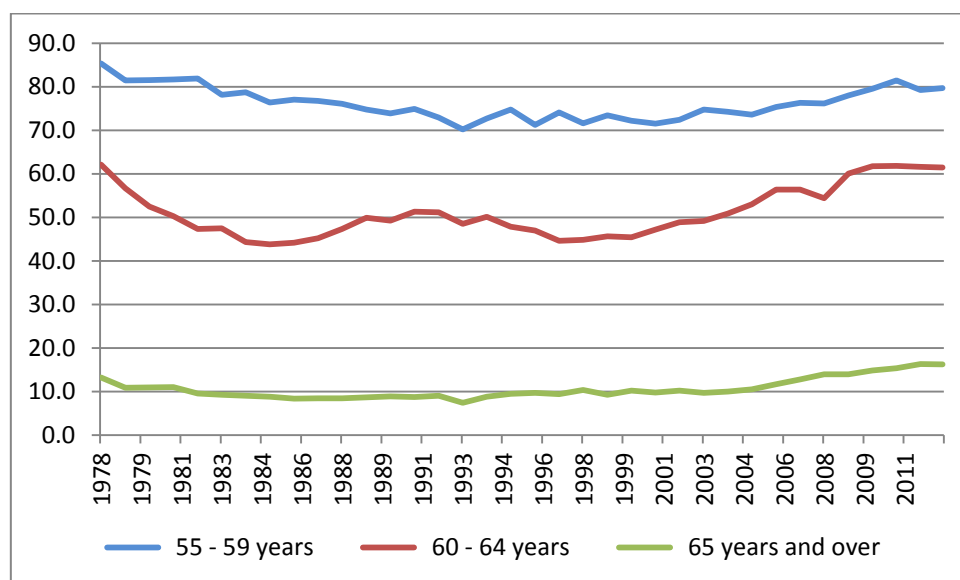
restructurings due to divorce/separations and remarriage/re-partnering (Hayes et al, 2010 provide an overview). These changes in family arrangements, together with the ageing of the population can impact the extent to which families can support retirees and supplement retiree income.

Another relevant factor is technological change which is changing available employment options and skill requirements with potentially adverse consequences for employment security, income and alternative employment options for many older workers approaching retirement age. Increasing globalisation and competition from lower wage workers in developing countries can aggravate the adverse employment and income impact of technological change on workers (and business owners) in affected occupations and industry, even though society as a whole can benefit from these trends. Figure 4 shows trends in labour force participation rates while figure 5 shows recent trends in the ratio of part time to full time work for different age groups.

Participation rates of males in the workforce for the age groups 55-59 years, 60 to 64 years and over 65 years showed some decline over the past two decades but have returned over recent years to similar levels as in the late 1970s. Female participation rates for the age groups 55-59 years and 60 to 64 years, on the other hand, have shown a consistent increase since the late 1980s, with a marked acceleration since the late 1990s. Participation rates of females over 65 show some increase in the post GFC period.

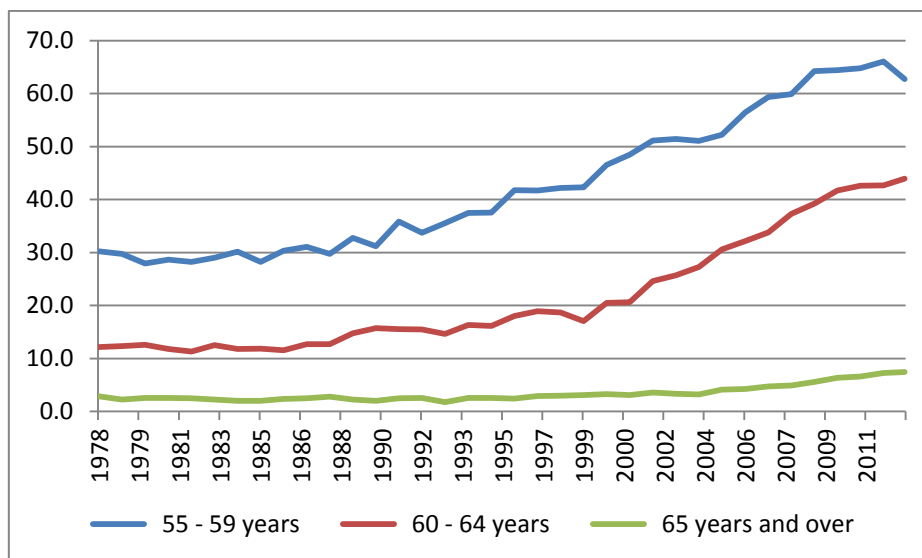
Figure 4 Trends in Labour Force Participation Rates 1992 – 2011

Male



Source: ABS, Cat 6105.0 - Australian Labour Market Statistics, July 2012

Female

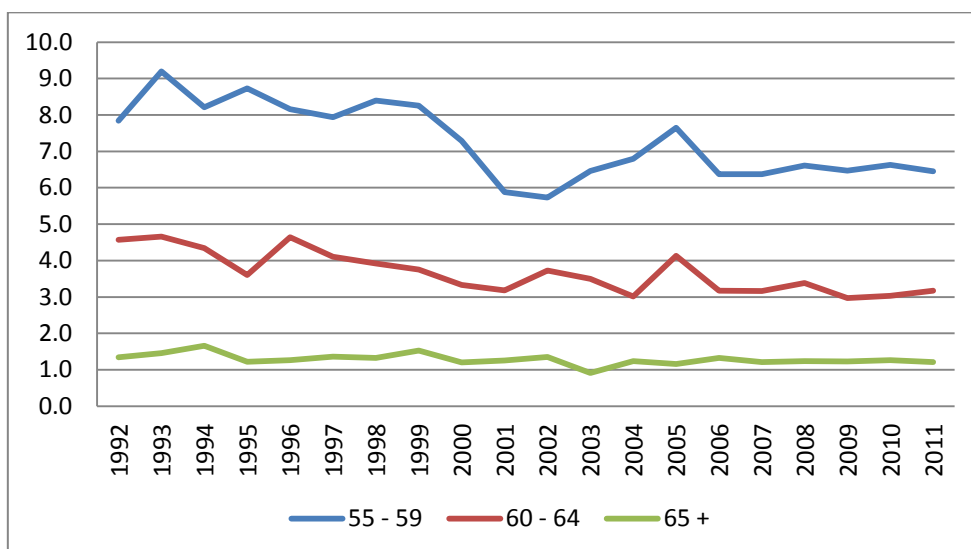


Source: ABS, Cat 6105.0 - Australian Labour Market Statistics, July 2012

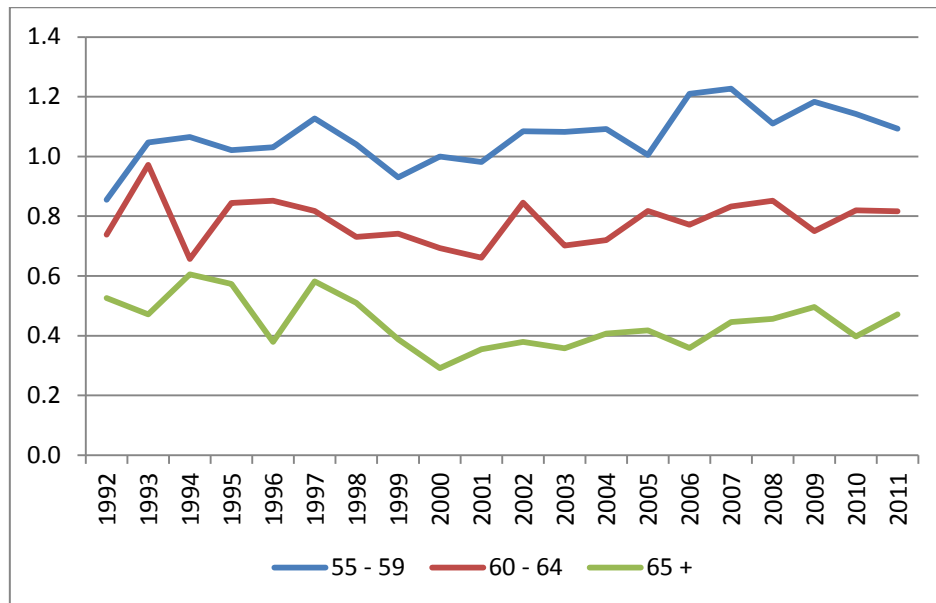
As the ratio of full time to part-time male workers shown in Figure 5 indicates, there has been some decline over the past two decades in the 55 to 59 and 60 to 64 age groups, possibly indicating ongoing casualization of the workforce. The ratio of full to part-time workers has changed little in the over 65 year age group. For females, the ratio of full to part time workers increased in the 55 to 59 age group, stayed relatively constant in the 60 to 64 age group, and declined slightly in the over 65 age group. Given the increased participation rates across all age groups it more difficult to define any impact of casualization amongst the female workforce.

