The Australian Approach to Retirement Income Provision*

Hazel Bateman
University of New South Wales
Sydney 2052, Australia
H.Bateman@unsw.edu.au

and

John Piggott
University of New South Wales
Sydney 2052, Australia
J.Piggott@unsw.edu.au

* Prepared for the International Seminar on Social Security Pensions, Tokyo 5-7 March 2001. Many thanks to our discussant at this seminar, Yasushi Iwamoto. The paper is based on Appendix 1 of Bateman, Kingston and Piggott, *Forced Saving: Mandatory Private Retirement Provision*, 2001, Cambridge University Press. Research support provided by the Australian Research Council is gratefully acknowledged.

The Australian Approach to Retirement Income Provision

Formal retirement income provision in Australia can be traced back to occupational superannuation (retirement saving) schemes offered by banks and state governments in the 19th century. However the year 1909 marks the beginning of a national retirement income policy with the introduction of a means-tested age pension. Since then retirement income provision has evolved into a multi pillar arrangement comprising the Age Pension, occupational superannuation and other long term saving through property, shares and managed funds. The 1990s saw the introduction of private mandatory retirement saving in the form of the Superannuation Guarantee. With the introduction of the Superannuation Guarantee, Australia joined a growing group of countries which centre their retirement income policy on private mandatory retirement saving.

This paper explains and provides insights into the Australian approach to retirement income provision. The paper is set out as follows. Section 1 provides the historical context. Current Australian retirement income provision is discussed in section 2. In section 3 these arrangements are assessed, while section 4 identifies problems and offers some solutions. Section 5 concludes.

1. Historical Background: The Evolution of Private Mandating of Retirement Provision in Australia

Traditionally, Australia relied on its Age Pension (a universal, but means-tested, benefit payment) for retirement income provision. The Age Pensions is paid from general revenues, with entitlement based on age, residency status, income, and assets, but not on employment history. Tax concessions for voluntary superannuation were first introduced in 1915 and strengthened in 1936, but preservation was poor and coverage was low. As recent as the mid-1980s, only 30% of private sector workers were covered by occupational superannuation.

Unlike most other developed countries, Australia never introduced policies to compel participation in a publicly provided employment or earnings-related retirement income scheme. Prior to the introduction of the Superannuation Guarantee, Australian retirement income policy comprised only two pillars – the means-tested Age Pension and voluntary retirement saving.

Australia's status as odd man out in this regard seems to have been more 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 public earnings-related retirement income arrangements 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, with the coming of the Second World War, implementation was deferred indefinitely.

Occupational superannuation grew rapidly in the public sector in the years following the Second World War. But it was less common in the private sector where it grew haphazardly, covering some occupations and not others and providing markedly variable conditions and benefits. While the taxation arrangements were concessionary, the superannuation industry was largely unregulated and benefit standards were poor. As a result, even by the mid-1980s, less than 50% of full time employees were covered by superannuation. Of this, private sector coverage was only around 30% and coverage of full time females even lower at around 25%.

There was renewed interest in public earnings-related retirement income provision in the early 1970s when a commissioned study[1] recommended the introduction of public pensions along the lines of those operating in most other OECD countries. However, these recommendations were disregarded by the government of the time in favour of greater support for voluntary superannuation. The trade union movement then carried the push for earnings-related retirement income provision but with the emphasis moving away from publicly provided to multi-employer 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, the "Accord", which survived through Labor's tenure of office. The Accord, along with Australia's then centralised wage determination system, included the idea of building superannuation contributions into a national centralised wage decision. The idea became reality in 1986, when the Accord Mark II was agreed. A central element in that agreement was 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

[1] The Hancock Report – see Hancock (1976).

contribution, to be paid into an individual account in an industry fund. This was known as productivity award superannuation.[2]

The introduction of productivity award superannuation in 1986 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. In retail trade, an industry representative of all of these groups, coverage grew from 24% in 1986 to 82% in 1993. Aggregate coverage doubled from 40% to 79%.

However, award superannuation proved to be difficult and costly to enforce. In 1991 the Australian industrial court rejected an application, supported by both the government and the unions, for a further 3% increment. The government responded by introducing legislation requiring employers to make superannuation contributions to an approved fund 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 92% of employees in 2000.[3]

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

---

[2] This agreement was subsequently ratified by the nation's industrial court, and survived a High Court challenge brought by the Confederation of Australian Industry questioning its constitutionality (Dabscheck (1989), p.99).

[3] A detailed discussion of the historical background can be found in Bateman and Piggott (1997) and Bateman and Piggott (1998).

2. Current Retirement Income Provision in Australia

Retirement income provision in Australia comprises 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 private mandatory retirement saving under the Superannuation Guarantee; and the third pillar is voluntary saving, including tax-preferred superannuation. The Age Pension provided under the first pillar is withdrawn where retirement income and assets provided under the other pillars, exceed statutory thresholds.

Two aspects of the Australian arrangements are unusual when compared with other private mandatory arrangements. Firstly, the first pillar Age Pension operates as both the safety net and the second pillar guarantee, and secondly, the first pillar is means-tested against all income and assets, rather than against private pension income only.

2.1 Australia's Three Pillars

First pillar support - The Age Pension[5]

The Age Pension commenced in 1909. For most of the period since that time it has served as the social welfare safety net for the elderly and, in the absence of a compulsory earnings related pillar, has provided a major source of retirement income for most retired people. In 2001 around 80% of the retired of eligible age received some Age Pension – of which around two thirds were paid at the full rate (Dept of Family and Community Services 2001). However, only less than 10% of pension recipients relied solely on the Age Pension.

The main features of the Age Pension are summarised in Table 1.

---

[4] The Australian public 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] In the discussion, we ignore 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.

Table 1: Features of the Age Pension [(a)]

Established	1909
Eligibility	Residency Age (males age 65, females age 62 [(b)]) Means-tested (income and assets)
Funding	General revenues PAYG
Amounts	Single rate - \$A10,966.80 pa Married rate - \$A9,154.60 pa (Subject to income and assets means-tests) Indexed to greater of growth of CPI and male average earnings.
Other benefits	Rent allowance, concessional pharmaceutical benefits, public transport, public utilities etc.
Taxation	Pensioner tax rebate fully exempts full rate age pensioners from income tax, partial exemption for part rate pensioners
Means-tests	*Income test:* Pension withdrawn at the rate of 40c for each \$A1 of private income in excess of a free area of \$A58 per week (single rate), \$A102 per week (married rate). *Assets test:* Pension withdrawn by \$A1.50 per week for every \$A1,000 of assets above thresholds: Single / Married Homeowner \$A145,250 / \$A206,500 Non homeowner \$A249,750 / \$A311,000 Thresholds and limits indexed to annual, movements in the CPI Part pension based on whichever test determines the lower rate of pension

(a) The dollar amounts are for July 2002.

