

The Market for Retirement Products in Australia

*Gregory Gordon Brunner
Craig Thorburn*

The World Bank
Financial Systems Department
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Abstract

Australia introduced a mandatory retirement savings scheme in 1992. This built on pre-existing voluntary occupational plans. The new scheme has been very successful in expanding coverage and mobilizing large financial savings that are equal to close to 100 percent of GDP. However, Australia does not impose restrictions on payout options. The payout phase used to be dominated by lump sum withdrawals, which accounted for 80 percent of benefit payments as recently as 2002. But pension payments increased in recent years and now represent 45 percent of total payments. The vast majority of these pension payments take the form of term

annuities and allocated annuities. The latter are similar to phased withdrawals in Chile but run for fixed terms of up to 25 years rather than for lifetime terms. The demand for life annuities and lifetime phased withdrawals is very limited. The paper discusses the factors that have shaped the pattern of demand for retirement products, including the availability of the universal age pension and the effect of clawback provisions, the impact of the high level of home ownership, and the widespread preference of retiring workers for reliance on self-annuitization. The paper also reviews the prudential regulation of superannuation funds and life insurance companies.

This paper—a product of the Finance and Private Sector Development Vice Presidency, Financial Systems Department—is part of a larger effort in the department to understand and inform country policy debate with respect to the retirement income systems design and performance. Policy Research Working Papers are also posted on the Web at <http://econ.worldbank.org>. The author may be contacted at cthornburn@worldbank.org.

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Gregory Gordon Brunner and Craig Thorburn¹

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PREFACE

This paper on the market for retirement products in Australia is part of a broader project on life annuities and retirement products, coordinated by Roberto Rocha, program manager in the unit for Financial Markets for the Social Safety Net, of the Financial and Private Sector Development Vice-Presidency of the World Bank. The project was initiated in 2004 to fill an apparent gap in the pension literature, especially in the literature addressing the payout phase of defined contribution pension systems. Many countries that have implemented systemic pension reforms and introduced private pension systems are now facing the challenge of organizing the payout phase for retiring workers. Organizing the payout phase entails introducing a well-regulated market for retirement products, covering the effective regulation and supervision of retirement products, marketing activities, providers and intermediaries. However, the literature on the payout phase is generally focused on a few countries and topics, and does not address in sufficient detail the institutional and regulatory issues faced by policy-makers in reforming countries.

The World Bank project fills the gap by reviewing in detail a number of representative country cases, including Australia, Chile, Denmark, Sweden, and Switzerland. These countries have large mandatory or quasi-mandatory private pension systems operating primarily on a defined contribution basis and have already entered the payout phase. Moreover, their institutional and regulatory arrangements for the payout phase are different in many aspects, including decentralized and centralized arrangements for the provision of life and term annuities, different menus of retirement products, different approaches to price regulation and risk-sharing, different marketing rules, and different capital rules for providers. Therefore these countries provide a rich variety of experiences and policy lessons for other reforming countries.

TABLE OF CONTENTS

1	INTRODUCTION	5
2	THE AUSTRALIAN PENSION SYSTEM	5
2.1	PUBLIC PENSIONS	5
2.2	REPLACEMENT RATES AND PENSION ELIGIBILITY	10
2.3	OCCUPATIONAL SCHEMES AND THE SUPERANNUATION GUARANTEE	12
3	THE PRODUCT MENU	15
3.1	ALLOCATED INCOME STREAMS	16
3.2	MARKET LINKED INCOME STREAMS	17
3.3	LIFETIME INCOME STREAMS	17
3.4	LIFE EXPECTANCY INCOME STREAMS	18
3.5	FIXED TERM INCOME STREAMS	18
4	TAXATION AND SOCIAL SECURITY RULES.....	20
5	OVERSIGHT – REGULATION AND SUPERVISION.....	23
5.1	INSTITUTIONAL STRUCTURES.....	23
5.2	APRA.....	23
5.3	CAPITAL, FUNDING, SOLVENCY	24
5.3.1	<i>Pension Funds</i>	24
5.3.2	<i>Life Insurance Companies</i>	29
6	TRENDS IN INDUSTRY COMPOSITION.....	36
6.1	SUPERANNUATION FUNDS.....	36
6.2	LIFE INSURANCE COMPANIES	39
7	TRENDS IN PRODUCT COMPOSITION.....	41
7.1	PRODUCT MIX – A STORY OF ATTITUDES	41
7.2	EQUITY RELEASE PRODUCTS	45
8	CONCLUDING REMARKS	46
	REFERENCES:	48

Tables

TABLE 1: INCOME TEST DETAILS (CURRENT AS AT MARCH 2007).....	6
TABLE 2: ASSET TEST DETAILS (CURRENT AS AT MARCH 2007)	7
TABLE 3: HOME OWNERSHIP RATES IN SELECTED COUNTRIES.....	8
TABLE 4: PROJECTED AGE AND SERVICE PENSIONS AS A PERCENTAGE OF GDP	9
TABLE 5: TYPES OF SCHEMES	15
TABLE 6: COMPARISON OF DIFFERENT TYPES OF INCOME STREAM PRODUCTS	19
TABLE 7: REASONABLE BENEFIT LIMITS.....	21
TABLE 8: INCOME AND ASSET TEST COMPARISON.....	21
TABLE 9: ANNUAL CONTRIBUTIONS AND TOTAL ASSETS OF SUPERANNUATION FUNDS....	37
TABLE 10: SUPERANNUATION FUND ASSETS BY TYPE OF FUND	37
TABLE 11: NUMBER OF SUPERANNUATION FUNDS BY TYPE	38
TABLE 12: NUMBER OF ACCOUNTS IN SUPERANNUATION FUNDS	39
TABLE 13: LIFE INSURANCE PREMIUMS (\$ BILLION; YEAR TO 30 JUNE)	39
TABLE 14: ANNUITY BUSINESS OF LIFE COMPANIES (YEAR TO 30 JUNE).....	40
TABLE 15: SUPERANNUATION ASSETS OF LIFE COMPANIES (YEAR TO 30 JUNE).....	40
TABLE 16: COMPOSITION OF BENEFIT PAYMENTS	41
TABLE 17: PROPORTION OF PENSION PAYMENTS	42
TABLE 18: SALES OF ANNUITIES AND ALLOCATED PENSIONS.....	45