Figure 5 Ratio of full-time to part-time workers: 1992-2011

Male



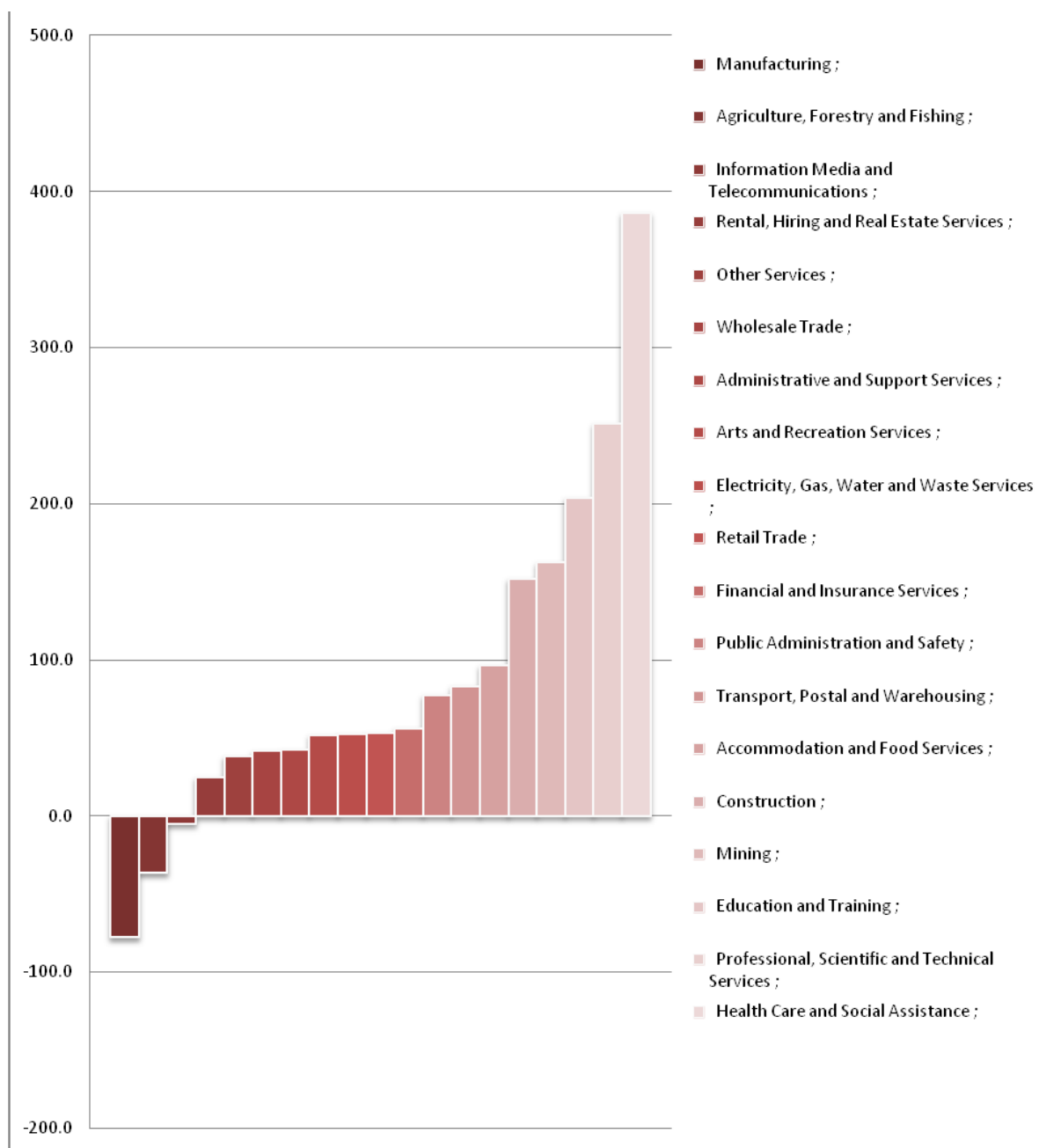
Source: ABS, Cat 6105.0 - Australian Labour Market Statistics, July 2012

Female

Source: ABS, Cat 6105.0 - Australian Labour Market Statistics, July 2012

Hidden within those aggregate changes are substantial shifts in the composition of employment shown in Figure 6. Strong growth has occurred in the professional services area, in occupations requiring higher education training, and in mining and construction, with little or no growth in areas such as manufacturing, agriculture, and lower skilled occupations. For older workers in many industries these structural shifts can imply redundancies and limited opportunities to obtain employment in growth sectors, thereby hastening “retirement”.

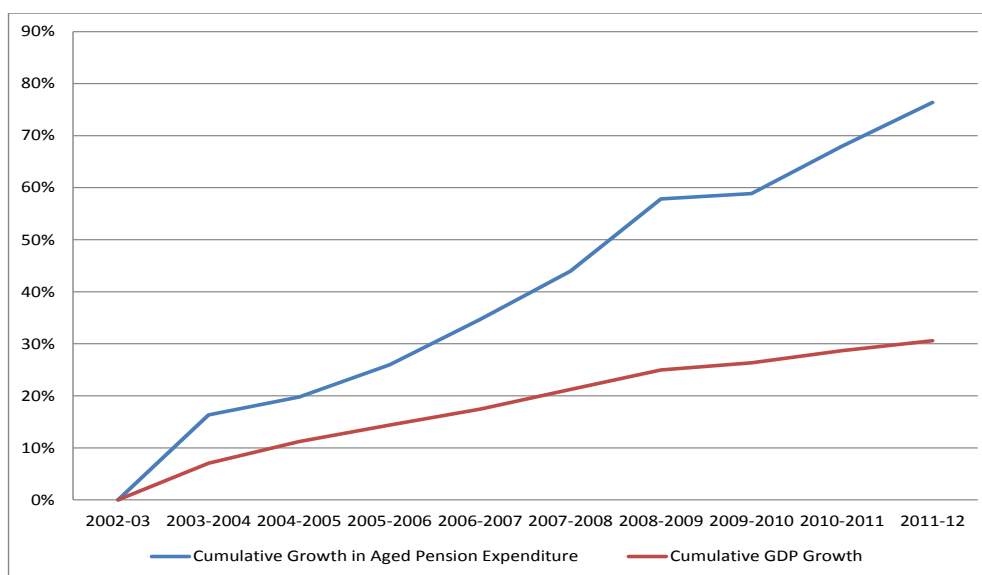
Figure 6 Cumulative Change in Industry Employment (000's) Feb 2005 - Nov 2012



Source: ABS, CAT 6291.0 Labour Force, Australia, Detailed, Quarterly

Also important, as a driver of policy debate and potential policy changes are the budgetary consequences of the demographic trends.

Evidence of the fiscal strain of government expenditure on the aged, as a proportion of GDP, is shown in Table 7. Over the period 2002-3 to 2011-12, government expenditure on the aged, 72% of which is for the age pension, has increased from 2.4% of GDP to around 3.7% of GDP.

Figure 7 Growth in Aged Assistance Expense Compared to GDP: 2002-2012

Source: The Treasury Final Budget Outcomes (2001 - 2012) and ABS Cat 1350.0

As shown in Table 3, the projected increase in age pension expenditures, health expenditures, and tax expenditures (from tax concessions associated with superannuation) create sustainability problems for the Federal Government Budget. Projections to 2050 indicate that the proportion of the population aged over 65 year will increase from 14 % to 23%, and government expenditure on health, the age pension and aged care will increase to almost 13% of GDP from its present level of 7.5%. Changing the ORA and/or the PA are among the options available to the government to reduce these mounting pressures on the budget. How such changes would impact upon other government expenditures, such as disability pension payments, is an important consideration in assessing their effectiveness.