(b) Until recently the eligibility age for women was age 60. An increase to age 65 is being implemented over the period 1995 to 2014.

The Age Pension is payable to women aged 62 years and over, and to men aged 65 years and over. (The eligibility age for women is being increased to age 65 by the year 2014). Claimants must also satisfy certain residency qualifications. The Age Pension is means-tested by either a person's income or, assets; whichever determines the lower rate of pension and is automatically indexed twice yearly. A higher rate of pension is payable to a single person than to each member of a married couple. Since 1997, indexation has been against the greater of the growth of the Consumer Price Index (CPI) and male average earnings. The Age Pension is subject to personal income tax but a pensioner tax rebate applies which fully exempts full-rate pensioners from income tax and provides partial exemption for part-rate pensioners.

In July 2002 the Age Pension amounts were $A10,966.80 pa for single people (around 25% average male earnings) and $A9,154.60 pa (around 20% average male earnings) for each of a married couple.

Means-testing

The Age Pension has been means-tested since its inception in 1909. Initially both an income test and a separate property (assets) test applied. The annual rate of pension was reduced on a pound for pound basis once earnings exceeded a free area and also by one pound for every ten pounds of the value of property (including the family home) above a second free area. In December 1912 the family home was made exempt from the property test, and remains so.

The means tests remained largely unchanged until the late 1960s, when the reduction of the income test withdrawal rate from 100% to 50% in 1969 marked the commencement of a period of liberalisation. In the 1972 Federal election campaign, both major parties undertook to abolish means testing for the Age Pension. Following this election the pension free amounts were doubled and, by 1975, the means tests had been abolished for those aged 70 and above. By 1976 the assets test was abolished.

This represented the highpoint of liberalisation of the Age Pension means tests. In 1978 tightening of the means tests commenced when partial means testing was reintroduced for persons aged 70 or more. By the mid-1980s, means testing on both income and assets was again being applied to all retirees.

Recent policy has reflected an increased emphasis on targeting, with an attempt to simplify the administrative burden.[6]

Under current rules the income test the Age Pension is withdrawn at the rate of 40 cents for each dollar of private income in excess of a free area of $A58 per week (for single pensioners) and $A102 per week (for a pensioner couple). The assets test operates to reduce the Age Pension by $A1.50 per week for every $A1,000 of assets above a statutory threshold: $A145,250 for a single homeowner, $A206,500 (married homeowner couple), $A249,750 (single non-homeowner) and $A311,000 (married homeowner couple). As noted earlier, the test paying the lower rate of Age Pension applies.

Adequacy of the Age Pension

The government has legislated to maintain the single rate Age Pension at a minimum of 25% of male average earnings.[7] As retirees solely reliant on the Age Pension pay no income tax, this translates to a net of tax replacement rate of 37%. Compared with other rich developed countries, these magnitudes are favourable for safety net payments, but fall far short of the payments promised under typical public earnings-related pension schemes. As Table 2 indicates, in 1991, Canada was the only G7 nation with a higher minimum level of age benefit than Australia.

Table 2: Minimum social security provision – single older person - in Australia and G-7 countries in 1991, $A[(a)]

	Australia	United States	Canada	France	Germany	United Kingdom	Italy
Level of benefits (PPP)	$A8805	$A6648	$A9462	$A7899	$A6201	$A6635	$A7434

Source: Whiteford (1995).
Notes: (a) Precise estimates for Japan are not available, but the minimum value is below the G7 average. Purchasing power parity conversions were used.

[6] The thrust of the simplification is the extension of 'deeming' for financial assets. That is, income to be tested under the income test is determined by applying a statutory (deemed) rate of return to the capital value of financial assets. The 2002 deeming rates are 2.5% for the first $A34,400 (single retiree)/$A57,400 (couple) and 4% for the remainder.

[7] Increases flow-on to the married rate.

Means testing has ensured that a high proportion of government transfers are received by the poorest aged, thereby generating significant redistribution (Bateman *et al.* 1994). It has also helped to keep the aggregate value of transfers modest.

Second pillar support – The Superannuation Guarantee

The Superannuation Guarantee was introduced in 1992, following the compliance problems associated with the inclusion of superannuation in industrial awards. The Superannuation Guarantee mandates employers to make superannuation (retirement saving) contributions on behalf of their employees to superannuation (pension) funds of their choice[8]. Employers that fail to do so are subject to the Superannuation Guarantee Charge. The Superannuation Guarantee Charge comprises the shortfall in the minimum level of superannuation support *plus* interest *plus* an administrative cost component. It costs more to pay the Superannuation Guarantee Charge than the mandatory contribution, not least because this Charge is not a deductible business expense, unlike the Superannuation Guarantee. The superannuation contributions are placed in individual accounts in private superannuation funds and invested on behalf of the employees. Table 3 summarises the main features of the Superannuation Guarantee.

The Superannuation Guarantee applies to all employers and to almost all employees. Employees earning less than $A450 per month (around 14% of average male earnings) are specifically excluded.[9] The mandatory contributions are fully vested (ie. the member is fully entitled to all accrued benefits), fully preserved (ie. 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.[10] The superannuation funds are managed by boards of trustees..

[8] Superannuation is analogous to private retirement saving and superannuation funds are analogous to pension funds. These terms may be used interchangeably throughout the paper.

[9] This decision was made largely on the grounds of high administration costs on small amount accounts.

[10] 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.

The minimum level of superannuation support was phased-in. Employer contributions commenced at 3 or 4% of earnings[11] in 1992 with the target 9% contribution reached in July 2002.

Table 3: Features of the Australian Superannuation Guarantee

Commenced	1992
Contributions	9% earnings, paid by employer
Funding	Fully funded Individual accounts Many private funds Few investment restrictions
Benefits	Defined contribution Fully vested, portable and preserved to age 55 (increasing to 60 by 2025) No early withdrawals Choice of lump sum, pension, annuity with tax/transfer incentives to encourage income streams
Statutory coverage	All employees aged 18-65 Earnings > $A450 month (14% average male earnings) Self employed not covered, but tax concessions apply for voluntary contributions
Taxation	Employer contributions tax deductible Fund income (contributions and investment earnings) and benefits taxed at concessionary rates
Regulation	Prudent man: no rate of return or asset requirements.

Third pillar support – Voluntary retirement saving

Voluntary retirement saving comprises voluntary occupational superannuation, personal superannuation and other forms of long term saving through property, shares, managed investments and home-ownership. Voluntary occupational superannuation accounted for around 60% of total superannuation contributions in

[11] The initial mandatory contribution rate was 4% of earnings, although this was lower for small firms, which commenced at 3% of earnings.

2000[12] with 43% of employees making voluntary or personal superannuation contributions at an average rate of 6% of earnings. Voluntary occupational superannuation is long standing and has traditionally been offered to public sector workers and middle to high-income private sector workers. Benefits are generally based on defined benefits. As well, around 85% of current retirees own their home.