Figures

FIGURE 1: HOME OWNERSHIP BY AGE AND CENSUS YEAR	8
FIGURE 2: POTENTIAL AGGREGATE REPLACEMENT RATIOS FOR SELECTED DECILES.....	11
FIGURE 3: TRENDS IN PROPORTIONS - AGE PENSIONER ELIGIBILITY	11
FIGURE 4: SUPERANNUATION ASSETS AND AGE PENSION COVERAGE PROJECTIONS	12
FIGURE 5: BALANCE SHEET COMPARISON FOR DEFINED CONTRIBUTION SCHEMES	26
FIGURE 6: BALANCE SHEET COMPARISON FOR DEFINED BENEFIT SCHEMES	28
FIGURE 7: VESTED BENEFIT INDEX (VBI) – JUNE 2006	29
FIGURE 8: HIGH LEVEL OUTLINE OF STATUTORY FUND OPERATION.....	32
FIGURE 9: ASSET AND LIABILITY STRUCTURE FOR STATUTORY FUNDS.....	32
FIGURE 10: SOURCES OF INCOME IN RETIREMENT	43
FIGURE 11: PROJECTED SUPERANNUATION BALANCES BY AGE, 2000-2030.....	44
FIGURE 12: AVERAGE HOUSEHOLD WEALTH AND INDEBTEDNESS	44

1 Introduction

This paper considers the structure of the Australian retirement income arrangements, and looks at motivations which have led to government policies towards retirement income and its impact on the popularity, or otherwise, of differing retirement income products. In the context of the development of global annuity markets, it seeks to show why the market for annuities in Australia is so poorly developed, and how recent policy changes are likely to make annuities even less attractive. The Australian experience with annuities is best approached by first examining the contextual arrangements as these have a strong direct influence on actual practice. These contextual arrangements include: a long-standing and relatively generous first pillar with wide but means tested access; formalized second pillar arrangements with a strong defined contribution orientation; and taxation and social security arrangements that influence consumer and market participant behavior.

The role of the mandatory second tier pension framework has been motivated by a desire to ensure that Australians have a better income in retirement than they could expect from the government-provided age pension. The system is also designed to boost national saving and reduce the rate of growth of government pension outlays. The system provides retirees with great flexibility and personal choice regarding how they invest the assets they have accumulated for their retirement. Despite this, there is considerable confidence that these assets will be used wisely. The government provides a range of incentives to encourage retirees to take up income stream products; however, it relies to a much greater extent on common sense and prudent management by individuals rather than any form of compulsion to ensure that accumulated assets are used primarily by individuals to support themselves in their retirement. The government still expects to play an important role in the provision of a publicly funded age pension well into the future.

The provision of second pillar private income is left to the private sector. It is supported by a comprehensive regulatory framework based on a formal risk-based model which not only provides the regulator with a risk rating for pension providers and life insurance companies, but also a matrix of supervisory response. Pension and annuity providers who provide guaranteed income streams are subject to capital requirements to ensure that their commitments can be honored.

2 The Australian Pension System

2.1 Public Pensions

For a considerable period of time, the Australian retirement incomes system consisted of a first pillar age pension. The age pension was established in 1908, providing a flat rate pension through the federal government on a pay-as-you-go basis. The majority of Australians looked to the age pension as their main source of retirement income. The pension was subject, for a long period, to an income and asset based ‘means test’ but, progressively into the 1970s the means testing was made more liberal until it focused on income only and not on assets. In response to the fact that it was possible for many older Australians to arrange their financial affairs such that they had considerable assets but generated limited income for ‘means testing’ purposes, an asset based test was

reintroduced in 1985. Currently both an assets and income test apply. The rate of pension payment is calculated under both tests and the test that results in the lower rate (or nil rate) will apply.

The government enacted laws in 1997 to set the level of the age pension at 25 percent of an average wage measure so the pension is now indexed to wages as a matter of course. Rates are indexed twice a year in March and September, to the greater of CPI or Male Total Average Weekly Earnings (MTAWE). The single rate is benchmarked to 25 percent of MTAWE and the combined rate is set so that the single rate is 60 percent of the combined rate. Thus, the combined rate amounts to 41.7 percent of the average wage. The pension is assessable for income tax purposes.

The income test operates so as to permit a full pension for those with limited income and reduce that pension by an amount of 40 cents for each dollar earned over and above the thresholds (refer Table 1). A single pensioner can retain the full pension and currently earn an additional \$128 per fortnight. As the pensioner's income increases the pension reduces by 40 cents for each additional dollar of other income but total income would increase. At the point where income reaches \$1,445 per fortnight then the pension entitlement ceases. The threshold income for the clawback provision amounts to just over 6 percent of the average wage, while the age pension is eliminated when income reaches 69 percent of the average wage. The two threshold levels are higher for couples. The first corresponds to 11 percent of the average wage and the second to 115 percent. (Details of current test parameters are available on the Centrelink website.)