Table 3 Demographic Projections

Year	1970	2010	2050 (projection)
Dependency ratio (workingage/>65 years)	7.5	5	2.7
Life expectancy at age 60	n.a.	Males 23.4 Females 26.6	Males 29.2 Females 31.4
Total Population (mill)	12.5	22.2	35.9
Percentage 65 and over	8.3	13.5	22.7
Government Spending % of GDP			
Health		4.0	7.1
Age Pensions		2.7	3.9
Aged Care		0.8	1.8

Source: The Treasury (2010)

In these circumstances, it is appropriate to review the rationale for current arrangements prescribing the age at which individuals can qualify for government provided age-related income support or access to pension savings which have been subject to favourable tax treatment in the accumulation phase. Current and mooted policy changes regarding these issues have been largely based on

macroeconomic and demographic considerations, but there are potentially significant distributional consequences which also warrant attention.

2.3 Retirement Regulations

The Australian retirement incomes policy framework has four pillars; a means tested age pension providing a safety net; private, mandatory superannuation savings for employees; voluntary superannuation savings; and, voluntary non-superannuation savings (including home ownership). As noted by Treasury (2012, p66) “These pillars were not established on a systematic basis as part of a grand design. Rather, each pillar emerged and evolved separately”, and a chronology of developments can be found in Nielson (2010). For older Australians, the interrelationship between the age pension system, the private superannuation system, and labour force status is relatively complex – if not a minefield. These complexities involve:

- differences in the age of entitlement to pension income and age of permitted access to use of private superannuation savings;
- the amount of pension income receivable being contingent upon (ie means tested against) superannuation wealth and other asset holdings and income (from those assets or labour income);
- policies enabling some access to superannuation balances while still in full or part-time employment (the *transition to retirement* scheme) and partial discounting of labour income in the means test calculation for those receipt of an age pension (the *Work Bonus* scheme).

The various recent policy changes and current arrangements for Australia’s retirement income system have been driven primarily by macroeconomic and government budgetary considerations – within the context of a long standing policy commitment to ensuring that retirees are guaranteed (via the age pension) an income level at least equal to 25 per cent of average weekly earnings. And policy arrangements are far from settled.

As well as increases in the ORA, there have also been calls⁷ for an increase in the age at which individuals can generally access their superannuation savings (the *preservation age*) which is currently 60 for those born after July 1, 1964.⁸ Motivating these calls have been concerns to encourage longer participation in the workforce, thus leading to greater accumulation of private superannuation balances (rather than an earlier running down of such balances via “early retirement”) and less reliance on, or deferral of receipt of the age pension as a result of means testing. Others⁹ have suggested that some part of superannuation savings, particularly if early access is permitted, be required to be converted into a lifetime annuity (either immediate or deferred) to help deal with the problem of longevity risk.

But current “retirement age” related arrangements and such policy proposals have significant distributional consequences – in addition to those arising from the generous tax concessions

⁷ See, for example, the Henry Tax Review Retirement Income Review (2009, Chapter 5) and *FSC calls for super preservation age review: Savings gap could be reduced by \$400 billion* (Kachor, 2012)

⁸ It is 55 for those born before July 1, 1960, and increases in a step fashion to 60 for those born after that date but before July 1, 1964.

⁹ See *Reallocate super and secure the future* (Yeow, 2012)

provided in the accumulation phase of superannuation. Such consequences can be related to differences in gender, income, occupational choice, and reflect differences in labour force participation experience, health consequences, and longevity expectations. Policy settings (regarding pensions, superannuation, disability, health) also have a significant influence upon individual retirement decisions and need to be carefully set to encourage “optimal” retirement decisions. Since much of the empirical evidence on causes and consequences of retirement age is international, it is appropriate to consider the international context of retirement incomes policies to help interpret that evidence.

2. International Context

Discussions regarding retirement savings policy need to recognize the variety of arrangements which exist internationally. The World Bank provides a framework for analysis by identifying five pillars of retirement incomes policy which interact in various ways. The components range from the basic age pension through to voluntary savings outside of any officially supported pension or retirement savings scheme. Australia has four of the five described pillars, but does not have a mandated, contributory, publicly managed pension plan scheme (see pillar 1 below).

Table 5: The Five Pillars of Retirement Incomes Policy¹⁰

Pillar No.	Form	Objective
0	A basic pension from public finances that may be universal or means-tested	Funding to provide a minimum level of financial security
1	A mandated public pension plan that is publicly managed with contributions and, in some cases, financial reserves	Public provision of additional financial security to individuals based on their length of employment and level of tax contributions throughout their working lives.
2	Mandated and fully funded occupational or personal pension plans with financial assets	Aims to transfer at least some part of the responsibility for retirement income provision from the state to the individual via compulsion.
3	Voluntary and fully funded occupational or personal pension plans with financial assets	To encourage additional voluntary private provision (and provides incentives for the self-employed and others to undertake retirement savings.)
4	A voluntary system outside the pension system with access to a range of financial and non-financial assets and support	to recognise the importance of non-pension assets like the family home and a personal investment portfolio in retirement and ensuring that quality advice is available for management of these assets.

Many developed countries are facing similar demographic and budgetary challenges to Australia.¹¹ Consequently there has been widespread policy emphasis on:

- Increasing the state pension age/ retirement age to reflect increasing life expectancy and to reduce the cost of providing publicly financed pension benefits,

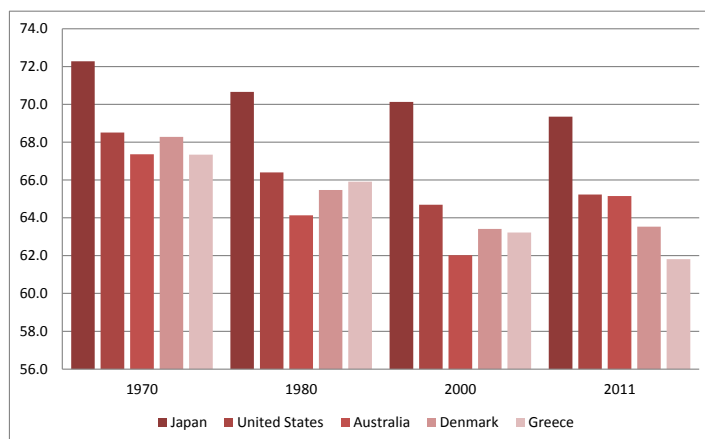
¹⁰ (Mercer, 2012).

¹¹ For more information see the Melbourne Mercer Global Pension Index Report, Mercer 2012

- Promoting higher labour force participation amongst the elderly to increase retirement savings and reduce the length of retirement, and
- Incentives to encourage voluntary savings.

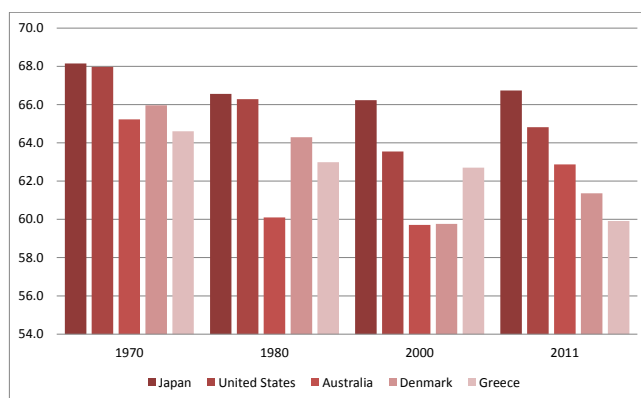
Similar to Australia, there is evidence of a decline in the “effective” retirement age of both men and women (the age at which they effectively exit the workforce)¹², until the advent of the Global Financial Crisis in 2007, with women also tending to retire earlier than men. (See Figures 8 and 9)

Figure 8 Average Effective Age of Retirement - Men: 1970-2011



Source: OECD Statistics¹³

Figure 9 Average Effective Age of Retirement - Women: 1970-2011



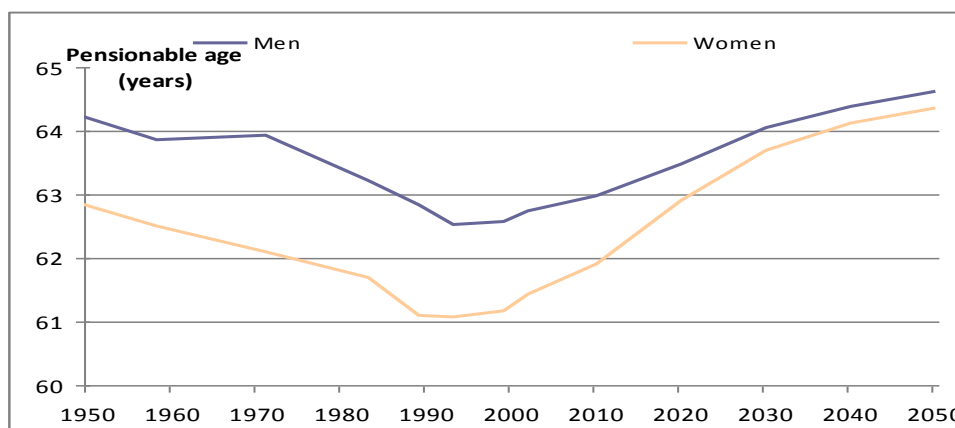
Source: OECD Statistics

As Figure 10 suggests, this was related to a widespread trend for ORAs to fall the decades following the Second World War. That trend appears to have been reversed internationally since around 2000. Projections indicate that this upward trend will continue into the foreseeable future.