2.2 Integration of the Retirement Income Pillars

While the major source of income for most retirees is currently the Age Pension, this will change over coming decades as more Australians reach retirement with long periods of Superannuation Guarantee coverage.

Private retirement benefits

Retirement benefits accumulated under the Superannuation Guarantee and/or voluntary superannuation may be taken as a lump sum or an income stream upon reaching the preservation age, currently 55 but increasing to age 60 over the period to 2025. Income streams are encouraged by tax and Age Pension means-test provisions, but it is unclear whether these are affecting the long-term preference for lump sum benefits (Bateman *et al.* 1993).

Currently around 75% of the value of retirement benefits are paid as lump sums, but benefit amounts are generally small: the 1997 ABS Retirement and Retirement Intentions Survey reports that, in the four years prior to 1997, around 50% of lump sum retirement payments were less than $A60,000. However, the same survey indicates that lump sums are largely used for retirement purposes. Table 4, which sets out the disbursement of lump sum payments for recent retirees, shows that most superannuation payments are invested, rolled-over or used to pay off the family home.

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, traditional annuities and allocated pensions or annuities.

[12] In other words the Superannuation Guarantee accounted for 40% of total superannuation contributions.

- Superannuation pensions are pensions paid by or on behalf of superannuation funds. They have traditionally been paid by defined benefit schemes in the public and corporate sectors.

- Traditional annuities are offered by life insurance companies. Current products include fixed or indexed annuities for life or an agreed term. In 2001 around 10% of gross annuity sales related to life annuities.

- Allocated pensions and allocated annuities (also known as phased withdrawals) are offered by a wide range of financial institutions. Annual income payments are required to lie between defined minimum and maximum amounts. In 2001 allocated income streams accounted for 90% of total retirement income stream sales.

Table 4: Disbursement of lump sum payment, November 1997

	Age at retirement from full-time work 65 and over (proportion of total lump-sum benefits)
Rolled over	25.9
Purchased immediate annuity	0.8
Invested	42.0
Paid off home	12.4
Bought motor vehicle	0.8
Cleared outstanding debts	5.9
Paid for holiday	6.7
Assisted family members	0
Undecided	1.9
Other	3.8

Source: ABS Retirement and Retirement Intentions, Australia, November 1997, ABS Cat No. 6238.0. Table 12.

Product design and demand has been driven by the differential tax and Age Pension means-test arrangements applying to alternative types of income streams. Allocated products (phased withdrawals) have been the fastest growing segment of the market in recent years, although changes to the age pension means-tests in September 1998 led to increased demand for life and life expectancy products. In the 12 months to December 2001, gross sales of allocated products totalled $A7.6billion, nearly 10 times that of traditional annuities.

Integration

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 mandatory private retirement saving (the Superannuation Guarantee – the second pillar) and voluntary retirement saving (pillar three). However, they do distinguish between the type of retirement benefit. Where a lump sum is taken and used to purchase financial assets, the 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 5.

Life and life expectancy products are given greatest preference, with exemption from the assets test and preferential income test treatment. Allocated products (phased withdrawals) and short duration income streams are given least preference.[14]

Table 5: Retirement income streams – income and asset tests

Product type	Asset test	Income test
Life pension/annuity Life expectancy pension/annuity	no	Income *less* full purchase price/life expectancy (or term)
Other term annuity > 5 years	yes	Income *less* full purchase price/term
Term annuity < 5 years Allocated pension/annuity (phased withdrawal)	yes	Deeming applies

Future retirement benefits

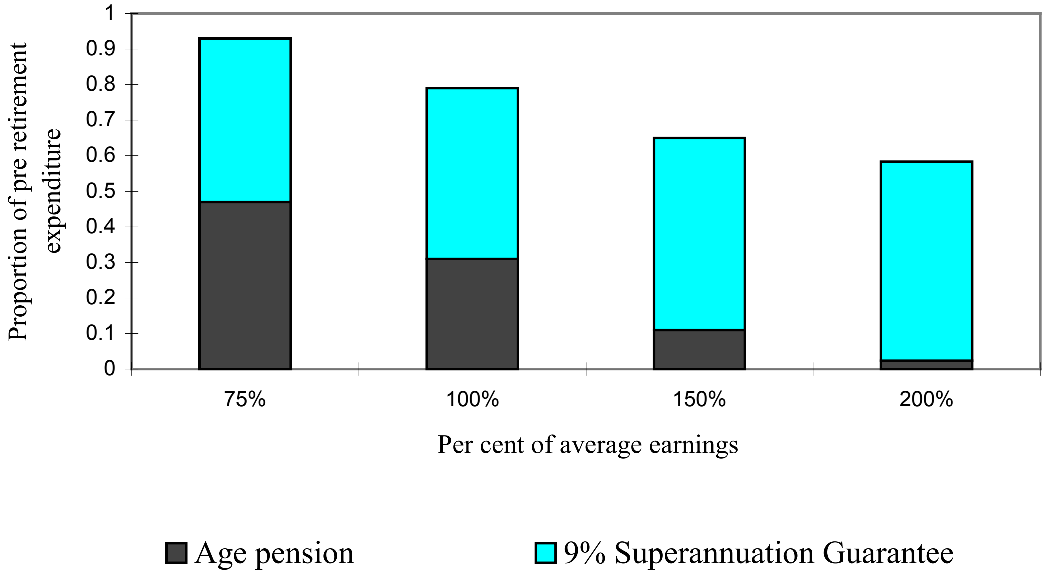
With almost all employees now covered by the Superannuation Guarantee, many workers with additional voluntary superannuation coverage and improvements in vesting, portability and preservation, the composition of retirement income, and

[13] A lump sum that is taken and dissipated is not counted under the means tests.
[14] 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.

therefore the role of the public Age Pension as the major source of income in retirement, will change in future years.

This is illustrated in Figure 1, which shows the expected composition of net total (public and private) retirement income for a full working life of Superannuation Guarantee coverage.

Figure 1: Future composition of retirement benefits [(a)]



Source: Bateman and Piggott (1997), page 27.

(a) Assumptions: single male worker on fixed income levels between 75 % and 200 % of male average earnings, voluntary saving excluded. Net of tax replacement rates are calculated as a percentage of pre retirement expenditure.

2.3 *Taxation and Regulation of Superannuation*

With the move towards greater reliance on private provision for retirement, the related areas of the taxation and regulation have also been reformed.

Prior to 1983 superannuation benefited from a generous tax treatment: contributions were largely tax deductible, fund earnings were exempt from tax and only 5% of the value of a lump sum, the main form of retirement income, was included in taxable income.

However, there was little industry regulation and the vesting, portability and preservation standards were poor.