Table 1: Income Test Details (current as at March 2007)

Family situation	For full payment (per fortnight)*	For part payment (per fortnight) up to+#
Universal pension (single rate)	\$527 or 25% of AW	
Universal pension (combined rate)	\$878 or 41.7% of AW	
Average wage (AW)	\$2108	
Single rate	up to \$128 or 6.1% of AW	\$1,445.25 or 68.6% of AW
Combined rate (couples)	up to \$228 or 10.8% of AW	\$2,435.00 or 114.9% of AW

* Income over these amounts reduces the rate of pension payable by 40 cents in the dollar (single), 20 cents in the dollar each (for couples).

Source: FaCSIA

The treatment of the income arising from various investments, including income stream products, has been an important influence on how Australians of pensionable age arrange their financial affairs. By making a particular product more or less favorably treated relative to other products, it is to be expected that the demand for such products will change. For example, at one point it was relatively attractive for pensioners to retain investments in low interest bearing accounts so as to maintain their access to pension benefits. This has been addressed by a combination of factors, including assessing some investments based on a 'deemed' income level rather than the actual level. This also seeks to prevent the perverse behavior of seeking lower returns on assets simply to receive a higher age pension, and encourages pensioners to invest at market-rates of interest.

The asset test applies against asset holdings instead of income receipts. People with substantial assets are expected to rearrange their affairs to provide for themselves in retirement (Centrelink 2007). This test reduces the pension according to separate

schedules for home owners and for other pensioners reflecting the benefit that a person gains from owning rather than renting (Table 2).

Table 2: Asset Test Details (current as at March 2007)

Family situation	For full payment*	For part payment	From September 2007
Homeowners			
Average annual wage	\$54,808	\$54,808	
Single rate	\$161,500 or 2.95 AAW	\$338,500 or 6.18 AAW	\$520,750 or 9.50 AAW
Combined rate (couples)	\$229,000 or 4.18 AAW	\$523,500 or 9.55 AAW	\$825,500 or 15.06 AAW
Non-Homeowners			
Single rate	\$278,500 or 5.08 AAW	\$455,250 or 8.31 AAW	\$641,750 or 11.71 AAW
Combined rate (couples)	\$346,000 or 6.31 AAW	640,500 or 11.69 AAW	\$946,500 or 17.27 AAW

* Prior to 20 September assets over these amounts reduced the rate of pension payable by \$3.00 per fortnight for each \$1000. From 20 September 2007 assets exceeding the thresholds reduce the pension by \$1.50 per fortnight.

Source: FaCSIA

The halving of the clawback provision in the asset test has made it less onerous and will reduce the impact of the accumulated balances under the superannuation guarantee scheme since the upper threshold for the combined rate for home-owners has been raised from 10 times average annual earnings to 15 times. A person on average earnings who contributes for 40 years and experiences a 2 percent annual wage growth would require an average investment return of 8.5 percent to reach the new higher level compared to 6.5 percent before the change in the rules. The new less onerous asset test is also likely to reinforce the aversion to the purchase of life annuities, since the impact of the income test has not been weakened.

Assets are defined for assessable purposes in a way that also influences pensioner behavior. The Social Security Act also exempts the value of certain ‘life interests’, burial plots paid for in advance, and certain “assets test exempt income streams”.

The pensioner’s principal home is an exempt asset no matter what its value. This is largely as a result of the strong attachment to home ownership and the associated financial security it involves in the Australian culture. As a result, however, it is possible to accumulate substantial wealth in a principal residence and avoid any impact on social security entitlements arising from this wealth.

Australia exhibits a high level of home ownership and, as a result, the influence of the treatment of the principal private residence is particularly important in retirement plans and is politically material in considering policy options. In 2001, overall home ownership was 70 percent (Table 3), a relatively high rate by global standards.

Table 3: Home Ownership Rates in Selected Countries

Country	Year	Ownership rate ^a
		per cent
Spain	1998	83
Ireland	2000	78
Greece	1999	74
Belgium	2000	74
New Zealand	1996	71
Australia	2001	70
Italy	1998	70
United Kingdom	1999	69
United States	1999	67
Canada	1999	64
France	1999	55
Denmark	2000	53
Netherlands	2000	51
Germany	1998	43

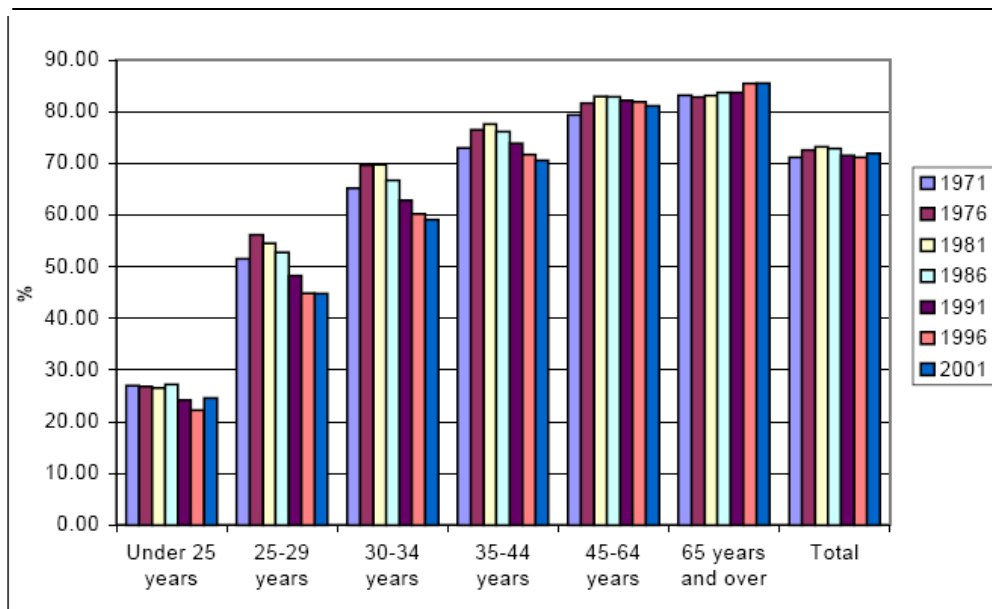
^a Proportion of households who own or are purchasing the house they live in.