¹² “The average effective age of retirement is defined as the average age of exit from the labour force during a 5-year period. Labour force (net) exits are estimated by taking the difference in the participation rate for each 5-year age group (40 and over) at the beginning of the period and the rate for the corresponding age group aged 5-years older at the end of the period.” (OECD, http://www.oecd.org/els/employmentpoliciesanddata/Summary_2011+values3dec2012.xls)

¹³ www.oecd.org/els/employmentpoliciesanddata/ageingandemploymentpolicies-statisticsonaverageeffectiveageofretirement.htm

Figure 10 OECD Official Retirement Age - history and projections

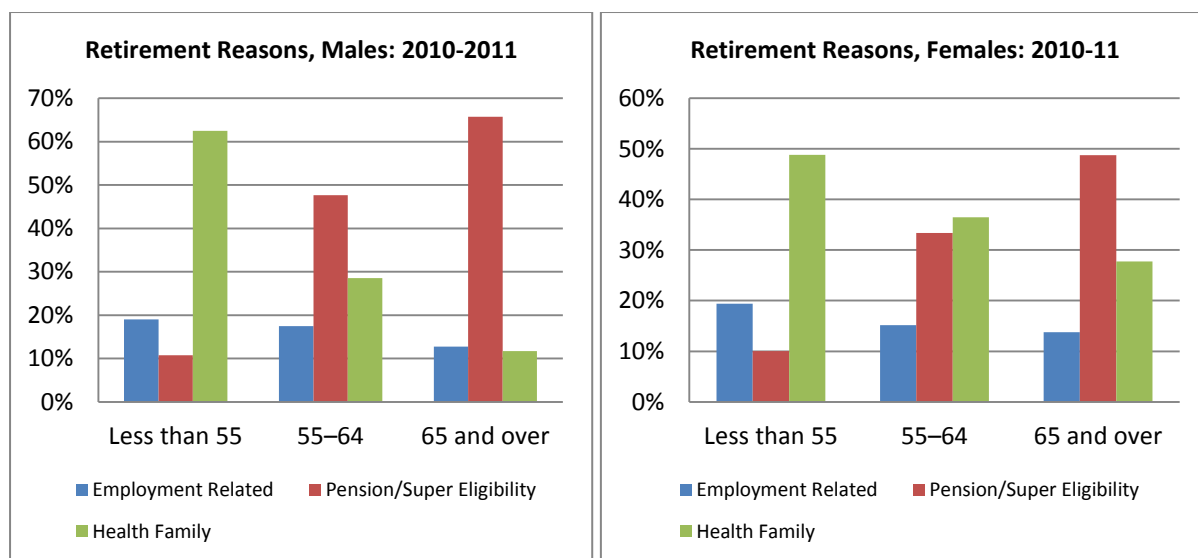


Source: OECD (2011)¹⁴

3. The Retirement Decision

The retirement decision is inherently bound up with employment, health and lifestyle considerations, and influenced by public policy settings which determine the availability of government financial support and thus affect incentives. Figure 11 shows the main reasons stated for retirement. While the relative importance of employment, health/family and retirement income eligibility are common for both genders, other determinants not shown on the graph are more important for females. These include timing of retirement to coincide with that of partner, pursuit of leisure/holiday activities, and other (not specified) reasons, while caring for others was relatively more important within the health/family reasons category.

Figure 11 Retirement Reasons: Australia 2010-11



Source: Australian Bureau of Statistics: 62380DO005_2010201106 Retirement and Retirement Intentions, Australia, July 2010 to June 2011

¹⁴ OECD (2012), Pensionable Age and Life Expectancy, 1950-2050, *Pensions at a Glance 2011: Retirement-income Systems in OECD and G20 Countries*.

Many economists, such as Gruber and Wise (1997), argue that a key determinant for remaining in the labour force is whether an additional year of work will provide the individual with an increased present value of retirement wealth. In this regard, the structure of tax and social security arrangements can be expected to play a major role in the retirement decision. For example, tax incentives, or increases in the ORA, which encourage longer workforce participation (and saving) increase retirement wealth, whereas means testing of pensions is essentially a tax on pre-retirement earnings and savings and provides a disincentive for continued workforce participation. This disincentive effect is compounded by the deferral of receipt of available benefits (such as the age pension – unless the benefit is adjusted for this deferral).

In this regard, Warren and Oguzoglu (2010) find that “the Australian retirement system does provide an incentive to retire early. However, men are much more likely than women to respond to these financial incentives.” This is reflected in the gender difference in relative importance of super/pension eligibility as a determinant of retirement decisions shown in Figure 11.

There is considerable international evidence that retirement decisions are influenced by changes in the ORA – even though effective retirement age (permanent departure from the workforce) typically differs from the ORA. Wise and Gruber (1997) find, in a multi-country study, a strong correlation (dependent on the nature of pension arrangements) between the age at which social security benefits are available and age of retirement from the labour force. In Germany, a reduction in the official age to receive early retirement benefits in 1972 from 65 to 60 corresponded with a reduction in the average age of retirement of white collar workers by 5.5 years. (A similar example is given for France). In 1961, a similar revision to the allowable age for early retirement (at which Social Security benefits could be accessed) was implemented in the US. While this led to a reduction in the average age of early retirement, significant incentives for continued work (such as an upward adjustment for future pension benefits) meant that the reduction was not as pronounced as that of Germany or France.

A more recent study by Gruber and Wise (2005) involving simulations across 12 different countries suggests that increasing the eligibility age for pension payments by three years reduced the proportion of workers that retire from the workforce within four years of the effective retirement age by an average of 47%. Their simulations also show that on average the change in policy resulted in a 27 per cent reduction in government benefit payments to the aged net of tax revenues. The reduction comes from two elements they label as the mechanical effect (the reduction caused purely by benefits not being paid until three years later) and the behavioural effect (the reduction caused primarily through increased tax receipts and contributions to the scheme as a result of continued workforce participation).

Bernal and Vermuelen (2012) find that an increase in the official age in retirement of 65 to 67 in the Netherlands may increase the effective retirement age by (only) around 4 months (six months for men and two months for women). This study (like many on retirement) only discriminates between working and not-working and does not take into account the amount of work undertaken. In that regard, Hurd and McGarry (1993) find that individuals that have the ability to reduce hours or the level of responsibility at a given job as one approaches retirement have a higher effective age of retirement. This suggests potential benefits from policies that provide incentives for people of retirement age to transition to retirement.

In the Australian context, the preservation age (PA) can also be expected to play a role in decisions regarding early retirement. Indeed, Felmingham et al (2006) state that based on responses to the 2003 wave of the HILDA survey, over 50 per cent of the age group between 50 and 60 state that reaching the PA is an important factor in determining retirement intentions. This is higher than the number that state reaching the ORA is important. And with over 1/3 of superannuation balances drawn down before age 65 (Tax Review – Retirement Income Strategic Issues Paper) reaching the PA clearly has an influence on retirement behaviour.¹⁵

Harding et al (2009) estimated that a one off shift in the preservation age from 55 to 60¹⁶ would have significant effect on the retirement incomes of “generation X” (those who would be aged between 54 and 68 in 2029). An induced increase in retirement age and higher superannuation balances at age 65 (due to greater contributions and lower withdrawals) would mean that private income in retirement would increase by around 30 per cent and age pension receipts would decrease by around 25 per cent.

But there are clearly potential distributional differences in the consequences of increasing the PA. For many individuals working till the ORA will still mean that superannuation (and other accumulated wealth) will be below the amount specified for the asset test for receipt of the full age pension. Early retirement, after reaching the PA, means that such individuals (households) enjoy increased leisure (in years prior to the ORA) and a voluntary reduction in their lifetime consumption level (less wage income over remaining years to the ORA and use of superannuation balances to fund consumption prior to the ORA rather than after), but with no consequences for the amount of lifetime age pension they receive.