Since the early 1980s the taxation of superannuation has been reshaped. Taxation of lump sum benefits was introduced in 1983 and a tax on superannuation fund income (including both contributions and investment income) in 1988. Taxation now applies at all three possible points: contributions, fund earnings and benefits. This contrasts with similar arrangements operating elsewhere in the world where generally only benefits are taxed. Under the Australian arrangements, employer contributions are tax deductible (up to age determined limits) but are taxed in the hands of the superannuation fund at a rate of 15%. In addition, a 15% superannuation surcharge applies to the contributions of high-income earners. Fund earnings are taxed at a statutory rate of 15%, which is reduced to the extent that income accrues in the form of dividends or capital gains.[15] Retirement benefits are taxed as well, with the amount of taxation depending on the type of benefit and its size. Recent Australian tax reforms have ignored the taxation of superannuation.

The 1980s also saw the introduction of a comprehensive regulatory framework for superannuation. As the Australian government does not have the constitutional power to make laws concerning superannuation the initial legislation utilised the government's taxation powers. Enforcement was tied to tax concessions provided to superannuation funds: a superannuation fund did not meet the regulatory requirements did not receive the tax concessions. An industry regulator was established[16] and a set of operational standards for the industry was introduced. However, with the introduction of mandatory superannuation in the 1990s, greater enforcement powers were required. This time the enabling legislation was enacted under the Australian government's corporations and pensions power, in addition to the taxation power, which allowed the introduction of civil and criminal remedies against trustees who failed in their duties.

Prudential issues are largely left to superannuation fund trustees, who are personally liable to fund members for their decisions. Trustees are responsible for the management, operation and investments of superannuation funds. With the exception of a 5% of asset

[15] Full corporate tax imputation credits are available on dividend income which may be set off against tax on any income, including capital gains and taxable contributions, while capital gains tax is indexed to inflation.

[16] Initially the Insurance and Superannuation Commission and from July 1999, the Australian Prudential Regulatory Authority.

ceiling on in-house investments, and a "no borrowing" rule, there are no asset requirements, nor is a minimum rate of return required.

2.4 The Superannuation Industry in Australia

The main institutions responsible for private mandatory retirement saving in Australia are superannuation funds.[17] Superannuation funds operate as trusts and are managed by boards of trustees, which are generally required to comprise equal employee and employer representation. Other institutions such as banks, life insurance companies and investment managers have important roles as service providers.

There are five types of superannuation fund, each introduced in response to different historical and policy considerations. The public sector superannuation funds appeared first in the 19th century, followed by corporate superannuation funds for white-collar workers. Retail funds were established by life insurance companies to promote personal superannuation, while the introduction of 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 a variant of retail fund - the master trust.[18] Finally, 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.[19] Superannuation funds can either be closed (that is, membership is restricted to employees of a particular employer or industry) or open (also called a public offer fund – where membership is open to the general public).

In March 2002 there were 237,144 superannuation funds in Australia, comprising 233,903 'small' and 3,241 'other' superannuation funds. The 100 largest superannuation funds account for around 65% of total superannuation assets (Clare and Connor 1999).

More recently has been the introduction of retirement savings accounts (RSAs), which aim 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. They are owned and controlled by the superannuation members holding the

---

[17] Since 1997 other institutions have been allowed to offer Retirement Savings Accounts (RSAs) as an alternative.

[18] Which allows non-related individuals or companies to operate superannuation under a single trust deed.

accounts and are taxed and regulated like all other superannuation accounts. RSAs currently account for less than 1% of superannuation assets.

Table 6: Characteristics of superannuation funds, March 2002

Types of fund	Assets ($A billion)	No. of funds	No. of accounts (millions)
Corporate	72	2,771	1.452
Industry	48	128	7.306
Retail [(a)]	173	251	12.005
Public Sector	110	91	2.836
Small Funds	97	233,903	0.407
Annuities, life office reserves etc.	33	na	na
All funds	532	237,144	24.006

Source: APRA Superannuation Trends, March 2002.
Notes: (a) Retirement savings accounts are included in retail funds.

In practice trustees delegate many tasks to service providers including fund administrators, investment managers, asset consultants, custodians and other professionals such as lawyers, actuaries and marketing specialists. Industry estimates indicate that nearly 86% of industry funds, 70% of public sector funds and around 60% of corporate funds use external fund administrators.

Superannuation assets

There has been a large increase in superannuation fund assets since the introduction of award superannuation and 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 2001. Government estimates suggest that by the year 2020, superannuation fund assets could total around 116.5% of GDP (Tinnion and Rothman 1999).

[19] Small superannuation funds have 5 or less members and are generally established by a family owned company with family members as trustees.

In the absence of asset or rate of return restrictions, Australian superannuation funds tend to invest in a wide variety of assets with a mix of duration and risk return characteristics. Less than thirty percent of assets are directly invested by superannuation funds: in March 2002 36% of assets were invested by external investment managers and 30% in pooled superannuation funds.

The average asset allocations of Australian superannuation funds are set out in Table 7.

Table 7: Asset allocation of Australian superannuation funds, March 2002

	Assets	
	$A billion	**%**
Cash and deposits	38	7
Loans and placements	21	4
Interest bearing securities	83	16
Equities and units in trusts	245	46
Direct Property	28	5
Overseas	103	19
Other	15	3
Total	532	

Source: APRA Superannuation Trends, March 2002.

Rates of return

Aggregate rates of return of Australian superannuation funds are difficult to determine. Excluding the small self managed funds, there are over 3,000 superannuation funds. Currently none of these are required to regularly report rates of return to a central agency and disclosure applies only to 'open' or public offer funds. Further, most reported 'rates of return' relate to investment returns, rather than the total return on contributions (after taking account of administration fees and charges, taxation and any other outlays such as insurance premiums). However, some idea of recent rates of return can be gained by reference to the performance of the 'open' retail superannuation funds, as summarised in Table 8 below.

Table 8: Performance of master trusts

	Average returns			
Fund type	**1 year**	**2 years**	**3 years**	**5 years**
Capital guaranteed	5.0	4.8	5.2	5.5
Capital stable	6.5	4.9	5.6	6.8
Cash funds	4.9	2.8	3.0	3.9
Managed	11.1	8.9	8.8	10.5
Australian shares	10.5	11.0	8.8	13.7
Fixed interest	5.2	6.2	8.1	6.9
Property	12.0	7.0	8.5	9.1
International equities	20.3	9.0	17.5	17.1
International bonds	14.1	2.7	11.4	6.7
Total products	9.1	5.6	8.3	6.9

Source: Rice Kachor Research (2000).

Administrative costs and charges

Fees and charges are freely determined and differ between the types and particular characteristics of superannuation funds. To provide some point of comparison, illustrative charges of the two main destinations of Superannuation Guarantee – industry funds and master trusts (a form of retail superannuation fund) are reported – see Table 9 below.

