Retirement Incomes for an Ageing Australia

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Abstract

Over the past 100 years, retirement income provision in Australia has evolved into a multi-pillar arrangement comprising the Age Pension, the Superannuation Guarantee and voluntary retirement saving. With fully funded superannuation and a public pension that is both less generous than many other countries and means tested, Australia's retirement income arrangements are well placed to cope with population ageing. However concerns remain in relation to adequacy, efficiency and the vulnerability of private provision to trends in labour, economic and financial markets.

1. Introduction

Over the next few decades the structure of Australia's population will undergo a major change. The population is ageing because people are living longer and birth rates have declined over many years. The over 65s, which accounted for 12.8% of the population in 2003, will increase to 26.1% by 2045, while the proportion of the oldest old (those aged 85 and over) will increase from 1.5% to 5.4% over this period (Productivity Commission 2004). As a result, there will be increasing numbers of old people to support and fewer people of working age to provide that support.

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The combination of an ageing population and increased life expectancy will see an increase in government expenditure on age pensions, health and aged care. These issues have been considered by the government in the 'Intergenerational Report' (Treasury 2002) and are currently the subject of a Productivity Commission research study (Productivity Commission 2004). These reports suggest that by 2045 there will be a gap of around 7% of GDP between total government revenue and expenditure. In large part this will be due to a projected increase in health expenditures from 4% to around 8% of GDP, in age care expenses from 0.7% to around 1.8% of GDP and age pension expenses from 3% to nearly 5% of GDP.[1]

Some preliminary policy responses have been canvassed in the Treasury paper 'A More Flexible and Adaptable Retirement Income System' (Treasury 2004b), including initiatives to extend the working life of Australians and increase the likelihood that superannuation benefits are used to fund retirement – both of which should reduce the potential pressures on Age Pension expenditures, However, there has been little real debate about impact of an ageing population on Australia's ability to fund future retirement incomes, or the role that retirement income policies can play to address the strains that an ageing population will place on future living standards.

This paper investigates the resilience of Australian retirement income policies to population ageing. It is set out as follows: the next section traces the evolution of Australia's retirement income policies. Current arrangements are then described in section 3 while section 4 highlights the policy challenges of adequacy, efficiency and the vulnerability of private retirement provision to scary markets. Section 5 discusses the resilience of these arrangements to demographic change and section 6 concludes.

2. Evolution of Australian Retirement Income Policies[2]

Retirement income provision in Australia dates back to the occupational superannuation schemes offered by banks and state governments in the 19th century. However the year 1909 marks the beginning of a coordinated retirement income policy with the introduction of the Age Pension. Since then retirement income provision has evolved into a multi-pillar arrangement comprising the means-tested Age Pension, mandatory and voluntary superannuation and other long term saving through property, shares and managed funds. With the introduction of the Superannuation Guarantee in 1992, Australia joined a growing group of countries which centre their retirement income policy on private mandatory retirement saving.

The Age Pension was introduced in 1909 as a general-revenue financed, means tested safety net payment for the retired. At that time it was subject to both an income test and a separate property (assets) test. Under the income test the annual rate of pension was reduced on a pound for pound basis once earnings exceeded a free area. The assets test reduced the pension amount by one pound for every ten pounds of the value of property (including the family home) above a threshold. In 1912 the family home was made exempt from the assets test, and remains so.

The Age Pension means tests then remained largely unchanged for nearly 60 years, when the income test withdrawal rate was reduced from 100% to 50% in 1969. This marked the beginning of a period of liberalisation and ultimately temporary abolition of the means tests. In the 1972 election campaign, both major parties undertook to abolish means testing of the Age Pension and following the election the pension-free amounts were doubled. By 1975, the means tests had been abolished for those aged 70 and above and in 1976 the assets test was abolished for all. However, another change of government saw the gradual reversal of these policies. By the mid-1980s, means testing on both income and assets again applied to all retirees. Recent policy has confirmed the renewed emphasis on targeting.

For most of the 1900s Australian retirement income policy comprised two pillars – the (mostly) means tested Age Pension and voluntary (but tax preferred) superannuation. Superannuation saving has been tax preferred since 1914 when tax concessions for employer contributions and fund earnings were introduced (establishing an EET framework). Tax concessions for benefits taken as lump sums followed in 1936. These arrangements remained largely unchanged for nearly 50 years. Superannuation was initially uncommon, but occupational superannuation grew rapidly in the public sector following the Second World War. It was less prevalent in the private sector where coverage was generally restricted to senior white-collar workers. While the taxation arrangements were concessionary, the superannuation industry was largely unregulated and benefit standards were poor. As a result, as recent as the mid-1980s, less than 50% of full time employees were covered by superannuation: private sector coverage was only around 30%, coverage of full time females even lower at around 25% and coverage of part time and casual workers was minimal.

Unlike many other developed countries, Australia did not introduce contributory earnings-related public pensions. The international trend had been to commence with a targeted age pension (social assistance) and then expand this to contributory PAYG public pensions (social insurance).

Australia's failure to follow this trend was more of a matter of historical and political accident than of any consistent policy. It was always recognised that the Age Pension alone was not sufficient to fund adequate provision for the retired in a developed and rich society such as Australia's. Between 1913 and 1938, three unsuccessful attempts were made to introduce contributory earnings-related public pensions similar to those that were proving popular in Western Europe and the Americas. In 1938 Australia even got as far as passing the enabling legislation, but its implementation was deferred (and ultimately abandoned) with the start of the Second World War.