Source: ABS Australian Social Trends 2001, Cat. No. 4102.0:

Furthermore, as shown in Figure 1, for those reaching retirement age home ownership levels are above 80 percent. This reflects, in part, the use by retiring Australians of their retirement savings to pay off their outstanding home loans.

Although the home has been viewed as a source of support in retirement, until recently this has mainly been accessible through the sale of the property and a move to a less expensive property (downsizing) thereby releasing some of the equity in the home. However the market for equity release products is developing rapidly (discussed later in section 7.2).

Figure 1: Home Ownership by Age and Census Year



Source: National Affordable Housing Forum Background Paper Number 5, July 2006

The age pension continues to be funded on a pay-as-you-go basis. The current expenditures are of the order of 2.4 percent of GDP however, it is expected that this will rise as the population ages. This represents around 32 percent of the total income support arrangements made by the federal government². Expectations for the pension costs have been made in the short run and the long run allowing for the demographic transition and ageing population. These estimates, shown in Table 4, suggest that the increments in age pension payments are of an order of magnitude that is manageable but material.

Table 4: Projected Age and Service Pensions as a Percentage of GDP

Year	%
2003-04	2.88
2008-09	3.01
2014-15	3.34
2024-25	4.01
2034-35	4.48
2044-45	4.59

Source: Productivity Commission 2005, p 203

The Australian government is required, under its *Charter of Budget Honesty Act 1998*, to prepare an intergenerational report to assess the long-term sustainability of government policies over a 40 year period, including the financial implications of demographic change. Some of the conclusions of the 2003 Report, and a research report from the Productivity Commission³ lie at the heart of the government approach to retirement incomes. These reports conclude that while there will be important fiscal challenges arising from the ageing population because of spending pressures in areas such as health, age pensions and age care, “population ageing is not a crisis”⁴, in part due to it being a gradual phenomenon with scope to take some corrective measures. Also because of its system design, Australia does not have large future liabilities associated with age pensions because government funded age pensions are not earnings-related and have been partly replaced by privately funded superannuation. The government has also created a fund, known as the Future Fund, to accumulate sufficient financial assets to offset its own unfunded superannuation liability by 2020.⁵

The government expects that the age pension will continue to play a central role in providing income to older Australians. However, there will be a fall in the percentage of the aged population which will seek recourse to the full pension as the superannuation system matures and people accumulate other assets.

Some transitional and parametric changes have been made to eligibility to control costs and reflect societal change. Men qualify for the age pension at age 65 provided that they also meet residency, assets and income based tests. Women had, until more recently, a normal age of 60; however, this is gradually being shifted to age 65 using a progressive scale based on year of birth.

² Source: Productivity Commission 2005 page 193. This figure relates to the 2003-04 budget year.

³ Economic Implications of an Ageing Australia

⁴ Ibid p.xxxviii

⁵ As at May 2007, this liability stood at around \$103 billion and it is expected to grow to around \$148 billion by 2020. By November 2007 accumulated assets of the fund were \$61.5 billion.

2.2 Replacement Rates and Pension Eligibility

When it was introduced in 1908, the age pension was designed to ensure that an individual would live in modest comfort: this still remains the aim. However, as early as the mid-1970s, reform proposals began to emerge which sought to shift the emphasis for retirement income policy away from poverty alleviation towards income maintenance through compulsory superannuation. This shift towards greater financial independence has been given further impetus because of the projected fiscal costs of the ageing population which have seen a number of government initiatives to encourage independence through deferral of age pension take-up and higher superannuation contributions.

Replacement rates in Australia are very much at the low end of the OECD average. But the system was never designed as a comprehensive social income system. The OECD estimates that, when combined with other benefits and particular taxation arrangements in place for age pensioners then the gross replacement rate provided by the first pillar in Australia is 40 percent and the net replacement rate is 52 percent for a pensioner whose pre-retirement income was at the average level. As a result of the means test, the replacement rate for a pensioner earning half the average income before retirement was estimated to be 65 percent on a gross basis and 77 percent on a net basis. For a pensioner earning twice the average before retirement, the estimate is 26 percent gross and 37 percent net.⁶

The Australian government has not set an explicit replacement rate target for Australia's retirement income system. However, the former Senate Committee on Superannuation noted that there was a strong consensus among superannuation industry representatives that an adequate retirement income was between 60 and 65 percent of pre-retirement gross income.