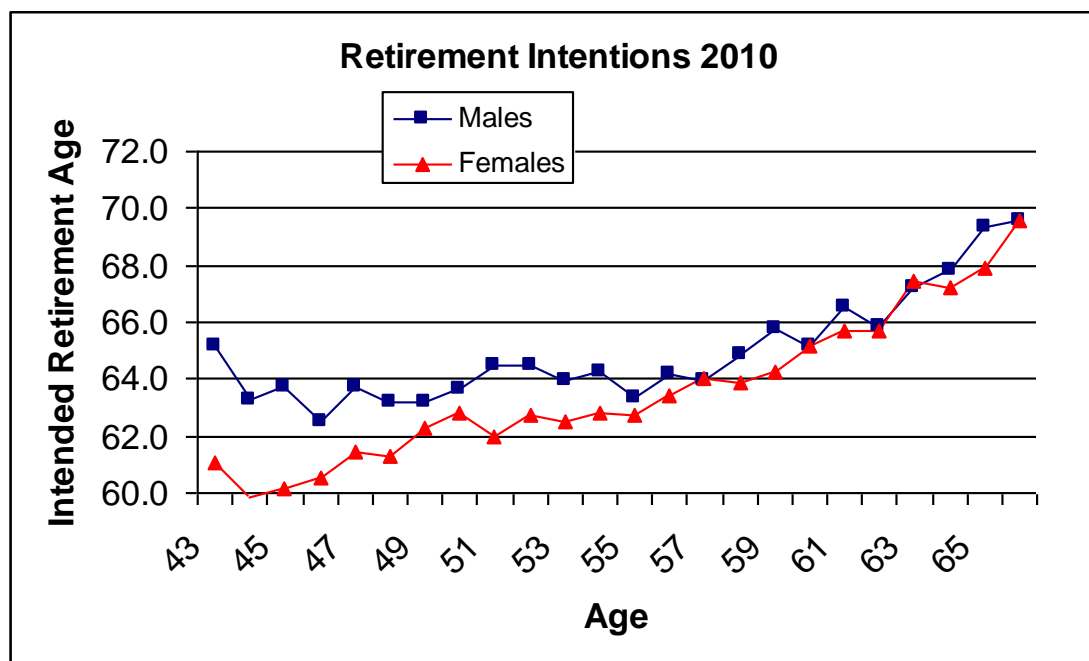
Even though financial incentives clearly play a role, whether the retirement decision is based on the rational calculations favoured by economists is open to dispute. Apart from the role of other factors such as health and employment opportunities, there is little evidence that most individuals actively plan ahead for retirement. This is illustrated by the survey findings of Agnew, Bateman and Thorp (2012) who find “that more than half of Australians in their 50s and 60s have not planned key aspects of retirement.”

Furthermore, Australians appear to have optimistic expectations about when they may have sufficient financial resources to be able to retire. Figure 12, derived from HILDA survey data shows that both males and females generally anticipate retiring well before the ORA, although as they approach that age, reality appears to set in!

¹⁵ Some part of this drawdown may reflect usage of Transition to Retirement pensions, introduced on July 1 2005 which enable individuals aged 55 and over to withdraw part of accumulated superannuation balances while remaining in the workforce. The conversion of earnings on those super balances now in decumulation mode to tax-free status for those aged 60 and over, and the ability to continue contributing into an accumulation account provide a tax arbitrage, limited only by the size of maximum allowable contribution rates.

¹⁶ The PA has been 55, but is changing to 60 for those born after July 1, 1964

Figure 12 Retirement Intentions 2010



Source: ACFS-AIST: Superannuation over the past decade: Individual experiences, 2012

In practice, expected and actual retirement ages differ significantly, due to financial, health, and employment availability factors. Dorn and Sousa-Poza (2010), for example, examine the extent to which retirement is “voluntary” or “involuntary” in a study of 19 industrialized countries (not including Australia). They find that while involuntary retirement was low (15 per cent or less of retirees) in a number of countries (USA, Canada, Denmark, Japan, Norway) “involuntary early retirement seems to be the rule rather than the exception in some continental European countries”. High unemployment rates appear to increase involuntary retirements, as do stronger job protection policies - by reducing willingness to hire.

How much retirement in Australia is involuntary. Figure 11, showing reported reasons for retirement, suggests it might be substantial. Barrett and Brzozowski (2010) study “involuntary” retirement in Australia, drawing on the HILDA survey data. If involuntary retirement is defined by retirees stating that they retired because they were laid-off, left their job for medical reasons, or because they were self-employed and the business closed, around 27 per cent of retirees would be classified as involuntary. This is relatively high by international standards, raising questions about what characteristics of the Australian labour market or health care arrangements might account for this finding. Also important for policy consideration is whether there should be differential policy approaches to involuntary and voluntary retirees – since the former face less satisfactory financial and wellbeing conditions in retirement (as discussed later).

With regard to health, Pit et al (2010), confirm the importance of health factors shown in Figure 11. They find from a survey of retirees aged over 45 that women who had experienced serious problems “were twice as likely to have retired early due to ill-health as those without these health problems. The number of health problems associated with early retirement due to ill-health appeared to be slightly greater for men than for women. In men and women, the strongest association with retirement due to ill-health was in self-reported health status.”

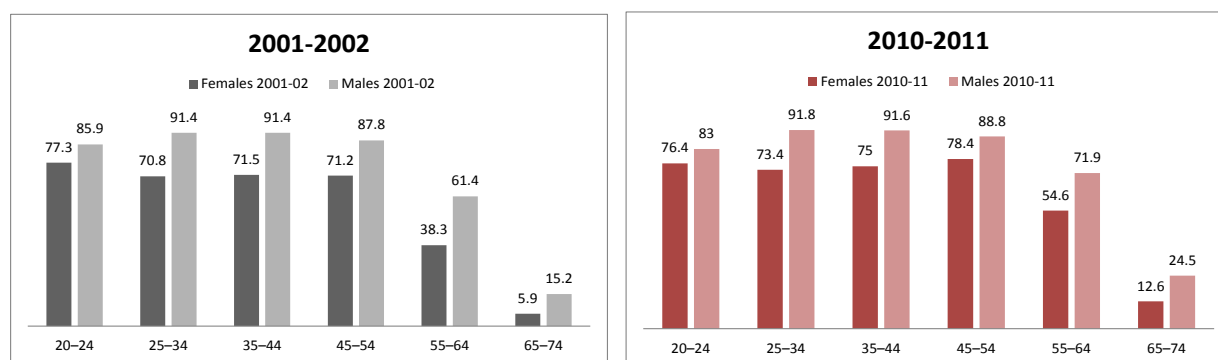
But health considerations also influence retirement expectations. Sargent-Cox et al (2012) find using data from the HILDA (Australia) and HRS (USA) surveys that “Australian workers reported younger expected age of retirement compared to the U.S. sample. Reporting poor health was more strongly associated with younger expected retirement age in the United States than in Australia”. “Australian women in particular have much younger expected ages at retirement... most likely the result of the current younger age of eligibility for superannuation benefits”, a result which the authors speculate may disappear as ORAs are moved to equality.

Foreman and Chen (2008) argue, for the US, that “All in all, poor health is one of the most important factors influencing individual decisions to retire, perhaps even more important than financial considerations”.

On the other hand, financial incentives through the availability of disability schemes may facilitate early retirement due to health reasons for males who retire before age 55. What effect the planned introduction of the National Disability Insurance Scheme, will have in this regard remains to be seen. It may help some individuals remain in employment but also give incentives to others to exit the workforce.

One commonly observed characteristic of labour force experience internationally is that employment rates of older, pre-retirement, workers are lower than for other age groups in the work-force (See Figure 13). This has significant implications for the ability of such workers to accumulate further retirement savings, but also raises the question of why such lower employment rates are observed.

Figure 13 Workforce Participation Rate by Age Bracket Comparison



Source: ABS, Cat 4125.0 - Gender Indicators, Australia, Jan 2012, Table 1

There are a number of potential explanations. One is that it is a quasi-voluntary decision by older workers who because of age related health reasons may be unable to continue working in their previous occupation, and are able to access government benefits or personal savings to subsist (See Figure 11). A second possible reason is that technological change may impact most adversely on employment opportunities for older age groups whose education experience makes them less adaptable to new technology. A third possible reason is that proximity to retirement makes such workers less attractive to employers because of perceived higher costs of labour force turnover.