The wartime Labor government was committed to the continuation and strengthening of the Age Pension. In 1943 it established a National Welfare Fund to 'finance social services' and in 1945 introduced a separate 'social services' contribution to be paid into the National Welfare Fund. However, these initiatives were short-lived, and in 1950, following another change of government, were merged into the personal tax system. By 1952, the Age Pension was once again financed solely from general revenues.

There was renewed interest in contributory public pensions in the early 1970s when the Labor government of the day commissioned a report on a 'National Superannuation Scheme'. The resulting Hancock Report recommended the introduction of contributory public pensions along the lines of those operating in most other OECD countries (Hancock 1976). However, by the time the report was tabled, there had been a change of government and its recommendations were disregarded. Instead, the focus of the incoming government was to increase the coverage of voluntary superannuation. These developments coincided with concerns by the trade union movement about the equity of access to superannuation benefits. As a result the trade union movement continued the push for earnings-related retirement income provision, but with the emphasis moving away from publicly provided to occupational arrangements.

When a Labor Government was elected in March 1983, a major part of its economic strategy was a continuing contract with the union movement, known as the 'Accord'. The Accord, along with Australia's then centralised wage determination system, included the idea of building superannuation contributions into the national centralised wage decision. This materialised in 1986, under Accord Mark II, where it was agreed that while the increase in compensation to employees should be 6%, to keep pace with inflation, half of the increase would accrue in the form of a 3% employer superannuation contribution, to be paid into an individual account in an industry fund. This was known as productivity award superannuation.

The introduction of productivity award superannuation led to large increases in the coverage of occupational superannuation. Over the next three years, as individual industrial award agreements were negotiated and ratified under the umbrella of the 1986 national wage case decision, superannuation coverage increased markedly, particularly in the private sector and in industries dominated by women, part-time and casual workers. Overall coverage of superannuation doubled from 40% to nearly 80%.

However, productivity award superannuation proved difficult to enforce and its implementation required that superannuation provisions be included in each and every industrial award. Following the rejection by the Industrial Court of an increase in the employer contribution to 6%, the government responded by introducing legislation to require all employers to make superannuation contributions on behalf of their employees. This policy commenced in 1992 and is now known as the Superannuation Guarantee. Superannuation coverage has continued to grow, reaching over 90% of employees (and close to 100% of full time employees) by the early years of the 21st century.[3]

A chronology of Australian retirement income policy is set out in Appendix 1.

3. Current Arrangements

Current retirement income provision in Australia consists of three components (or pillars). The first pillar is a universal (but targeted) Age Pension financed from general revenues[4]; the second pillar is the slowly maturing mandatory private retirement saving under the Superannuation Guarantee; and the third pillar is voluntary saving, including tax-preferred occupational and personal superannuation and homeownership. The Age Pension provided under the first pillar is withdrawn where retirement income and assets provided under the other pillars exceed statutory thresholds.

First Pillar - Age Pension[5]

For most of the period since its commencement in 1909, the Age Pension has served as the social welfare safety net for the elderly and, in the absence of a mandatory retirement savings pillar until the final decade of the 20th century, has been the main source of retirement income for most retired people. In 2003 around 78% of the retired of eligible age received some Age Pension – of which around 67% were paid at the full rate. And while the Age Pension was the principle source of income for 70% of

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aged households, only 10% of pension recipients relied solely on the Age Pension (Family and Community Services 2004).

The Age Pension is payable to elderly Australians who satisfy residency, age and means test requirements. Women can claim the Age Pension from age 62.5 years (increasing to 65 by 2014) and men from age 65 years. It is means tested by either a person's income or assets - whichever determines the lower rate of pension - and is automatically indexed twice yearly.[6] A higher rate of pension is payable to a single person than to each member of a married couple. The Age Pension is subject to personal income tax but the Senior Australian Tax Offset fully exempts full-rate pensioners from income tax and provides partial exemption for part-rate pensioners.

In September 2004 the annual Age Pension was $12,238.20 for single persons (around 25% of average male earnings) and $10,218.00 (around 20% of average male earnings) for each of a married couple. Net replacement rates are higher (closer to 40% for single retirees) due to the tax concessions applied to retirement incomes. As a result the taxation of retirement incomes is negligible compared to the taxation of labour income.

Eligibility for the Age Pension brings with it access to other payments and allowances including: a pharmaceutical allowance, the pension concession card, rent assistance, remote area allowance, telephone allowance etc... As well, Age Pension recipients who have assets tied up in real estate can apply for a Pension Loan.

A recent initiative is the Pension Bonus scheme, which is designed to encourage persons of retirement age to defer claiming the Age Pension. Under the scheme a tax-free lump sum bonus is available to those who defer claiming the Age Pension for a minimum of 12 months, up to a maximum of 5 years. When the person finally retires they receive the bonus and the Age Pension.[7]

Current means testing

Under the current income test the Age Pension is withdrawn at the rate of 40 cents for each dollar of private income above a free area of $61 per week (or $108 per week for a pensioner couple). Private income includes: income from financial investments, cash, bank accounts, bonds, managed funds, shares, deferred annuities, business income, and income from trusts, property and superannuation. For simplification purposes, the income test applies to 'deemed' rather than actual income for many financial investments. Under the current rules no part pension is available under the income test once annual income exceeds $34,144.50 pa for a single person or $57,083 pa for a couple.