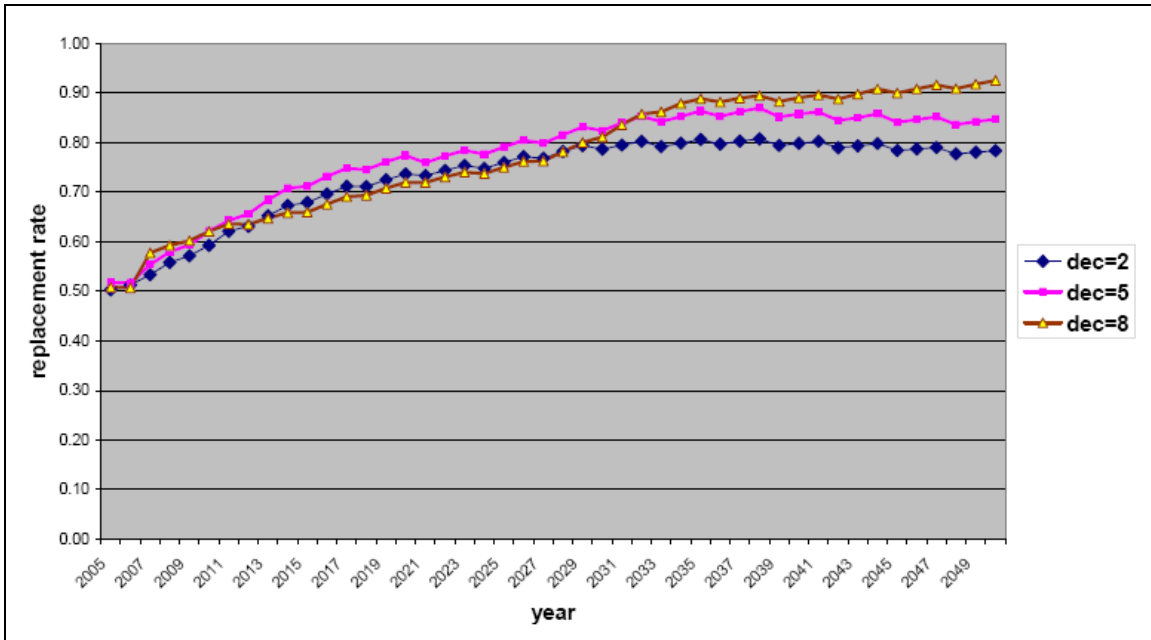
Analysis undertaken by the Treasury's Retirement Income Modeling Unit (RIM) indicates that current policy based on the basic age pension and mandatory and voluntary private savings will deliver substantially higher replacement rates in Australia over the longer term (Figure 2). RIM calculates replacement rates based on a comparison of potential net expenditure before and after retirement.⁷ This includes income from all investments, all private pension payments and the age pension, and drawdowns from capital less any tax payments. As shown in Figure 2 RIM projects that aggregate adequacy rises from around 50 percent at present to around 80 percent and to higher levels for people from higher income deciles. The latter reflects contributions above the SG and additional private savings made by higher income groups.

The effect of the means testing is to limit the eligibility of those of pensionable age to the full pension providing instead either a partial pension or no pension at all. Figure 3 shows that the trends over the past decade have seen the number of retirees who are eligible to receive the age pension rising, although those receiving the full age pension have been falling as a proportion of the total.

⁶ Source: OECD (2005).

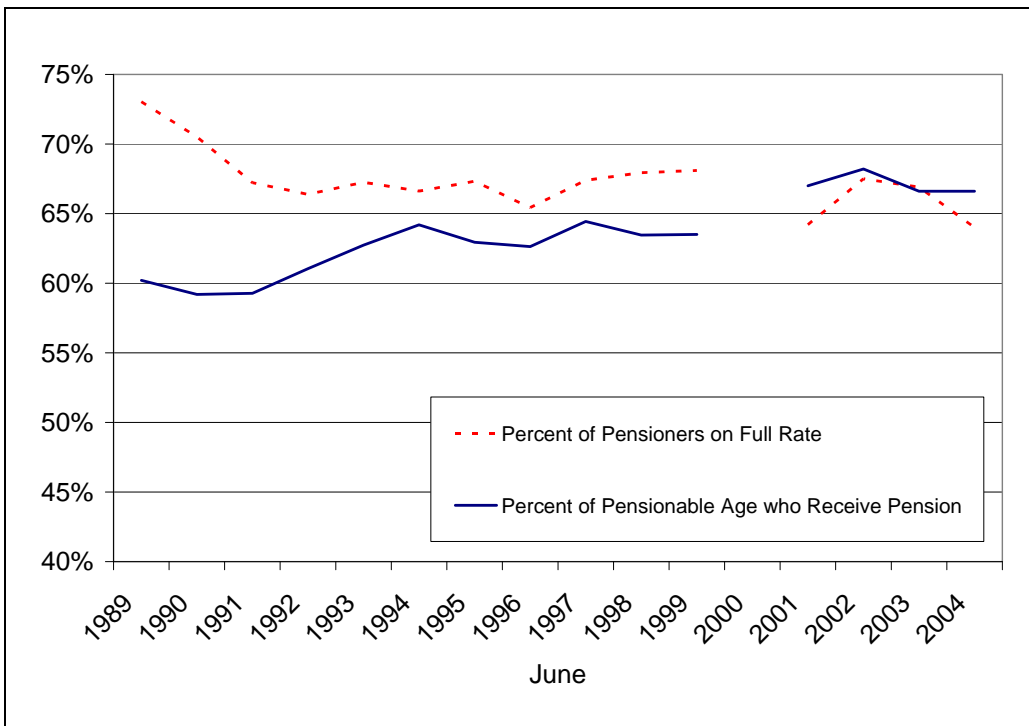
⁷ Rothman, G. 2007.