In response to this last point, on the 23rd of June 2004 the Australian Federal Government brought into force *The Age Discrimination Act*; the first federal level legislation against age discrimination. The Act seeks equality of rights in areas including employment regardless of age. One objective of

the Act is to respond to Australia's ageing population by increasing the ease at which older Australian's can participate in the workforce. Between 2004 and 2010, 69.2 per cent of all complaints made under the Act have been in relationship to employment (The Australian Human Rights Commission, 2011). However, despite this legislation a 2012 report prepared for the Financial Services Council suggests that older workers continue to be treated differently and that employers need to better explore the ways in which the skills of older workers can be utilised. (Westfield Wright, 2012)

Hairault *et al* (2010) analyse the possibility that proximity to retirement age is a determinant of labour force experience of older workers. If workforce turnover costs are significant, employers will prefer to hire workers with a longer expected duration in the job, giving younger workers an advantage in competing for jobs. In their view, it is not biological age *per se* which is the key variable, but age relative to official retirement date. This could explain the positive cross country relationship between workforce participation rates of older workers and official retirement age. Whereas the normal explanation for such a relationship might emphasize supply of labour features (the need to keep working until the official retirement age is in sight) they note a demand side aspect which suggests that proximity to retirement is perceived as a negative characteristic by employers.

Ultimately both demand and supply factors are relevant. Using panel data for France, Hairault *et al* investigate determinants of labour force experience and find that adding distance to expected retirement as an additional explanatory variable to usual explanators such as age, education, skills, occupational sector, location, family status, improves significantly the predictability of participation status for males over 55. They argue that reducing the tax on continued labour force activity (such as by actuarially fair pensions or less generous older age unemployment benefits) has a double dividend – encouraging postponement of retirement and increasing pre-retirement workforce participation.

There are a range of other factors affecting the retirement decision such as socio-economic factors (Skugor *et al* 2012), physical job demand (Modrek and Cullen 2012), psychological and behavioural biases (Knoll 2011), and *hyperbolic discounting* (Knoll 2011). In general these studies find more generous retirement benefits are likely to have a larger impact on the early retirement of low-skilled workers compared to high-skilled workers, workers in more demanding jobs retire earlier, individuals display *loss aversion* rather than *risk aversion* suggest that individuals are more likely to discount potential future retirement benefits gained from delayed retirement more heavily given the potential "lost" years of retirement, and that individuals tend to place an excessive (non-constant) discount on distant events, thereby leading to short-sightedness when one must decide between the immediate benefits of retirement and longer term financial consequences.

4. The Post-Retirement Experience

How does the age and causes of retirement affect post-retirement experience? Does involuntary retirement have particularly adverse consequences? How does the financial situation of retirees affect subsequent well-being? Is there a relationship between age of retirement and remaining life expectancy?

Involuntary retirement can be expected to lead to a reduction in wellbeing in retirement. This is borne out by research by Barrett and Brzozowski (2010) who analyze HILDA data to determine the reasons for an observed drop in household consumption after retirement – which is inconsistent with optimal life-cycle planning. In aggregate, they find “an economically significant decline in expenditures on groceries and food with retirement... comparable to that found for other countries.” However, by classifying retirees into voluntary and involuntary retirees, they find that “the observed retirement effect is in fact due to retiring unexpectedly earlier than planned - households that retire as planned report no significant changes in these basic expenditure categories.”

It is well known that relatively few retirees will have accumulated enough superannuation or other savings to achieve “comfortable” living standards in retirement – where that is measured by reference to a replacement ratio (post/pre-retirement income) of (say) 60 per cent or an income level needed to achieve some calculated level of consumption. This is particularly true for involuntary retirees, but shown also to be relevant for voluntary retirees by various simulation modelling exercises which calculate expected financial wealth at the ORA.

One relevant trend in this regard is the increasing number of retirees who have a significant level of (generally mortgage) debt at the age of retirement. The Kelly Report for CPA Australia (2012) notes, using HILDA data, that 30.7% of the 60-64 age group in 2010 had a mortgage compared to 16.5% in 2002. A range of factors may be relevant to that situation (such as lower interest rates or increased borrowings to finance other investments such as investment properties). But there is anecdotal evidence (or widely held suspicions) that such mortgage debt is financing higher pre-retirement spending than ultimately sustainable, with the intention to use super balances to pay-off the debt at the time of retirement. Such pre-retirement spending can be either for own consumption, or can take the form of transfers to family members (such as children unable to independently generate sufficient savings to finance house purchase). A further factor of relevance is the exclusion of the family home from the asset test for the age pension, giving incentives for households to “trade up” to higher value housing to enjoy the associated lifestyle benefits (albeit at the expense of less disposable income in retirement). Unfortunately, there is little hard evidence on these matters, making it an important issue for further study.

Turning to mortality issues, the question of how the age of retirement affects subsequent life expectancy is confounded by the role of other factors such as health, wealth, and socio-economic status which affect mortality. “A vast literature shows that individuals with low income, low wealth, low education, or low social status often die younger than those who are better off or better educated; and this is true for many countries and for many (if not all) periods.” (Cutler et al, 2006). While some part of that relationship may involve poor health leading to both lower income and earlier death, there does not appear to be any effect of different behaviours associated with socioeconomic status. “Health gradients by socioeconomic status persist even when differences in smoking, drinking, and other factors are taken into account.” (Cutler et al, 2006).

Kalwij et al (2009) examine the relationship between income and remaining life expectancy at retirement for the Netherlands. They note that numerous studies have found a link between socio-economic factors and mortality, such that lower income groups have lower life expectancy. One consequence is that lower income groups have a worse deal in terms of pension entitlements, due

to the lower number of years they can expect to receive such payments. They find that “[t]he difference in remaining life expectancy at age 65 between lower income individuals who only have a public old age pension and higher income individuals, defined as two times median income, is about three years for both men and women.”

Similar findings are reported by Sullivan and von Wachter (2009) based on a sample of US workers. They find that average income in the years just prior to retirement (assumed to be 60) is significantly negatively correlated with remaining life expectancy, and that higher variability of income also has a negative effect.

How does age of retirement influence remaining life expectancy? Kuhn et al (2010), review the literature and state that “In sum, the overall consequences of early retirement are not at all clear”, even when early retirement due to poor health is controlled for. That is reflected in the results of various studies. Coe and Lindebloom (2008) concur on the lack of clarity from earlier studies. However, for their sample data, they find no adverse effect of early retirement on subsequent health, but Kuhn et al find an increase in early post-retirement mortality. As well as mortality, retirement may be associated with changes in health or cognitive facilities, although the literature here is also far from reaching definitive conclusions. Among a wide range of studies, Ekerdt et al find that there is no significant difference in the health of retirees and non-retirees. De Grip et al (2012) find that retirement can have a negative impact on the information processing speed of retirees however other facets of mental capacity such as cognitive flexibility may actually improve. Jokela et al (2010) find a slight increase in both physical and mental health after both statutory and voluntary retirement.

Perhaps the last word on this issue of how retirement age affects subsequent mortality should be left to Hernaes et al (2012) who study how differential changes in the ORA for different groups of individuals in Norway (thereby enabling the researchers to control for the influence health and income) affected mortality. No apparent relationship could be found leading them to conclude that “mortality considerations should not have a prominent place in policy considerations of the retirement age”.

5. Conclusions and Policy Issues

Among the important issues in current retirement policy debate are appropriate settings of the ORA and the PA to deal with increasing longevity, motivated largely by the implications of a larger ratio of aged (non-working) to working population for the government budget. International studies suggest that increasing the ORA leads to increases in actual retirement age (which are generally less than the ORA), but not necessarily by the same extent. These arise from both the financial effects as well as the behavioural effects – such as anchoring of perceptions on the ORA as the “normal” retirement age. The distributional consequences of such a change warrant consideration, and take several forms. First, those from lower income and/or socio-economic groups with lower expected life spans suffer a larger relative reduction in their expected life-time pension wealth (given the later age of access). Second, there is no differentiation in the relative treatment of those who have entered the workforce at earlier or later ages – unlike in many other countries where universal contributory pension/social security schemes relate allowable retirement age (and amount of benefits) to years of employment and contributions. Third, there are significant, adverse, implications for those who

are “involuntary” early retirees because of health or workforce conditions – and thus need to rely on accumulated savings or other government benefits for longer before accessing the age pension.

However, the setting of the PA may be a more significant issue than the setting of the ORA – particularly given that there is some evidence that it is a more relevant influence upon retirement age expectations.