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The assets test reduces the Age Pension by $1.50 per week for every $1,000 of assets above statutory thresholds. Currently these are $153,000 for a single homeowner, $217,500 (married homeowner couple), $263,500 (single non-homeowner) and $328,000 (married homeowner couple). The retiree's own home is excluded and the capital value of certain retirement income streams are valued at concessional rates. Eligible assets include: home contents, cars, boats, rental properties, the capital value of investments, money in the bank, outstanding loans, the value of a business, and gifts in excess of $10,000 in any financial year (or in excess of $30,000 over a 5 year period).

The test paying the lower rate of Age Pension applies.

Second Pillar – The Superannuation Guarantee

Under the Superannuation Guarantee employers are required to make superannuation contributions of at least 9 % of earnings on behalf of their employees to a superannuation fund. The arrangements apply to all employers and to almost all employees earning more than $450 per month (around 14% of average male earnings).[8] The self-employed are not covered, although tax concessions apply for voluntary contributions. The mandatory contributions are fully vested (that is, the fund member is fully entitled to all accrued benefits), fully preserved (accrued benefits must remain in a fund until the statutory preservation age for access to benefits is reached), fully funded and must be paid into a complying superannuation fund.[9]

Superannuation saving is subject to a complex tax regime whereby:

- Employer contributions are generally tax deductible (up to age-determined limits), employee contributions are not tax deductible but may be eligible for tax concessions or government co-contributions, and special tax concessions apply to spouse and children's contributions;
- Fund earnings are taxed, but at different rates depending upon the income type; and
- Benefits are taxed at different rates depending upon type of benefit, age of taxpayer and size of benefit, and an annuity rebate is available to offset tax on some retirement income streams.

With the increased availability of tax concessions for retirement benefits, the taxation of superannuation saving is closest to a TTE regime.

Third Pillar – Voluntary Retirement Saving

Voluntary retirement saving includes voluntary occupational superannuation, personal superannuation and other forms of long term saving through property, shares, managed investments and home-ownership. Voluntary

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occupational superannuation is long standing and has traditionally been available to public sector workers and middle to high-income workers in the private sector. In the past benefits were based on defined benefits, but these are increasingly replaced by defined contribution schemes. Voluntary superannuation is reasonably prevalent. In 2000 around 36% of employees made voluntary contributions to superannuation (ABS 2000a). Interestingly, coverage is higher for older than younger employees with around 7% of 15-19 year olds and 46% of 45-54 year olds making personal contributions. Other data suggests that around 27% of employees receive employer contributions greater than the Superannuation Guarantee level, while 20% of all employees make voluntary post-tax contributions (Bingham 2003). Homeownership is probably the most important non-superannuation asset for most Australians: in 2003, dwellings accounted for 65% of total Australian household assets, with around 85% of retirees owning their home.

For the self-employed, concessions under the capital gains tax exist to encourage rollover of the proceeds of the sale of a business into superannuation. However, the extent of take-up of this incentive is unclear.

The Superannuation Industry

Both mandatory and voluntary superannuation contributions are placed with superannuation funds. For mandatory superannuation (the Superannuation Guarantee) employers are responsible for choosing the fund although employee choice of superannuation fund will be allowed from July 2005.

Superannuation funds are privately operated trusts managed by boards of trustees. There are five types of superannuation fund, each introduced in response to different historical and policy considerations. Public sector superannuation funds appeared first in the 19th century, followed by corporate superannuation funds set up to cater for white-collar workers in the private sector. Retail funds were established by life insurance companies to promote personal superannuation, while the introduction of productivity award superannuation in the 1980s and the Superannuation Guarantee in 1992 led to the introduction and rapid growth of industry (multi-employer) superannuation funds and master trusts (a multi employer and employee variant of the retail fund).[10] More recently, the mandatory coverage of small employers, combined with favourable tax treatment of superannuation, has led to the introduction and growth of small (self-managed) superannuation funds.[11]

Superannuation funds can either be closed (where membership is restricted to employees of a particular employer or industry) or open (also called a public offer fund – where membership is available to the general public). They are also differentiated on the basis of being 'for profit' or 'not for profit', having a trustee board comprising an equal number of employee and employer representatives or a corporate trustee, and providing benefits on the basis of defined benefits, defined contributions or both.

Table 1. Characteristics of 'standard' Superannuation Funds, July 2004

Types of fund	% total assets	% total members	Number of funds
Corporate	12.4	4.0	1,406
Industry	15.4	32.4	103
Retail	45.1	51.2	234
Public Sector	27.1	12.4	55
All standard funds			1,798

Source: APRA Superannuation Trends, July 2004

In July 2004 there were 292,238 superannuation funds in Australia, comprising 290,440 'small' and 1,798 'standard' superannuation funds. Assets and membership of standard superannuation funds are summarised in Table 1. When compared to the private retirement saving industry overseas, the Australian superannuation industry is characterised by its huge diversity.

Superannuation Assets

There has been a large increase in aggregate superannuation fund assets since the introduction of the Superannuation Guarantee. Measured as a percentage of GDP, total superannuation fund assets have grown from 2.8% in 1972, to 18.1% in 1986 to over 75% by 2004. It has been estimated that superannuation fund assets could reach over 116% of GDP by the year 2020 (Tinnion and Rothman 1999).

In the absence of portfolio or rate of return restrictions, superannuation funds invest in a wide variety of assets with a mix of duration and risk-return characteristics. Less than 36% of assets are directly invested by superannuation funds with the remainder invested by external investment managers or in pooled superannuation funds. Over the past decade there has been an increasing trend towards member investment choice of investment strategy and asset class. Some superannuation funds offer member choice of individual investment managers. Employee choice of superannuation fund itself will commence in July 2005.