Figure 2: Potential Aggregate Replacement Ratios for Selected Deciles



Source: Rothman, G, 2007

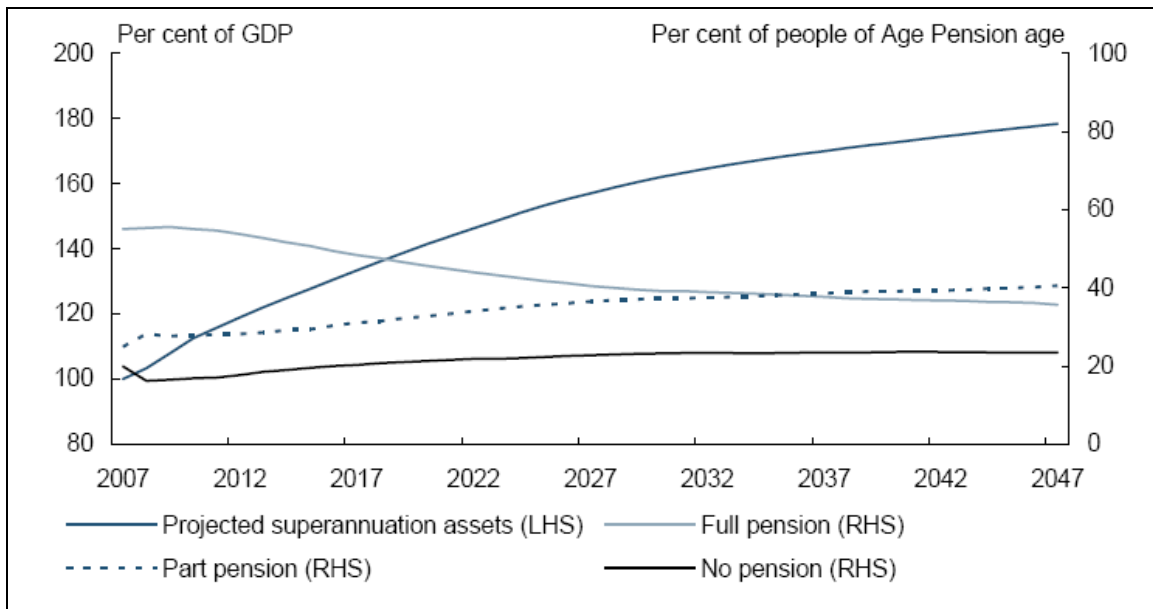
Figure 3: Trends in Proportions - Age Pensioner Eligibility



Source: FaCSIA (various publications) and Staff Analysis

This trend would be worrying if it were to continue into the future due to population ageing and the effect that this would have on the government’s fiscal position. This is where the SG comes to the rescue by providing growing wealth for the ageing population, as the system begins to mature and the level of superannuation assets grows. The level of assets accumulated in superannuation is expected to grow substantially over the next half century. As mentioned previously, the incidence of occupational superannuation was not widespread until the creation of the compulsory system in 1992. Even at that time compulsory contributions were low and did not reach the current level of 9 percent until 2002. However, balances are now rising rapidly. While it is expected that the demographic transition will lead to a broadly similar proportion of the population of the relevant age being eligible for the age pension, the number of people eligible for the full pension gradually declines from current levels of just over 60 percent to just below 40 percent (Figure 4). Conversely the number of people eligible for a part pension will rise.

Figure 4: Superannuation Assets and Age Pension Coverage Projections



Source: Department of the Treasury, 2007. Intergenerational Report 2007, Commonwealth of Australia, Canberra

2.3 Occupational Schemes and the Superannuation Guarantee

Although the history of occupational superannuation schemes in Australia dates back to before federation, it was not until the middle of the 20th century that they became a more common feature of employment arrangements. Larger employers tended to be the main providers of occupational superannuation schemes for their staff. Most often, these schemes provided defined benefits with limited portability when the member changed employers and with relatively poor vesting of employer contribution related benefits in the event of early departure. As such, they strongly favored long term career employees with a single firm. Benefits on withdrawal and on retirement tended to be provided as a lump sum as the taxation basis was favorable. A limited number of employers, most usually life insurance companies and some banks, provided benefits in the form of a pension.

Given the relatively small number of schemes that provided pension benefits, integration with the means tested first pillar was not common. A culture built up (the ‘lump sum mentality’) that encouraged the expectation that a retirement benefit from an occupational scheme taken as a lump sum was to be used for early retirement consumption and/or invested so as to maintain the entitlement to the first pillar age pension. Although all Australians who were employed were able to access schemes operated by life insurance companies, particularly directed at the self employed and employees who were not covered by an employer sponsored scheme, overall coverage was of the order of 30 percent under the second pillar⁸ (Bateman and Piggott, 1997) for most of the 20th century until the steps taken to secure the second pillar were made in the 1980s.

The other significant provider of schemes as part of employment arrangements were the schemes provided to public sector employees at both the federal and the state levels and for various government authorities. These schemes tended to provide defined benefit pensions and were operated on a pay-as-you-go basis.

In the mid 1980s, as part of a national agreement on wage policy, a ‘productivity award superannuation’ component of an otherwise proposed wage increase was allocated to be made as a contribution to a superannuation scheme. This initiative represented the seed of further changes that had a dramatic effect on the superannuation landscape.

In 1992, the federal government created the ‘superannuation guarantee’ (SG) system. Under this system a contribution is paid by employers for all employees to an ‘approved’ superannuation scheme⁹. The rate of contribution was phased in reaching 9 percent in 2002¹⁰. The increase in the contribution rate was considered to be consistent with productivity growth so as to not pressure real wages to fall. Since that time, various policy proposals have been made by several parties to increase this rate or otherwise enhance the level of contribution¹¹. The effect was that, by 1995, coverage had increased to around 95%¹².

The second effect of these arrangements was to vastly increase the level of superannuation assets in Australia, and the general public interest in such schemes. It was strongly oriented by the deferred pay philosophy so needed to be fully vested from the point of the contribution being made and to include both elements of preservation for retirement purposes and portability so as not to penalize more transient work patterns.