The Henry Tax Review, Retirement Income Review, recommended that “The superannuation preservation age should also be increased, to align with the Age Pension age.” However, it noted the consequences for some involuntary retirees by arguing that “An increase in the superannuation preservation age should be coupled with mechanisms to allow early access to superannuation for those above age 60 years who are unable to continue to participate in the workforce due to disability.” (Henry, 2009). Whether that would be a sufficient mechanism to deal with those who are unable to find alternative work following lay-off and thus consider early retirement is debateable.

While there are clearly budgetary consequences from early drawdown of super balances which lead to increased levels of age pension receipt (through now meeting the income and assets test), it should be asked what proportion of early retirees fall into this category. Projections of future pension dependency imply that around a third of individuals will continue to receive the full pension, when the superannuation system reaches “maturity” around the middle of this century. For those, generally lower life-time income groups, a voluntary early retirement decision involving access to superannuation savings is a life-style choice involving increased leisure and lower consumption in the remaining years prior to the ORA as well as lower consumption post the ORA due to use of super savings in the pre-ORA years. Where accumulated super is sufficiently low that the full pension would have been received anyway, this involves no consequences for the government budget, and the rationale for changing PA arrangements to prevent this life-style choice is open to question. With the current assets test settings (see Appendix 1) a single homeowner would receive the full pension with assets (other than the family home) of \$192,500. Running down such balances by early retirement could finance three to four years of consumption prior to the ORA at levels equivalent to that from average weekly earnings, before accessing an unchanged age pension entitlement on reaching the ORA.

An important issue in this regard is equity. Lower income workers are likely to have spent longer time in the workforce (due to lesser years in education and earlier entry to the workforce). Should equity be interpreted as access to the age pension at the same age for all (and regardless of expected remaining lifetime) or access to some part of retirement savings after some given number of years of workforce participation and of contributions? These are issues which warrant further debate, recognising that views are often coloured by the particular system with which we are familiar. The notion that retirement age could vary depending on years worked and contributions made is more readily acceptable to those in countries where a contributory national pension scheme operates.

But in that regard, an important feature is one which Australia has largely eschewed. That is the linking of annual entitlements to the age of access. Incentives to work beyond the ORA are limited – with age pension entitlements unaffected by age of access. Indeed, there is an implicit tax via the operation of means testing arrangements. They thus do not meet the criteria of “actuarial fairness”, which would involve higher rates of pension for later retirees. While there is some incentive (via the

work bonus test which reduces the impact of wage income up to some level on meeting the income test for the pension) it is, arguably, of minor impact and relatively cumbersome administratively. Linking the size of the age pension positively to age of access in an actuarially fair manner could be expected to provide greater incentives for workforce participation beyond the ORA (either full time or part time supplemented by drawing down of superannuation savings).

The one area in which some such arrangement has been introduced is via the transition to retirement income scheme which allows people above the preservation age to access a portion of their superannuation balances prior to retirement. These were introduced by the Federal Government in July 2005. The objective of the scheme was to provide older Australians with more flexibility in planning for retirement and to encourage participation in part-time work prior to retirement. (Commonwealth of Australia, 2004). However, the transition to retirement income scheme appears to have been widely used as a tax-effective method for boosting superannuation savings prior to retirement. The extent to which this strategy can be utilised was significantly reduced on the 1st of July 2012 when the maximum concessional contribution cap was reduced to \$25,000 for all individuals. But for many lower income workers, as long as the PA remains below the ORA, the scheme provides a mechanism for facilitating early partial retirement, which is potentially quite valuable for those “involuntary” retirees unable to maintain full time employment for health or job availability reasons.

Finally, the age of retirement debate needs to take into account not just the budgetary consequences of the ageing population, but also the consequences of significant increases in productivity and real incomes over time, and the opportunity this provides for an enhanced variety of work-leisure choices over the lifetime. Since the start of the millennium, average real household disposable income has increased by over 30 per cent from around \$600 to \$850 (see Figure 1). Similarly average weekly earnings, to which the pension is linked (at 25 per cent of that figure for the single pension), have increased in real terms by around 30 per cent over that period. For older individuals whose consumption habits have been developed over several decades, early retirement provides an opportunity to take some of the productivity gains in the form of increased leisure. That is not necessarily a bad social outcome.

APPENDIX 1: CURRENT AGE PENSION RATES AND CONDITIONS

As of March 2013, the maximum fortnightly age pension payment is \$712 for a single individual and \$536.70 for a couple (See table 4). However, according to projections made by the Productivity Commission in 2008¹⁷, only 55 percent of all retirees receive a full pension. A number of tests are performed to first determine eligibility for the aged pension and then to determine what percentage of the maximum rate an individual is entitled to. The first criteria to determine eligibility is whether the individual has reached the official age of retirement. The official age of retirement for both men and women is currently 65. However, in accordance with the increasing life expectancy of Australians, this will be gradually increased to 67 by the 1st of July 2023. This increase will take place over 6 years beginning in July 2017.

Once an individual has reached the official range of retirement, two additional tests known as the income test and the asset test are undertaken. The fortnightly income and total assets of a potential aged pension recipient are compared to the reduction free thresholds. If an applicants fortnightly income or assessable assets exceed these thresholds, the rate of payment is gradually reduced by 40 cents for each dollar over the fortnightly income threshold and by \$1.50 for every \$1000 above the asset threshold. It is important to note that while most assets are considered assessable assets, a major exception is the family home. There has been some suggestion that the exception of the family home from the asset test may be one important reason for the family home making up such a large proportion of the average Australian's total wealth.¹⁸

Table 4: Age Pension Means Test Criteria

	Income test		Asset test	
	Free threshold	Part payment cut-off	Free threshold	Part payment cut-off
	\$ per fortnight	\$ per fortnight	\$	\$
Homeowner Single	152	1,697.20	192,500	707,750
Homeowner Couple	268	2,597.60	273,000	1,050,000
Non-homeowner Single	152	1,697.20	332,000	847,250
Non-homeowner Couple	268	2,597.60	412,500	1,189,500

Maximum Rates of Payment	Single	Couple
Fortnightly	\$712.00	\$536.70 (each)
Per Annum	\$18,512	\$27,908.4 (combined)

Source: Centrelink (2012)

¹⁷ Productivity Commission (2008). Trends in Aged Care Services: some implications.

¹⁸ ABS, CAT 6554 Household Wealth and Wealth Distribution, Australia, 2009-10

REFERENCE LIST

- Agnew J, Bateman H and Thorp S (2012). Work, money, lifestyle: Plans of Australian retirees', *Centre for the Study of Choice*, Working Paper Series No. 12-006.
- Australian Human Rights Commission (2011). The Road So Far: the Age Discrimination Act 2004 (Cth). Retrieved from http://humanrights.gov.au/age/publications/ADA_road_2011.pdf
- Barrett G and Brzozowski M (2010). Involuntary Retirement and the Resolution of the Retirement-Consumption Puzzle: Evidence from Australia, University of Sydney, *Economics Working Paper Series* 2010-10
- Bernal N and Vermuelen F (2012). Between dream and reality: The impact of an increase in the legal retirement age on the effective retirement age. Paper presented at the Netspar Pension Day Event, 9 November 2012.
- Borowski, A. (2008). Back at the crossroads: The slippery fish of Australian retirement income policy. *Australian Journal of Social Issues*, 43, 311–334.
- Coe N and Lindebloom M (2008). Does Retirement Kill You? Evidence from Early Retirement Windows, *CentER Discussion Paper Series* No. 2008-93
- Commonwealth of Australia (2004). A more flexible and adaptable retirement income system. Retrieved from http://demographics.treasury.gov.au/content/download/flexible_retirement_income_system/flexible_retirement_income_system.pdf
- Commonwealth of Australia. (2010). Australia to 2050: Future challenges: the 2010 intergenerational report, Commonwealth of Australia. Retrieved from http://archive.treasury.gov.au/igr/igr2010/report/pdf/IGR_2010.pdf
- Cutler D, Deaton A and Lleras-Muney A (2006). The Determinants of Mortality, *Journal of Economic Perspectives* 20:3, 97–120
- Davidson P (2009). When Raising Retirement Ages, Don't Start with the Poorest [online]. *Impact*, Winter 2009: 14.
- De Grip A, Dupuy A, Jolles J and van Boxtel M (2012). Retirement and Cognitive Development: Are the Retired Really Inactive?, *Research Centre for Education and the Labour Market*, ROA Research Memorandum
- Dixon, John (1977). Australia's Policy Towards the Aged: 1890-1972, *Canberra College of Advanced Education*, Canberra.
- Dorn D and Sousa-Poza A (2010). Voluntary' and 'involuntary' early retirement: an international analysis, *Applied Economics*, 42: 427–438
- Dubner S (2012). Retirement Kills: a New Marketplace Podcast, *Freakonomics*. Retrieved from <http://www.freakonomics.com/2012/05/17/retirement-kills-a-new-marketplace-podcast/>

Ekerdt D, Baden L, Bosse R and Dibbs E (1983). The effect of retirement on physical health, *Journal of Public Health* 73(7) 779-783

Forman J and Chen Y (2008). Optimal Retirement Age, Presented at the 2008 Retirement 20/20 Conference *Defining the Characteristics of the 21st Century Retirement System*, Washington DC, November 17-18, 2008

Gruber J and Wise D (1997). Social Security Programs and Retirement around the World, *National Bureau of Economic Research*, Working Paper 6134

Gruber J and Wise D (1998). Social security and retirement: An international comparison. *The American Economic Review*, 88, 158–163.