Retirement Benefits

Superannuation accumulated under the Superannuation Guarantee or voluntary superannuation may be taken as a lump sum or an income stream once the age of 55 (the preservation age[12]) is reached. Income streams are encouraged through tax concessions and the Age Pension means tests, but it is not clear whether these are affecting the long-term preference for lump sum benefits.

Because superannuation accumulations do not have to be taken as a particular type of income stream, a range of retirement income stream products have evolved. There are three main categories – superannuation pensions, annuities and allocated pensions.

- Superannuation pensions are lifetime income streams paid by superannuation funds, generally under defined benefit schemes.
- Annuities are sold by life insurance companies. Current products include fixed amount or indexed annuities for life or an agreed term (including life expectancy at retirement).
- Allocated pensions and annuities are effectively phased withdrawals from a retirement accumulation. Under current rules annual income payments must lie between statutory minimum and maximum amounts and choice of asset allocation is allowed. These products are offered by a range of financial institutions.

Since September 2004 a market linked income stream has been marketed. This product has features of both annuities and allocated pensions. It is similar to an allocated pension in that there is choice of asset allocation and payments are linked to the performance of underlying assets. However, like an annuity it is payable for a fixed term (of between life expectancy and life expectancy plus 5 years) and is non-commutable.

Total Retirement Incomes: Income Streams and Means Tests

As noted earlier, the Age Pension provided under the first pillar is withdrawn where retirement income and assets provided under the other pillars exceed statutory thresholds. The Age Pension means tests do not distinguish between private mandatory retirement saving (the Superannuation Guarantee – the second pillar) and voluntary retirement saving (pillar three). However, they do distinguish between the types of retirement benefit.

Where a lump sum is taken and used to purchase financial assets, the

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Table 2. Retirement Income Streams – Income and Asset Tests

Product type	**Asset test**	**Income test**
Life pension or annuity LIfe expectancy pension or annuity Market -linked income stream (required term, between life exectancy and life expectancy plus 5 years)	50% exemption	Adjusted income
Other term annuity > 5 years	Applies	Adjusted income
Allocated pension or annutiy	Applies	Adjusted income
Term annuity < 5 years	Applies	Deemed income
Income from lump sum	Applies	Deemed income

Notes:

a. *Available since 20 September 2004.*

b. 100% exemption for products purchased prior to 20 September 2004.

capital value is assessed under the assets test and 'deemed' income is subject to the income test.[13] Where a retirement income stream is purchased, the means tests apply differently depending on the product type. The current rules are summarised in Table 2. Products with a term of at least life expectancy receive greatest preference, with 50% exemption from the assets test and concessional income test treatment.[14] Allocated products and short duration income streams are given least preference.[15]

How Do Retirees Fund Their Retirement?

That nearly 80% of current retirees receive the Age Pension and two thirds of these receive the full rate of Age Pension is not really surprising. It is only in the last 15 years that superannuation coverage has exceeded 50% of workers, so it will be several decades before these workers retire with sufficient private savings. APRA data for the June Quarter 2004, showed that the average size of a superannuation accumulation (for members of a standard superannuation fund) was $18,035. On the assumption that each member has an average of 2.5 accounts, this suggests an average accumulation of around only $45,000. Similarly, it has been estimated, that in 2002 the average superannuation balance of 50-64 year olds was only $56,000 which if converted to an annuity at age 65, would provide an income of only $100 a week up to age 80 (Kelly and Harding 2002).

It is therefore not surprising that the Age Pension is still the main source of income in retirement and that most superannuants take lump sums. The

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Survey of Employment Arrangements and Superannuation conducted by the Australian Bureau of Statistics in 2000 showed that around 66% of retired people received only lump sum superannuation benefits, 21% received both a lump sum and an income stream and 13% received an income stream only (ABS 2000b). Interestingly, this survey also showed that retirees used only 50% or so of their lump sums for retirement income purposes. Of the lump sum recipients surveyed:

- 42% had used their lump sum to buy or pay off a home, make home improvements, pay off a car or settle outstanding debts;
- 23% had rolled the lump sum over or invested it in an approved deposit fund, annuity or another superannuation scheme; and
- 28% invested the lump sum elsewhere. (ABS 2000b).

Of those retirees who take retirement income streams, there is an overwhelming preference for allocated pensions or annuities. Table 3 summarises recent trends. In 2004 allocated products had the largest share of the market comprising around 90% of retirement income streams purchased with eligible termination payments. Lifetime annuities accounted for a very small proportion of total sales. At this stage it is unclear how the market linked income stream (introduced in September 2004) will affect the market shares.

With almost all employees now covered by the Superannuation Guarantee, many workers with additional occupational or personal superannuation coverage and improvements in vesting, portability and preservation, the composition of retirement income will change in future years. The Treasury's Retirement Income Modelling Group (RIM) estimate that a single male on median earnings with 30 years of Superannuation Guarantee contributions could expect to retire with a total (Age Pension plus superannuation) replacement rate of 76%. This would increase to 85% if

Table 3. Retirement Income Streams, Market Shares, June 2004

Type of retirement income stream	Market share	Sales in last 12 months, $m	Ave purchase price (in last 3 months), $
Allocated pensions/annuities	76.2	6,386	112,100
Term annuities	8.7	985	87,900
Lifetime annuities		113	103,900
Non ETP retirement income streams	15.1	985	118,200
Total	100.0	9,260	102,400

Source: IFSA Retirement Income Streams Report (June 2004) contributions were made for 40 years. In both cases the total retirement income would comprise a part Age Pension and an income stream purchased from superannuation accumulation (Treasury 2004b). If these estimates were realised, by 2050, 25% of the retired would receive no Age Pension, 40% of the retired would receive a part pension and only 25% of the retired would receive a full pension (compared with nearly 55% currently).