Table 9: Charging schedules for illustrative superannuation funds [(a)]

Average industry fund	Illustrative master trust
Administration charge of \$52 per annum + Investment management fee of 0.3-0.7% of assets	Contribution fee of up to 4.5% of each contribution + Member fee of up to \$42 to \$70 per annum + Asset administration fee of up to 0.95% of assets + Investment management fee of 0.4-1.08% of assets

(a) Estimates based on industry fund averages and illustrative master trust charges for 2000.

However, the charges identified above reveal little about the impact of administrative charges over a lifetime of retirement saving. Assuming the above charges apply over the entire accumulation period, they can be converted to standard metrics for comparison (Bateman, Piggott and Kingston 2001). Under such assumptions, Table 10 summarises the total administrative charges, expressed as a percentage of contributions and as a percentage of assets under management, for the illustrative superannuation funds. It is estimated that total administrative charges range from 0.37% to 0.77% of assets for industry funds and 0.41% to 1.81% of assets for retail funds (master trusts). This suggests a huge divergence in charges across funds.

Table 10: Total administrative charges

Current charging schedule applied to the accumulation phase	**Average industry fund**	**Illustrative master trusts**
% contribution	8.1-16.1%	7.3-27.7%
% assets under management	0.37-0.77%	0.41-1.81%

Source: Bateman, Kingston and Piggott (2001), Table 7.7.

3. An Assessment of Australian Retirement Income Policy

As Australian retirement income policy is in transition, any assessment of that policy must be contingent on the nature of future developments. Subject to this caveat, however, Australian retirement income policy performs favourably when assessed against both the individual and economy wide criteria for the performance of retirement income arrangements.[20] More particularly the second pillar Superannuation Guarantee performs well in the accumulation phase, because the mandatory contributions ensures full fundedness and the private basis of the policy helps provide political insulation (Diamond 1997). The benefits phase is much less satisfactory because income streams are not mandatory.

Individual criteria

An assessment of Australian retirement income policy against the financial risks facing individuals in retirement is summarised in Table 11.

If we consider only the private mandatory retirement saving pillar (the Superannuation Guarantee) the Australian policy scores poorly in terms of the individual criteria, because

[20] For a comprehensive discussion see Bateman and Piggott (1997) and Bateman and Piggott (1998).

of the lack of an income stream requirement. In particular, longevity and inflation risks are not addressed because of the failure to require a lifetime indexed – or indeed any - income stream.

Table 11: Assessment of the Australian retirement income policy – individual criteria

	Superannuation guarantee	Age pension
Coverage Risk	• Adequate for employees only.	
Replacement Rate Risk	• Adequate for continuous contributions.	
Investment Risk	• Borne by retiree, but addressed through asset diversification.	
Longevity Risk	• Not covered – no mandatory purchase of lifetime income streams, ineffective incentives.	• Provides a safety net (or cushion) against all risks
Inflation Risk	• Not covered – no mandatory purchase of indexed income streams, ineffective incentives.	
Political Risk	• Accumulations are insulated from political risk, except for tax changes, but the public pension safety net remains exposed.	

Further, even if lifetime indexed income streams were required, the Superannuation Guarantee would on its own only partially address many of the financial risks faced by an individual in retirement. In particular, the Superannuation Guarantee does not cover the self employed (some 12% of the total labour force) and income replacement may be insufficient for non-standard workers.[21] As well, while Superannuation Guarantee accumulations rest in the private sector, and are therefore not part of the government

[21] For example, Tinnion and Rothman 1999 show that a single male with a full working life of Superannuation Guarantee contributions out of average weekly earnings could expect a total net-of-tax replacement rate of 76% from private retirement income plus the Age Pension. This compares with a net-of-tax replacement rate of 37% from the Age Pension alone.

budgetary process, they are not completely insulated from political risk. It is open to any government to increase tax rates on accumulations and/or benefits – as was the case with the introduction of the superannuation surcharge[22] – or to make detrimental changes to the regulatory environment.

Many of these risks are, of course, mitigated by the interaction of the Superannuation Guarantee with the means-tested Age Pension. As well, some risks (such as replacement rate or coverage risk) may be addressed through the voluntary retirement saving pillar.

Economy-wide criteria

Assessment of Australian retirement income policy – or more particularly the Superannuation Guarantee - against the economy-wide criteria of efficiency, equity and administrative efficacy is summarised in Table 12.

Table 12: Assessment of Superannuation Guarantee - economy-wide criteria

Efficiency	• Addresses dynamic inconsistency of preferences and price distortions, by compelling saving • Does not address failure of annuities market • Impact of integration with means-tested age pension unclear
Equity	• Enhances inter generational neutrality • Detrimental intra generational impacts - low income earners forced to change intertemporal consumption stream - tax concessions favour high income earners
Administrative efficacy	• Complex to administer • Regulations prohibit charges on small amount accounts

[22] An additional tax on the contributions of high income earners. The relevance here is that superannuation taxes are legislated separately to income taxes - and are therefore less transparent.

The Superannuation Guarantee is likely to lead to an improvement in economic efficiency. By compelling retirement saving, it addresses myopia (along with any dynamic inconsistency of preferences) and the intertemporal price distortions arising from the income tax and the Age Pension. As well, it is likely to improve the composition of saving by reducing the emphasis on home ownership.

As well, by failing to mandate retirement income streams the Superannuation Guarantee does little to address the issue of adverse selection in the annuities market.

Mean- testing

The efficiency impact of the means-tested Age Pension, and its integration with superannuation, is unclear. Means testing of transfers always provokes questions about perverse incentives. This is because, over the range of individuals or households who are in the 'means-test range', high effective marginal tax rates (EMTRs) are generated which seem likely to affect behaviour in ways which are at odds with the social interest. Because efficiency costs increase disproportionately with the tax rate, economists instinctively react against such policies.

But, the efficacy of means-testing as a policy, as well as its overall efficiency impacts, requires a more sophisticated analysis than the above intuition suggests. In general, three factors need to be taken into account: the number of individuals directly affected by the policy with and without the means-test; the revenue requirements in the absence of means-testing and the impact of resultant tax increases on consumers more generally; and the flexibility of behaviour available to these groups: those affected by the means-test; those who would be affected by revenue-neutral tax increases were the means-tests to be abolished; and those would receive the transfer were the means-test to be abolished. Also important is system design – which will vary widely.

Ultimately, the efficiency impacts of means testing is an empirical question, and no *a priori* judgment can be made about its desirability in any particular case. Due to the lack of appropriate longitudinal data sets, there is no relevant empirical analysis of the Australian arrangements. However, the Australian system includes design features, which work to minimise jumps in EMTRs as persons reach retirement age. In particular, the taper for age pension withdrawal is gradual (at 40 cents per dollar of private income), having been recently reduced from 50 cents per dollar of private income in 2000, and dollar for dollar in the 1960s. As well, the pensioner tax rebate and the annuity tax rebate operate to make much public and private retirement incomes effectively tax-free. On the other hand, there is some anecdotal evidence of bunching of income and assets below the means-test thresholds, and an 'over investment' in residential housing, which benefits from concessions under the tax system and the Age Pension means tests. More generally, the jury is still out on the economy-wide efficiency impacts of steep versus gradual tapers (Blinder and Rosen 1985).