A third effect has been to increase the number of schemes operating on a defined contribution basis. Although it is possible to maintain defined benefit structures, the

⁸ Bateman and Piggott. 1997.

⁹ There are limited exceptions provided for the SG contribution obligation and these relate to employees with very low wages, part time employees under 18 years of age, and employees aged 70 and over.

¹⁰ The timetable for the employer contribution rates was 1992 3% for employers with payrolls less than \$A1 million and 5% for those with higher payrolls, 1996-98 6 %, 1998-00 7 %, 2000-02 8 %, 2002-03 and thereafter 9 %.

¹¹ In legal effect, the SG does not ‘oblige’ payment into a scheme. However, if no such payment is made then a higher rate (the same contribution plus a loading to cover an interest and an administration element) is required to be made through the taxation system to the ATO. Employees who have such a payment made with respect to them are entitled to claim the normal SG contribution from the ATO and transfer it to a scheme of their choice. As a result, employers are strongly incentivised to make the payments to schemes rather than through the ATO.

¹² The remaining gaps in coverage are explained by exemptions for some low paid workers, itinerant workers, and the continuing lower coverage in the self employed sector.

compliance work required to demonstrate that the scheme meets the SG obligations requires a defined benefit scheme to obtain an actuarial certificate. Other legislative initiatives have also added to this trend. This consequence is a result of the development of initiatives under the deferred pay concept first then the development of special procedures for defined benefit schemes so that they can comply with the same general requirements. That is, the rules for defined benefit schemes tend to be developed as modifications to the rules for defined contribution schemes. It has been popular to close defined benefit schemes and replace them, for new employees, with defined contribution schemes. It is also possible to offer a transfer from the old scheme to the new scheme although not all employers automatically take this option.

A fourth effect has been to increase the relevance of multi employer schemes and to reduce the number of individual employer sponsored arrangements. Originally, under the 'productivity award', employers with employees covered by such an award found themselves contributing to an industry scheme as well as, if they had one in place, an occupational scheme. Over time, considering administrative efficiency as the main argument, employers have tended to migrate their arrangements toward a lesser number of schemes. This process was substantially hastened by the introduction of comprehensive licensing requirements for pension funds in 2004. The maintenance of a single sponsor occupational scheme has become less relevant as companies have opted to 'outsource' arrangements, or have seen the numbers of members in such schemes reduce to uneconomic levels.

Small schemes with less than 5 members known as self managed superannuation funds (SMSFs) have also become popular. Originally, small enterprises and family businesses established schemes to provide for their SG obligations. It did not take long for these schemes to become an attractive source of financing for the business operations or for other purposes. Regulations were introduced to limit related investments and money belonging to the fund cannot be used for personal or business purposes. To ensure adequate control by fund members, all members must be trustees of the fund unless the fund employs a professional trustee supervised by APRA. High net worth individuals have been encouraged to establish schemes attracted by the greater control that they can exercise over the invested funds and the potential for lower charges, particularly after taking a benefit from another scheme. There are currently over 370,000 SMSFs and the number of funds is growing at more than 3,500 a month.

Other efforts have been made to increase the coverage of superannuation. In 1997, a 'spouse contribution' initiative was launched enabling schemes to offer members the option to establish a separate member account for their spouse and make additional contributions. Most recently, the government has introduced and enhanced a 'co-contribution' where a matching payment is made by the government when members make contributions to their scheme¹³.

¹³ The government's co-contribution was introduced in July, 2003 and matched \$1 for \$1 of member contributions up to a limit of \$1,000. The measure was available in full for incomes up to \$27,500 when it was introduced and subject to a linear phase out up to a maximum level of taxable income at \$40,000. In 2004, the government increased the matching to \$1.5 for every \$1 up to a limit of \$1,500. The benefit thresholds were also adjusted to \$28,000 and \$58,000 respectively, providing a gentler phase out. Eligible members receive this payment made to their member account in the superannuation scheme automatically through the processing of their tax return.

As a result, a range of types of schemes have emerged. Table 5 summarizes the commonly used categorization.

Table 5: Types of Schemes

Common Name	Description
Corporate Schemes	Single employer sponsored schemes (or established for a corporate group) – employer and employee each appoint half the members of the trustee board. Most schemes are DC. Some DB schemes remain but are mostly closed to new members.
Retail	Publicly offered on a group or individual basis by financial institutions with an administration company and trustee company usually a subsidiary of the financial group. They are used for personal superannuation, by the self employed and by employers not wishing to establish their own superannuation scheme. In some cases, a master trust structure is adopted where the trust arrangement allows a single trustee operating under an ‘umbrella’ trust deed to administer and manage the superannuation schemes of a number unrelated employers or individuals. Now mostly offered on a DC basis, but historically some schemes invested in life insurance policies with benefits derived from the terms of the underlying insurance contract.
Industry Schemes	A multi-employer superannuation scheme. Usually covers a specific industry or range of industries and will accept contributions from any employers in those industries. Most commenced in the mid 1980s and were set up on a pure DC basis with supplementary insurance coverage defined with a sum insured in terms of age at death and paid for by a premium deduction based on the insurance policy taken out by the scheme.
Public Sector Schemes	Schemes provided for employees of the government, Federal, state or municipal. A separate scheme is operated for the military and, in the case of the states, often for emergency services personnel. More recently, there is also a separate scheme for universities (collectively) and municipalities. Many DB schemes were closed to new members and moved to partial then full DC based operations.
Small / Excluded / Self Managed Schemes	Small schemes where all the individual members are also on the board of trustees and where there are less than 5 members. Operated fundamentally on a DC basis although it is possible that they could have a hybrid basis (so be DB under the law).
Approved Deposit Fund	A particular type of scheme recognized in the law that is designed to accept benefits from other funds and accumulate them until eventual retirement. Often, these schemes operate as retail schemes but it is possible to establish them in any category.
Small funds	Schemes with fewer than 5 members – in these funds the members and trustees are identical. Members who do not wish to operate the fund can appoint an APRA-regulated corporate trustee. There are over 320,000 small fund; most are regulated by the Australian Taxation office, with APRA having responsibility for 6,700.