4. Policy Challenges

Australia's retirement income system follows the multi-pillar approach first promoted by the World Bank in the seminal book 'Averting the Old Age Crisis' (see World Bank 1994). Over the past decade the World Bank has maintained this broad structure in its policy advice but with additional pillars such as 'part time employment' and 'notional defined contributions' where appropriate.

The World Bank and others have articulated the benefits of the multi-pillar approach as enhancing saving, improving incentives to work and save, facilitating both intra and inter generational equity, providing insurance against political risk and enhancing risk diversification (see World Bank 1994, Diamond 1997, Holzmann 1999). However, concerns with the multi-pillar approach to retirement provision (or more particularly the increased emphasis on private provision) have been raised. These include the impact of investment risk, the possibility that high fees, taxation and regulation may compromise benefits and questionable economy-wide impacts (see Beattie and McGillivray 1995, Orszag and Stiglitz 2001).

Australia's multi-pillar arrangements are not immune to these challenges. Particular issues facing Australia's retirement income arrangements include the adequacy of retirement incomes, the impact of public pension and private saving policies on incentives to work and save, and the vulnerability of private retirement savings arrangements to scary markets. These issues are discussed below.

Adequacy

With the large proportion of current retirees relying on the Age Pension and prior poor superannuation coverage of part-time, casual and women workers, there have been many calls to improve the adequacy of retirement incomes. A more appropriate policy question, however, is whether the current arrangements will provide adequate retirement incomes for those retiring with a working life of superannuation coverage.

The adequacy of the 9% Superannuation Guarantee has been raised

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constantly. In 1993, only a year after its introduction, the FitzGerald Report advocated a significant increase (FitzGerald 1993). More recently retirement income adequacy has been the subject of a Senate enquiry (Senate Select Committee on Superannuation 2002, Family and Community Services 2002).

The adequacy of retirement incomes relates to two main factors – the amount of income available to fund retirement and the form in which retirement benefits are taken. In terms of amount, relevant issues include, whether the mandatory contribution (currently 9%) is enough, whether the tax and other rules encourage additional provision for retirement and continued participation in the work force, and whether public funds will continue to be available to pay the Age Pension. For benefit type, the crucial issue is whether the available (and popular) forms of retirement benefits provide adequate insurance against the financial risks faced in retirement. These risks include, high inflation (inflation risk), outliving ones retirement saving (longevity risk), exposure to market fluctuations (investment risk), maintaining incomes comparable with pre retirement incomes (replacement risk) and the infrequent but large sums required to fund unexpected events (contingency risk).

Adequacy in terms of amount depends upon the size of net mandatory and voluntary contributions (determined by the length and pattern of labour force participation, income over the working life, and fees and taxes on contributions); fund performance (net of taxes, investment and administration fees and insurance premiums, and determined by asset allocation); type of retirement benefit (including the Age Pension and influenced by tax and social security incentives and habit); and the extent of other retirement savings and income generating activities (such homeownership and workforce participation of the elderly). For example, Bateman (2002) found that the mandatory 9% Superannuation Guarantee contribution reduced to an effective contribution of 4.6% when subject to the current superannuation tax regime and administrative charges of 1 per cent of assets.

Adequacy in terms of benefit type depends on the extent to which the benefits address the financial risks facing retirees. As noted earlier, most current retirees take lump sums and most purchasers of income streams choose allocated products (IFSA 2004). Whether a lump sum addresses any of the financial risks in retirement depends upon the use to which it is put – and as indicated above a large proportion of lump sums are not used to fund retirement. Allocated products - while providing choice of underlying asset allocation - do not provide insurance against longevity risk, inflation risk or investment risk, but do provide cover for contingency risk and possibly replacement risk.

The effectiveness of public policy is questioned here. The Age Pension means tests encourage life and life expectancy annuities, and more recently market linked income streams. Indexed life annuities provide insurance against longevity risk, inflation risk and investment risk; indexed life expectancy annuities provide insurance against inflation risk and investment risk; and market linked income streams will provide partial longevity insurance and the possibility of greater coverage against replacement risk. However, life and life expectancy income streams have been largely ignored by retirees, who have favoured allocated products. Whether the existence of market linked income streams will reverse this trend is unknown. It is possible that the Age Pension - itself a lifetime, indexed income stream - is crowding out demand for private retirement income products with these characteristics.

As more people retire with significant superannuation accumulations and potentially less reliance on the Age Pension, policy development is required to ensure that future total retirement incomes are both adequate in amount and in their ability to provide retirement income insurance.

Efficiency: Impact on Incentives to Work and Save

Australia's retirement income arrangements include a public pension means tested against privately accumulated assets and income. As a result it is subject to a myriad of social security and tax thresholds, rates, concessions and regulations. While economic theory suggests possible efficiency concerns, in the absence of relevant empirical analysis, the actual impact of these arrangements on decisions of Australians to work, to save and to accumulate appropriate assets to fund retirement is unclear.[16] Issues and potential impacts include:

- *The extent to which the Age Pension means tests affect the labour supply of older workers.* The issue here is the impact of effective marginal tax rates (EMTRs) on labour supply as the Age Pension and associated benefits are withdrawn and the personal marginal tax regime applies. An economists prior position would be that labour supply (and therefore superannuation participation) of older workers would be lower than otherwise due to the joint impact of the withdrawal of the Age Pension and the application of personal income taxes. However, Australian retirement policy design appears to minimise these effects. Relevant initiatives include: the Senior Tax Offset (which exempts many age pensioners from income tax), the assets test thresholds and income test free amounts (which provide a buffer before public benefits are withdrawn), the gradual 40%

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taper for the withdrawal of Age Pension benefits (reduced from 50% in 1997 and 100% in 1969) and the Age Pension Bonus (which provides an explicit cash bonus for delaying Age Pension take up).