Other issues

The Superannuation Guarantee scores well on intergenerational equity. It compels those employees with the lifetime resources to help fund their own retirement so would be expected to reduce calls on the means-tested Age Pension. This is confirmed in Bateman and Ablett (2000) who estimate a set of generational accounts for Australia. They find that the introduction of the Superannuation Guarantee has halved of the generational imbalance, which had previously favoured of current generations.

Within-generation distribution impacts, however, raise some concerns. First, if the Superannuation Guarantee is largely absorbed through slower wage growth, then the working poor may suffer more through reduced access to consumption today than they gain through increased retirement resources tomorrow. Second, superannuation tax concessions offer more of a tax break, relative to the comprehensive income tax, to the rich than the poor. Finally, the Superannuation Guarantee may be disadvantageous to non-standard workers, such as women – who have long periods out of the workforce, more part time work and lower wages on average than men. Again, the means-tested Age Pension acts to reduce these inequities.[23]

[23] Equity issues and the Superannuation Guarantee are discussed in Bateman *et al* (1994).

Due to the absence of a broadly accepted benchmark, the Superannuation Guarantee's rating on administrative efficacy is unclear. As a privately organised and funded form of retirement income provision it is likely to be more complex and more costly than public PAYG retirement income provision.[24] But private provision is likely to offer more choice, better governance and the potential for higher retirement benefits.

Finally, implementation of the Superannuation Guarantee was not problem-free. Of initial concern were the relatively high administrative charges placed on many accounts with small balances - inevitable in an immature system - and the proliferation of multiple accounts (around 3 for every worker).

The government responded to the former with regulations limiting the fees charged on small amount accounts. That is, the member protection rules which require that for superannuation accounts of less than $A1,000, fund administration costs cannot exceed fund earnings - although accounts can be debited for investment losses, contributions tax and insurance premiums.

The latter is being addressed through member education and changes in industry practice, which have simplified procedures for the transfer and amalgamation of superannuation accounts. An emerging problem is, however, that of 'lost' accounts. The Australian Taxation Office estimates that there are about 2.5 million 'lost' accounts and $A2.4 billion held on behalf of superannuation fund members who are 'lost' to their fund.

Current Evidence and Projections

Preliminary evidence of the success of Australia's three-pillar approach to retirement income provision has focussed primarily on coverage and national saving.

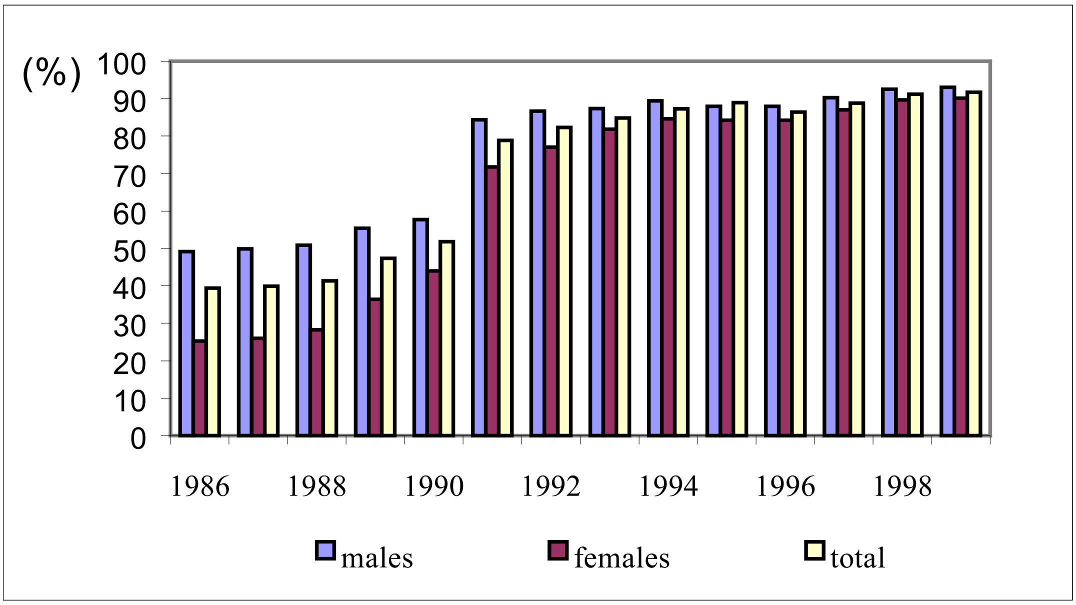
Coverage

Figure 2 reports trends in superannuation coverage. The Superannuation Guarantee – in conjunction with the productivity award superannuation of the 1980s – has led to very high coverage of private retirement saving (both mandatory and voluntary). Increases in coverage have been particularly high in industries dominated by women, part-time and

[24] However, while reported costs data may suggest that public arrangements are less costly, much public cost data is deficient.

casual workers. Total coverage has grown from 39.4% of workers in 1986 to over 92% in 2000.

Figure 2: Trends in superannuation coverage of employees



Source: Employee Benefits Australia, ABS No. 6334.0; Superannuation Australia, ABS 6319.0; Employee Earnings, Benefits and Trade Union Membership, ABS No. 6310.0.

National saving

Government estimates of the contribution to saving of a 9% Superannuation Guarantee is set out in Table 13.

The Superannuation Guarantee is projected to increase national saving by 1.2% of GDP by the turn of the century and by around 3.6% of GDP by the year 2020. Private saving improves because of the gradually increasing tax preferred mandatory contribution, and the earnings thereon, net of saving substitution. However, over the period to 2020, public saving falls, as reductions in tax revenue exceed reductions in Age Pension outlays. This will, however, turnaround in later years as the Superannuation Guarantee matures and the retired depend less on the Age Pension.

If these projections are correct, they reflect a major improvement in Australia's saving performance, which has been low by international standards. Net national saving currently stands at around 4.5% of GDP, so a 1.2 percentage point increase represents a 25% acceleration in net saving.

Table 13: The Superannuation Guarantee – contribution to national saving [a]

Financial year	Public saving	Private saving	National saving
	(contribution as a % GDP)		
1992-93	-0.03	0.5	0.4
1995-96	-0.05	0.9	0.9
1999-00	-0.18	1.4	1.2
2004-05	-0.31	2.6	2.3
2009-10	-0.37	3.2	2.8
2014-15	-0.39	3.5	3.1
2019-20	-0.35	3.9	3.6

Source: Gallagher (1997), Table 1.
(a) Estimates assume implementation of policies announced in 1996-97 and 1997-98 Budgets, with no increase in member contributions. Various saving substitution rates are assumed ranging from 5% for the first income decile to 50% for the tenth income decile.