Gruber J and Wise D (2005). Social Security Programs and Retirement around the World: Fiscal Implications, *National Bureau of Economic Research*, Working Paper 11290.

Hairault J, Langot, F and Sopraseuth T (2010). Distance to Retirement and Older Workers' Employment: The Case For Delaying the Retirement Age, *Journal of the European Economic Association* 8, 5 (2010) 1034-1076

Harding A, Kelly S, Percival R and Keegan M (2009). Population Ageing and Government Age Pension Outlays: Using Microsimulation Models to Inform Policy Making, ESRI International Collaboration Project. Retrieved from http://www.esri.go.jp/jp/workshop/0907/a_02_01.pdf

Hayes A, Weston R, Qu L and Gray M (2010). Families then and now: 1980-2010, *Australian Institute of Family Studies*, Facts Sheet, 2010. Retrieved from <http://www.aifs.gov.au/institute/pubs/factsheets/fs2010conf/fs2010conf.html>

Henry K (2009). Retirement Income Strategic Issues Paper, Commonwealth of Australia. Retrieved from http://www.taxreview.treasury.gov.au/content/StrategicPaper.aspx?doc=html/publications/Papers/Retirement_Income_Strategic_Issues_Paper/chapter_5.htm

Hernaes E, Markussen S, Piggott J and Vestad O (2012). Does Retirement Age Impact Mortality?, *Department of Economics, University of Oslo*, Memorandum No 19/2012

Holden K (1988). Physically Demanding Occupations, Health and Work After Retirement: Findings from the New Beneficiary Survey, *Social Security Bulletin*, Vol. 51(11)

Holzmann R and Hinz R (2005). Old Age Income Support in the 21st Century, The World Bank, Washington DC.

Humpel N, O'Loughlin K, Wells Y and Kendig H. (2009). Ageing baby boomers in Australia: Evidence informing actions for better retirement. *Australian Journal of Social Issues*, 44, 399–415.

Hurd M and McGarry K (1993). The Relationship Between Job Characteristics and Retirement, *NBER Working Paper Series*, Working Paper No. 4558

- Jackson N, Walter M, Felmingham B and Spinaze A (2006). Will older workers change their retirement plans in line with government thinking? A review of recent literature on retirement intentions. *Australian Bulletin of Labour*, 32(4), 315.
- Jackson R, Howe N and Nakashima K (2010). The Global Aging Preparedness Index, *The Centre for Strategic and International Studies*.
- Jokela M, Ferrie J, Gimeno D, Chandola T, Shipley M, Head J, Vahtera J, Westerlund H, Marmot M and Kivimaki M (2010). From Midlife to Early Old Age: Health Trajectories Associated with Retirement, *Epidemiology*, Volume 21, Number 23
- Kanchor K (2012). FSC calls for super preservation age review: Savings gap could be reduced by \$400 billion, *InvestorDaily*, August 2012.
- Kalwij A, Alessie R and Knoef M (2009). Individual Income and Remaining Life Expectancy at the Statutory Retirement Age of 65 in the Netherlands, *Netspar Discussion Paper 09/2009 – 033*. Retrieved from <http://media.leidenuniv.nl/legacy/voordr-2010-02-individual-income-and-remaining-life-expectancy-dp092009-033.pdf>
- Karam P, Muir D, Pereira J and Tuladhar A (2011). Beyond Retirees, International Monetary Fund, *Finance and Development*, Vol 48-2.
- Knoll M (2011). Behavioural and Psychological Aspects of the Retirement Decision, *Social Security Bulletin*, Vol 71, No. 4, 15-32.
- Kuhn A, Wuellrich J and Zweimüller (2012). Fatal Attraction? Access to early retirement and mortality, *Vox*. Retrieved from <http://www.voxeu.org/article/fatal-attraction-access-early-retirement-and-mortality>
- Leslie Nielson (2010). Chronology of superannuation and retirement income in Australia, Economics Section, Parliamentary Library, Australian Parliament House, 1 June 2010, 2009–10. Retrieved from http://aphnew.aph.gov.au/binaries/library/pubs/bn/eco/chron_superannuation.pdf
- Maestas N (2010). Back to Work Expectations and Realizations of Work after Retirement, *J. Human Resources*, Summer 2010 vol. 45 no. 3 718-748
- McGeary K (2009). How do Health Shocks Influence Retirement Decisions?, *Review of Economics of the Household*, Vol 7 – Issue 3.
- Mercer (2012). Melbourne Mercer Global Pension Index, *Australian Centre for Financial Studies*, Melbourne.
- Modrek S and Cullen M (2012). Physical Job Demand and Early Retirement, Presented at the 14th Annual Joint Conference of the Retirement Research Consortium, August 2-3, 2012, Washington, D.C. Retrieved from <http://www.nber.org/programs/ag/rrc/rrc2012/summaries/3.1%20Modrek,%20Cullen.pdf>
- OECD (2009). Age of labour force exit, *Society at a Glance 2009: OECD Social Indicators*, Pages: 82–83, OECD Publishing. Retrieved from <http://www.keepeek.com/Digital-Asset->

[Management/oced/social-issues-migration-health/society-at-a-glance-2009/age-of-labour-force-exit_soc_glance-2008-14-en](http://dx.doi.org/10.1787/soc_glance-2011-14-en)

OECD (2011). Pensionable years, *Society at a Glance 2011: OECD Social Indicators*, OECD Publishing. Retrieved from http://dx.doi.org/10.1787/soc_glance-2011-14-en

O'Reilly H (2008). Optimising a transition to retirement income stream, *JASSA The Finsia Journal of Applied Finance*, Issue 1, 2009.

Pit S, Shrestha R, Schofield D and Passey M (2010). Health problems and retirement due to ill-health among Australian retirees aged 45–64 years, *Health Policy*, 94: 175–181

Sargent-Cox K, Anstey J, Kendig H and Skladzien E (2012). Determinants of Retirement Timing Expectations in the United States and Australia: A Cross-National Comparison of the Effects of Health and Retirement Benefit Policies on Retirement Timing Decisions, *Journal of Aging & Social Policy*, 24:3, 291-308

Sickles R and Taubman P (1984). An Analysis of the Health and Retirement Status of the Elderly, *National Bureau of Economic Research*, Massachusetts

Skugor D, Muffels R and Wilthagen T (2012). Labour Law, Social Norms and the Early Retirement Decision, *Netspar Discussion Paper Series*, DP 11/2012-046

Staubli, S and Zweimüller, J (2011). Does Raising the Retirement Age Increase Employment of Older Workers?, *CEPR Discussion Paper no. 8510*, London, Centre for Economic Policy Research. Retrieved from: <http://www.cepr.org/pubs/dps/DP8510.asp>.

Sullivan D and von Wachter T (2009). Average Earnings and Long-Term Mortality: Evidence from Administrative Data, *The American Economic Review*, Vol. 99, No. 2, 2009, 133-138.

The Treasury (2001). *Towards higher retirement incomes for Australians: a history of the Australian retirement income system since Federation*. Retrieved from <http://archive.treasury.gov.au/documents/110/PDF/round4.pdf>

Warren, D. and Oguzoglu, U. (2010). Retirement in Australia: A Closer Look at the Financial Incentives, *Australian Economic Review*, 43: 357–375.

Westfield Wright (2012). Attitudes to Older Workers, Prepared for the Financial Services Council January 2012.

Yeow L (2012). Reallocate super and secure the future, *Australian Financial Review*, December 2012.