- *The extent to which the differing eligibility ages for superannuation and the Age Pension and the availability of lump sums leads to 'double dipping'.* There is evidence to suggest that significant superannuation savings are not being used to fund retirement. For example, Kelly and Harding (2002) found that, despite elderly persons having quite low superannuation accumulations, the average retirement age was 58 years for men and 41 years for women. The conclusion was drawn that Australians are accessing and using their superannuation accumulations while still quite young and then relying on the Age Pension to fund their retirement. Kelly, Farbotko and Harding (2004) report that around half of early retirees had negligible superannuation by the time they qualified for the Age Pension.

Under current policy design early retirees are probably acting rationally: superannuation benefits can be accessed up to ten years prior to the Age Pension age and many accumulations are just too small to make the purchase of appropriate income streams worthwhile. However, this behaviour must be monitored as more Australians retire with larger retirement accumulations.

- *The availability of the lifetime, indexed Age Pension (at a net replacement rate of 25% of AWOTE) and its impact on asset allocation in retirement.* A question here is whether the existence of the Age Pension, which carries many of the attributes of an adequate retirement benefit, will encourage retirees (and pre retirees) to be less than prudent with their private saving? Thorp, Kingston and Bateman (forthcoming 2005) show that the asset allocation of retirees who have purchased allocated pensions is more risky than optimal, suggesting that the Age Pension may be being used as a safety net for poor investment choices. This potential problem is likely to exacerbate as more people retire with larger private savings but continued eligibility to a part Age Pension.
- *The impact of assets test design on aggregate asset allocation.* Under current design a retirees own home is excluded from the Age Pension assets test (although higher thresholds do apply for homeowners). The issue here is whether this design feature (coupled with capital gains tax exemption for one's own home and the availability of negative gearing) distorts asset allocation in favour of owner-occupier housing. In support of this assertion it is noted that in Australia 65% of household assets are in owner-occupier housing, compared with 34% in the United States. Kelly and Harding (2002) found that more than half of total wealth of 50-64 year olds was in the family home.

- *The impact of the superannuation tax regime on self-provision for retirement.* The issue here is whether the complex taxation of retirement saving inhibits voluntary saving for retirement. Most other countries with comprehensive private retirement savings arrangements impose an EET tax regime whereby contributions and earnings are tax-exempt, while benefits are taxed. Australia taxes contributions (at differential rates depending upon the source of the contribution), fund earnings (at different rates depending upon the source of the income) and benefits (at different rates depending upon the type and size of benefits). When compared to alternative investments such as home ownership, the taxation of superannuation is both complex and penal.

While some of these issues have been recently considered by policymakers – see Treasury (2004b, 2004c) – a deeper understanding is required to ensure the design of sustainable and adequate retirement income policies.

Vulnerability to Scary Markets

Australian retirement income provision is increasingly reliant upon private provision. Successful private provision for retirement requires continuous contributions over the long term into well-governed retirement savings vehicles (superannuation funds) and strong investment performance.

There are significant risks associated with each of these prerequisites. First, there is the increasing likelihood that future workforce patterns will not replicate the continuous labour force participation of the past (Mitchell et al, forthcoming 2005). A shorter, and more disrupted, workforce experience translates to lower aggregate contributions. Second, there is increasing reliance on consumer choice of fund, of contribution rates, of investment strategy and of assets. It is not clear that workers of today or the future will possess the skills to be able to make appropriate choices. Third, good governance of retirement saving vehicles will be essential. Even under current regulations there have been high profile fund collapses (Ferris forthcoming 2005). Further, it cannot be guaranteed that high fees and charges will not dissipate future retirement savings. Finally, all private retirement savings are vulnerable to future trends in economic and financial markets. Crucial here are long run rates of return in equity markets.

Recent policy initiatives will address some of these risks. The recent superannuation safety reforms, through amendments to the Superannuation Industry Supervision Act, include compulsory licensing of trustees, registration of superannuation entities and the introduction of improved standards for risk management and reporting (Randle 2004). It is anticipated that these initiatives will improve fund governance. In addition, financial product disclosure, recently introduced under the Financial Services Reform Act, is aimed to better inform consumers about the impact of superannuation product fees and charges. Whether these initiatives will actually alleviate the vulnerability to scary markets is yet to be tested.

5. Resilience to Demographic Change

The ageing of the Australian population will see an increase in the aged dependency rate from 19% in 2003 to around 44% by the middle of the 21st century. By 2045 there will be less than 2.3 people to support each person aged 65 or more, compared with 5.3 people today, This raises the question - can we afford to grow old?

Estimates from Treasury's Intergenerational Report (Treasury 2002) and the recent Productivity Commission draft research report 'Economic Implications of an Ageing Australia' (Productivity Commission 2004) suggest an ageing-related increase in spending on age pensions of 50 percent over the next 40 years. More specifically the Productivity Commission projects an increase in Commonwealth spending on Age and service pensions from just under 3% of GDP in 2003 to nearly 5% of GDP by 2045. Implicit in these projections is a reduction in eligibility for the full Age Pension from 55% to 25% of aged persons, but little reduction in overall pension coverage.