Certainly, the composition of households' financial asset saving flows has altered dramatically in the last decade. Table 14 reports the net acquisition of financial assets over the past three decades. Life insurance and superannuation contributions have increased from 20% of households' net acquisition of financial assets in the 1970s to 50% in the 1990s.

Table 14: Households – net acquisition of financial assets[a]

	Bank deposits (%)	Life insurance, superannuation contributions (%)	Other[b] (%)
1970s	42	20	38
1980s	36	39	25
1990s	28	50	22

Source: Bateman and Piggott (1997)
Notes: (a) Includes unincorporated enterprises.
(b) 'Other' includes building society and credit union deposits, government securities, debentures, shares, unit trusts, etc.

A final point on saving performance concerns the composition (or quality) of saving and investment. There are two main channels of tax preferred saving in Australia - superannuation, and owner-occupier housing. The latter is both treated more concessionally under the income tax and excluded from the Age Pension means test. Therefore, in the absence of compulsory superannuation, owner-occupier housing is likely to be chosen as the preferred personal saving vehicle.

Impact on public pension outlays

The Age Pension (and the analogous service pension) currently accounts for around 3% of GDP. This is fairly small by international standards and is largely due to the design of the Age Pension as a means-tested safety net, rather than a form of social insurance. Government estimates suggest that, by 2050 total public age pension outlays will reach around 4.5% of GDP (Rothman 1998)[25] – again quite low by international standards.. Importantly, if the mandatory contribution rate remains at 9%, many future retirees will retain a part Age Pension.

4. Current Problems, and How Can They be Addressed?

Australia's retirement income arrangements remain problematic in a number of areas. These include integration of the second pillar private mandatory retirement saving (Superannuation Guarantee) with the first pillar Age Pension and the take-up of retirement income streams, distortions and complexity associated with the taxation of superannuation, second pillar choice, administrative costs and charges associated with private mandating and retirement income adequacy. These issues are discussed below.

Integration with the first pillar Age Pension, and retirement income streams

Perhaps the most difficult structural problem confronting Australia's private mandatory second pillar (the Superannuation Guarantee) is its linkage with the first pillar - the Age Pension - and the related question of benefit choice in retirement. Lump sum withdrawal of superannuation benefits is both permitted and widespread. This, combined with the disparity between the preservation age for superannuation benefits (currently 55, but increasing to 60) and the eligibility age for the Age Pension (62 for females, 65 for males), makes the integration of the Superannuation Guarantee with the Age Pension problematic. While most retirees dispose of their lump sum benefits prudently, they have an incentive to do so in ways that maximise their Age Pension benefits.[26] This may involve reduced interest by workers in maximising investment returns and means-test avoidance for workers near the Age Pension threshold.

[25] This compares to 4.75% in the absence of the Superannuation Guarantee. It is emphasised here that the Superannuation Guarantee was designed to complement, rather than replace, the Age Pension.

[26] See Atkinson *et al.* (1996).

While current policy provides incentives through the Age Pension means tests to encourage the take-up of life and life expectancy income streams, it is unclear whether these incentives will be effective over the long term. This was shown in Bateman *et al.* (1993) who found that the means tests and tax incentives did little to encourage retirement income streams.

Most analysts believe that there will eventually be compulsory annuity purchase of some kind, although the design (a lump sum for the first $x, then compulsory annuity purchase, or compulsory annuity purchase to $y per year, then a lump sum option, to give two possibilities) remains unclear.

Taxation

Much avoidable complexity in the Australian taxation of retirement saving is introduced by maintaining three tax bases: contributions, earnings, and benefits. All apply at concessional rates, so it is less the burden of tax than its complexity, which is the difficulty here. However, the tax on earnings distorts net of tax returns, adversely affecting asset choice. In addition, earnings taxes probably further encourage early retirement, since it is when retirement is a viable option that the earnings tax bites most severely, reducing the lifetime reward for working another year. As well, contributions and earnings taxes are flat rate and therefore regressive. The superannuation surcharge, which attempts to make the contributions tax on superannuation funds progressive across fund members, has proved to be administratively complex and costly.

Further, the separation of superannuation tax rates from the personal tax rate schedule reduces the political insulation offered by private retirement provision.[27]

The complexity of superannuation taxation in Australia stems from the multiple bases on which the tax is levied. Australia is the only country to tax all three of these possible bases. The best option would be to abolish the taxes on contributions and earnings, and to tax benefits at the retiree's marginal rate, as is done in the US for voluntary schemes. The implications for the current budget balance probably render this infeasible. An alternative might be to tax contributions at a flat rate, and tax benefits at the retiree's marginal rate, less the flat rate contributions tax. Doyle *et al* (1999) provide a formal analysis of this reform proposal.

---

[27] For more detail on the superannuation surcharge see Bateman and Piggott (1999). For a proposal for the

Choice

Choice in the Australian policy debate has two dimensions: choice of superannuation fund and choice of investment portfolio. Current policy reform has emphasised choice of superannuation fund, but support for it is far from widespread.[28] It is argued that fund choice will lead to greater competition and lower fees and charges. One the other hand, choice of superannuation fund would involve greater expenditure on marketing and distribution. In Chile employee choice of fund has proved expensive with marketing accounting for around 45% of total administrative costs. Another negative relates to the likely, if partial, breakdown of group life insurance arrangements. However, Australian superannuation funds are increasingly offering portfolio choice with more than 70% of members able to choose their investment portfolio.

Irrespective of the choice model pursued, it is vital that members are well informed and have access to easily understood comparative performance criteria. Therefore, government policy to facilitate greater investment choice should be complemented by appropriate disclosure rules and effective member education. Australia has recently introduced new rules for financial product disclosure but these will need to be strengthened if proposed choice of fund becomes reality.[29]

Costs and charges

Any costs associated with superannuation (private retirement saving) will erode the rate of return that might otherwise be realised. Expressed as a percentage of assets under management, even charges of 1 or 2% of assets can make a major difference to retirement accumulations. Under the Australian retirement income arrangements, there are a variety of difference types of superannuation funds, with differing features and governance structures. Therefore, there can be quite different implications for costs, charges and fees and therefore final retirement benefits. As indicated in Section 2, there is currently a large difference between the administrative charges associated with the multi-employer industry funds as compared to the 'open' retail master trusts. These factors should be taken into account in future policy concerning choice, as well as financial product disclosure, governance and industry structure.

---

simplification of superannuation taxation see Doyle *et al.* (1999).

[28] Draft legislation has been prepared and supported by the Government in Parliament, but the Australian upper house, the Senate, has so far rejected the proposal several times.