However, as noted above, there are considerable risks associated with current retirement income design based on a means tested Age Pension combined with private retirement saving. These risks will be exacerbated as the Australian population ages. The projections of both Treasury and Productivity Commission are based on current policy design and the continuation of current retiree behaviour (including labour supply). However, the impact on retirement of a mature Superannuation Guarantee, combined with the means tested Age Pension is unclear. Questions include:

- Whether the larger private superannuation accumulations (resulting from a mature superannuation system) will encourage older workers to retire even earlier, particularly as superannuation benefits can be accessed at least 5 years prior to the Age Pension age and are not required to be taken as a non-commutable income stream?
- Whether retirees will use their private superannuation savings prudently when they have access to the Age Pension - a safety net in the form of an indexed lifetime income stream with many of the desired attributes of retirement income insurance?

- Whether the economic, financial and labour markets of the future will continue to be sympathetic to private saving for retirement? That is, will future labour force participation mirror previous experience? Will economic conditions remain stable? Will the equity premium be maintained, particularly with the simultaneous mass decumulation of retirement assets across the developed world?
- Whether future Australian retirees will have access to low cost/high return vehicles for retirement saving and have the capacity to make appropriate choices of superannuation fund, of investment strategy, of asset allocation, of fund manager and of retirement benefit type?

Policymakers appear to be aware of some of these risks. In 2004, as part of *A More Flexible and Adaptable Retirement Income System* (Treasury 2004b), the Treasurer announced a number of policy initiatives to address ageing-related issues raised in the 2002 Intergenerational Report. These included:

- Providing incentives for older workers to continue participating in the workforce on a part time basis by relaxing rules for superannuation contributions and allowing limited access to superannuation benefits for retirees in part time work; and
- Implementing measures to increase the likelihood that superannuation benefits are used to fund retirement. These included the requirement that superannuation funds start paying of benefits before a retiree reaches the age of 75 and providing further incentives for retirees to buy income stream products by extending tax and Age Pension means test preference to so-called 'market linked income streams'.

While these developments are a move in the right direction they are not sufficient to address the risks facing the sustainability of future retirement incomes. That is, even if the labour, economic and financial markets of the future continue to be sympathetic to private retirement saving, a system based on private saving and a means tested Age Pension will only be sustainable where sufficient private saving is accumulated and this saving is used to fund retirement: To ensure this outcome the following policy reforms should be considered:

- The eligibility ages for superannuation (or at least mandatory superannuation under the Superannuation Guarantee) and the Age Pension must be aligned. This would offset any tendency to retire earlier due to the availability of a large superannuation accumulation, which under current rules can be dissipated prior to the Age Pension eligibility age without affecting access to the Age Pension.
- Mandatory income stream purchase should be required with at least a

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proportion of a superannuation accumulation. Combined with the first proposal this would ensure that retirement savings were being used to fund retirement.

- The tax regime for superannuation savings should be changed from TTT to EET. This would simplify the tax arrangements, provide a greater incentive for voluntary superannuation contributions and provide a source of tax revenue when the proportion of workers to retirees decreases.
- Include the value of a retiree's own home in Age Pension assets test. This initiative would reduce the likelihood that asset rich retirees could draw on the Age Pension.

In the absence of some of these reforms the Age Pension will be vulnerable to the financial pressures resulting from the ageing population.

6. Conclusion

This paper has sought to explain the Australian approach to retirement income provision and assess its resilience to population ageing. Over the past 100 years, retirement income provision in Australia has evolved into a multi-pillar arrangement comprising the Age Pension (a publicly provided safety net), the Superannuation Guarantee (private mandatory retirement saving) and voluntary retirement saving (including voluntary superannuation and homeownership). With fully funded superannuation and a public pension that is both less generous relative to international experience and means tested, Australia's retirement incomes policies are likely to be better able to cope with population ageing than many other countries, particularly those relying on PAYG public pensions such as in the US (Diamond and Orszag 2004), Japan (Takayama 1998) and other OECD countries (Disney and Johnson 2001). However, the risks associated with means testing and the reliance on private provision, could be exacerbated in a world characterised by an ageing population, and should not be ignored.

Notes

1 The Intergenerational Report had projected a fiscal gap of around 5% of GDP for the Commonwealth Government. The total government figure projected by the Productivity Commission is similar to the figure estimated in the ASFA-Access Economics 2004 Intergenerational Report (ASFA 2004).

2 This section is an updated and revised version of part of Appendix 1 in Bateman, Kingston and Piggott (2001).

3 A detailed discussion of the historical background can be found in Bateman and Piggott (1997) and Bateman and Piggott (1998).
4 The Australian Age Pension is universal to the extent that all residents of qualifying age are eligible, but targeted to the extent that it is subject to income and assets means tests.
5 This discussion ignores the distinction between the Age Pension and the Service Pension, which is paid to ex-servicemen and women. The two pensions are very similar, except that the Service Pension is paid five years earlier.
6 Since 1997, indexation has been against the greater of the growth of the Consumer Price Index (CPI) and male average earnings.
7 Eligibility for the Bonus Scheme includes a 20 hours a week work requirement. When paid the bonus is equal to 9.4% of the Age Pension for each year the Age Pension is deferred – eg for a single person eligible for the full age pension who defers one year, the bonus is $1,135. For 5 years deferral, the bonus is $26,363.
8 This decision was made largely on the grounds of high administration costs on small amount accounts.
9 Or a Retirement Savings Account (RSA) offered by a financial institution. For public sector employers, a government guarantee can substitute for full funding. Defined benefit schemes can count in meeting Superannuation Guarantee obligations provided an actuarial benefit certificate, specifying that the implicit level of superannuation support accords with the requirements, is obtained.
10 A product called a Retirement Savings Account (RSA) has also been introduced but has proved unpopular. Its aim is to provide a low cost option for small contributions. RSAs are simple capital guaranteed products offered by banks, building societies, credit unions and life insurance companies.
11 Small superannuation funds have 5 or less members and are generally established by a family owned company with family members as trustees.
12 The preservation age is being gradually increased to age 60 by 2025.
13 A lump sum that is taken and dissipated is not counted under the means tests.
14 These rules have applied since September 2004. Previously 'market linked income stream' were disallowed and life and life expectancy products were granted a 100% exemption from the assets test.
15 While life expectancy products do not provide longevity insurance, the government argues that these are an improvement on the take up of lump sums and will get retirees thinking in terms of income streams.
16 The issues associated with targeted welfare are outlined in Mitchell et al (1994).

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Appendix 1. Chronology of Retirement Income Policy in Australia

1909	Age Pension introduced
1913	Conservative parties proposed contributory national superannuation
1914	Introduction of tax concessions for superannuation
1922	Commonwealth employees superannuation fund established
1928	Conservative government introduced National Insurance Bill – proposed national insurance scheme

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1936	Service pension first paid. Tax concessions for lump sums introduced
1938	National Health and Pensions Insurance Bill passed – based on 1928 Bill, but deferred due to World War 2.
1943	Labour Government establishes National Welfare Fund to fund social services
1945	Social services contribution established
1950	Social services contribution merged with personal tax system
1969	Age Pension income test taper reduced from 100% to 50%
1973	Age Pension means tests abolished for persons aged over 75
1975	Age Pension means tests abolished for persons aged 70 to 74
1976	Age Pension assets test abolished for all persons
1978	Reintroduction of Age Pension assets test for persons aged over 70
1983	Superannuation tax changes: lump sum taxes introduced, increased tax deductibility for contributions from employees and the self-employed.
1984	Rollover funds established. Tax concessions for annuities introduced
1985	Age Pension assets test reintroduced for all persons. Labor government and trade unions finalise Accord Mark II
1986	3% productivity award superannuation endorsed by Conciliation and Arbitration Commission
1987	Regulatory framework for superannuation introduced – Occupational Superannuation Supervision Act. Supervisory body established – the Insurance and Superannuation Commission
1988	Major reforms of superannuation taxation – introduction of 15% tax on superannuation income, reduction of lump sum taxes, 15% annuity rebate introduced, increased tax deductibility for contributions from uncovered workers and self employed, introduction of marginal RBL scales
1990	Age Pension means tests liberalised for pensions and annuities. Introduction of tax rebates for superannuation contributions by low coverage employees
1991	Industrial Relations Commission rejects further 3% productivity award superannuation. Government announces introduction of 9% Superannuation Guarantee
1992	Superannuation Guarantee commences.
1993	Superannuation Industry Supervision (SIS) Act passed.
1994	Flat rate RBLs replace marginal RBLs. Age-determined employer contribution limits introduced. Improved preservation. Increased eligibility for 15% annuity rebate. Commencement of phase-in of increase of superannuation preservation age to 60.
1995	Commencement of phase-in of increase in Age Pension age for women from age 60 to 65. Labor government proposes to increase mandatory contributions to 15%.
1996	Simplification of the Age Pension means tests included deeming of income from financial investments.

1996 Change of government.

1996-97 Budget included proposals to introduce retirement savings accounts (RSAs), a rebate for contributions made on behalf of a low-income spouse, higher contribution taxes for high income earners (the superannuation surcharge) and an opt-out from Superannuation Guarantee for low income earners. (Not all proposals were realised).

1997 RSAs established. Superannuation surcharge introduced. Legislation passed to maintain Age Pension at 25% AWOTE. Maximum age for Superannuation Guarantee contributions increased from 65 to 70.

1997-98 Budget included proposals for employee choice of fund (finally passed in 2004 to commence in 2005) and to replace the previous government's proposed increased mandatory contribution rate with a 15% tax rebate for voluntary superannuation contributions (to a max of $3,000 pa).

1998 Age Pension means tests for retirement income streams revised to encourage life expectancy income streams. Pension Bonus Scheme introduced.

1999 Government announces reforms of business taxation, including proposals to reduce the capital gains tax rate for superannuation funds to 10% and to refund excess imputation credits.

2000 15% tax rebate for voluntary superannuation contributions abolished. Age Pension income test taper reduced from 50% to 40%. Senior Australian Tax Offset introduced.

2001 Financial Services Reform Act passed. Gradual implementation of licensing, disclosure and market misconduct measures.

2002 Legislation passed to allow superannuation splitting in divorce cases. Maximum age for superannuation contributions increased from 70 to 75 (for persons working at least 10 hours per week).

2003 Superannuation surcharge reduced from 15% to 12.5%. Introduction of government co-contribution for low/middle income earners.

2004 Changes to regulation of superannuation funds introduced via the Superannuation Safety Amendment Act 2003 (to include APRA licensing, fund registration and the requirement for risk management strategies and plans). Increase in government co-contribution.

2004 Market linked income streams introduced in September 2004, in conjunction with reduction in assets test concessions from 100% to 50% exemption for certain income streams.

2004 Employee choice of fund to commence. Superannuation surcharge to be reduced from 12.5% to 10%.

2005 Superannuation surcharge abolished.

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