[29] The Financial Services Reform Act – which requires uniform financial product disclosure - commenced

Adequacy

While government estimates suggest that a 9% Superannuation Guarantee (plus the Age Pension) will deliver an adequate replacement rate for retirees with continuous workforce participation, this experience is no longer the norm. As well, under current policy design, taxation and administrative charges (and insurance premiums) increasingly erode the mandatory contribution. This raises the issue of the adequacy of a mandatory contribution of 9% and whether the mandatory policy should be supplemented by incentives to make voluntary contributions. Despite concerns about adequacy, there are no government proposals to increase the mandatory contribution rate.

5. Concluding Comments

This paper has sought to explain the Australian approach to retirement income provision. 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 private pensions).

The centrepiece of retirement income provision is the Superannuation Guarantee, which commenced in 1992. Despite some early implementation problems, this is now operating quite smoothly: superannuation coverage is around 92% of employees and compliance is high.

In terms of the individual and economy-wide criteria for assessment, the Australian arrangements rate favourably. In particular, the Superannuation Guarantee does well in the accumulations phase, because the mandatory contributions ensure full fundedness and the private basis of the policy helps provide political insulation. However, it performs less well in the decumulation (benefits) phase, because retirement income streams are not mandatory. Given the historical right to take superannuation benefits as lump sums in Australia, mandating retirement income streams is politically difficult. In the long term, however, the success of Australia's current suite of retirement income policies will depend upon the introduction of such a policy.

---

operation in 2002.

References

Atkinson, M., J. Creedy and D. Knox (1996), “Alternative Retirement Income Strategies: A Cohort Analysis of Lifetime Redistribution”, *The Economic Record*, 72(217): 97-106.

Australian Bureau of Statistics (1997), *Retirement and Retirement Intentions*, ABS No. 6238.0, November 1997.

Australian Bureau of Statistics, *Employee Earnings, Benefits and Trade Union Membership*, ABS No. 6310.0 (various issues).

Australian Bureau of Statistics (1997), *Superannuation Australia*, ABS No. 6319.0.

Australian Bureau of Statistics, *Employment Benefits Australia*, ABS No. 6334.0 (various issues).

Australian Prudential Regulatory Authority (2002), *Superannuation Trends*, March 2002.

Bateman, H. and Ablett, J. (2000), “Compulsory Superannuation and Australian Generational Accounts”, *Economic Analysis and Policy*: 33-48.

Bateman, H. and Piggott, J. (1997), *Private Pensions in OECD Countries: Australia*, Labour Market and Social Policy Occasional Papers, No. 23, OECD, Paris.

Bateman, H. and Piggott, J. (1998), “Mandatory Retirement Saving in Australia”, *Annals of Public and Cooperative Economics*, 69(4): 547-569.

Bateman, H. and Piggott, J. (1999), *The Costs of the Superannuation Surcharge*, CEDA Information Paper No. 66.

Bateman, H., Kingston, G. and Piggott, J. (1993), ‘Taxes, Retirement Transfers and Annuities’, *The Economic Record,* 69(206): 274-84.

Bateman, H., Kingston, G. and Piggott, J. (1994), ‘The Equity Implications of Mandated Funded Pension Schemes’, in J Creedy (ed) *Taxation, Poverty and Income Distribution,* Edward Edgar, England: 163-74.

Bateman, H., Kingston, G. and Piggott, J. (2001),*Forced Saving: Mandating Private Retirement Provision*, Cambridge University Press.

Blinder, A. S., and Rosen, H, R. (1985), 'Notches', *American Economic Review*, 75(4): 736-747.

Clare, R. and Conner, D. (1999), *The Superannuation Market in Australia*, ASFA Research Centre, June 1999.

Dabscheck, B. (1989), *Australian Industrial Relations in the 1980s,* Oxford University Press, Melbourne.

Department of Family and Community Services (2001), *Annual Report 2000-01*, AGPS, Canberra.

Diamond, P. (1997), ‘Insulation from Political Risk’, in S Valdes-Prieto (ed), *The Economics of Pensions: Principles, Policies and International Experience*, Cambridge University Press, UK.

Doyle, S., Kingston, G. and Piggott, J. (1999), 'Taxing Super', *Australian Economic Review*, 32: 207-18.

Gallagher, P. (1997), *Assessing the National Savings Effect of the Governments Superannuation Policies: Some Examples of the New RIMGROUP National Savings Methodology*, Retirement Income Modelling Task Force, Paper presented to the Fifth Colloquium of Superannuation Researchers, University of Melbourne, July 1997.

Hancock, K. J. (1976), *National Superannuation Committee of Inquiry – Final Report*, AGPS, Canberra.

Rice Kachor Research (2000), *Master Trust Analysis*, August 2000.

Rothman, G. (1998), *Projections of Key Aggregates for Australia's Aged – Government Outlays, Financial Assets and Incomes*, Retirement Income Modelling Unit, The Treasury, paper presented to the Sixth Colloquium of Superannuation Researchers, University of Melbourne, July 1998.

Senate Select Committee on Superannuation (1995), *Member Investment Choice*, Parliament House, Canberra.

Tinnion, J. and Rothman, G. (1999), *Retirement Income Adequacy and the Emerging Superannuation System - New Estimates*, Retirement Income Modelling Unit, The Treasury, paper presented to the Seventh Colloquium of Superannuation Researchers, University of Melbourne, July 1999.

Whiteford, P. (1995), *The Use of Replacement Rates in International Comparisons of Benefit Systems*, Discussion Paper No. 54, Social Policy Research Centre, University of New South Wales.

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

1936 Service pension first paid. Tax concessions for lump sums introduced

1938 National Health and Pensions Insurance Bill passed – based on 1928 Bill

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 Means-tests abolished for persons aged over 75

1975 Means-tests abolished for persons aged 70 to 74

1976 Assets test abolished for all persons

1978 Reintroduction of assets test for persons age over 70

1983 Superannuation tax changes: lump sum taxes introduced, increased tax deductibility for employees and the self-employed.

1984 Rollover funds established. Tax concessions for annuities introduced

1985 Asset 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 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 low coverage employees

1991 Industrial relations Commission rejects further 3% Productivity Award Superannuation. Government announces introduction of 9% Superannuation Guarantee to commence from July 1992

1992 Superannuation Guarantee commences.

1993 Superannuation Industry Supervision 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 preservation age of 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 Deeming applied to financial investments under Age Pension income test. Change of government. 1996-97 Budget includes proposals to introduce retirement savings accounts (RSAs), spouse contributions, superannuation surcharge and opt-out from Superannuation Guarantee for low income earners.

1997 RSAs established and superannuation surcharge introduced. 1997-98 Budget includes proposals to introduce employee choice of fund and replace increased mandatory contribution rate (proposed under the previous government) with a 15% tax rebate for voluntary superannuation contributions (to a max of $A3,000pa).

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

2000 Abolition of 15% tax rebate for savings. Age Pension income test taper reduced to 40%.

2002 Financial Services Reform legislation (including financial product disclosure) commences. Budget includes proposals to allow splitting of superannuation contributions, contributions for children, low-income co-contributions, and continuous contributions to age 75.