3 The Product Menu

At the benefits stage Australians are not limited by any regulation of the products they can choose to meet their retirement income needs. Benefits from private pension accumulation may be paid as a lump sum, pension or annuity. Individuals may also rely on investment income and capital from their second pillar accumulation, any voluntary savings, and also from continuing work of some kind.

Australians have access to a range of products, which they can mix in various combinations to meet their retirement income needs. Some of these products are defined in government legislation and provide for a range of taxation benefits. While income streams are not mandatory the government created a range of incentives to encourage people to take up these products. The overall policy objective of retirement income streams has been to facilitate capital drawdown over the whole of retirement and target concessions to ensure an adequate replacement rate and overall equity. According to Stanhope (2004) the age pension asset test exemption rules are the main incentive rules affecting retiree choice of retirement income products. By investing in assets which receive the exemption, many individuals, particularly those with assets between \$150,000 and \$350,000 (for singles), gain much greater access to the age pension.

The main types of income streams are described below. This part of paper outlines the position prior to the end of June 2007. On 1 July 2007 the government introduced significant changes to the tax treatment of superannuation and a simplification of the rules applying to some of these products. These changes are outlined in Section 4.

3.1 Allocated income streams

Allocated income streams are the most popular method by which superannuation fund members take income streams, representing more than 80 percent of all money invested in income streams. They are account-based schemes which involve an investment account within a relevant fund or financial provider. This means that investment risk is borne solely by the purchaser. The investment account balance increases as investment earnings are added and decreases as regular income payments are made. Most allocated income streams offer a range of investment choices. Regulations require that payments must occur at least annually and are subject to minimum and maximum amounts to ensure that a mixture of income and capital is drawn down over a period of time approximating a person's life expectancy (these regulations are updated 1 July each year). The variance between the minimum and maximums are quite large and a person choosing the maximum could face sharply declining income as they age.

There are two types of allocated income streams—allocated pensions and allocated annuities. An allocated pension is a series of regular payments, comprising capital and earnings, payable directly from money held in a personal account with a superannuation fund including a self-managed superannuation fund. An allocated annuity provides payments comprising capital and earnings under a contract issued by a life insurance company. An allocated income stream can only be created with money that is within a superannuation fund and certain types of lump sum payments made to an employee on termination of employment.

Survey data indicate that just under a quarter of pensioners draw the minimum pension and less than 10 percent draw the maximum pension. Overall it appears that the tendency is for pensioners to take lower pensions reflecting desire to preserve capital. This view about conservatism is supported by data that indicates that the vast majority of pensioners seek little or no increases in the annual pension they are drawing, preferring instead to preserve capital and experience declines in the real value of their pensions.

Allocated income streams provide considerable flexibility. A person typically has access to the funds in their investment account and they are able to withdraw all or part at any time, but with possible tax implications.

The fact that earnings on the underlying assets of allocated products are tax free probably contributes to their popularity.

3.2 Market linked income streams

A market linked income stream is an account-based product offered by a superannuation fund or an annuity provider. They are sometimes referred to as ‘term allocated pensions’ (TAPs) or ‘growth pensions’. They were only introduced in September 2004, and have not proven very popular. There can be two types of these—market linked pensions and market linked annuities. A market linked pension is payable from a superannuation fund, whereas a market linked annuity is an annuity contract issued by a life insurance company. When creating a market linked income stream a person may only use superannuation money’.

A market linked income stream must have income payments paid for a fixed term. The fixed term is determined broadly by reference to a person’s life expectancy at the commencement of the income stream. A person can choose a term anywhere between certain minimum and maximum terms. The minimum term must be equal to a person’s life expectancy in full years. For a male aged 65, the life expectancy is 17.7 years and hence an 18-year term would be relevant. The maximum term is equal to the period from the commencement day of the income stream until the primary beneficiary reaches age 100. Each year, the account balance is divided by a factor applicable to the remaining term.

To allow some flexibility in the payments from a market linked pension a person can select an income stream which is within 10 percent either side of the calculated figure.

Unlike allocated income streams, market linked income streams are considerably less flexible when it comes to accessing the capital investment. Generally, most market linked income streams are ‘non-commutable’ unless they are being converted to purchase another complying income stream or in circumstances of extreme financial hardship. The investment choices available for market linked pensions are virtually the same as are available for allocated income streams. After the death of the account holder a reversionary benefit can continue to be paid to a spouse of dependent or the balance of the account can be paid to a persons’ beneficiary as a lump sum.

3.3 Lifetime income streams

A lifetime income stream is one which is guaranteed to be payable for the whole of the primary beneficiaries life. There are two types of these—lifetime pensions and lifetime annuities. A lifetime pension is provided from a superannuation fund, whereas a lifetime annuity is an annuity contract issued by a life insurance company. As previously discussed, Australian’s are not keen on purchasing annuities, and defined benefit pensions have been in long term decline.

A lifetime pension can only be created with money that is within a superannuation fund and certain types of lump sum payments made to an employee on termination of employment. On the other hand, lifetime annuities can accept any type of savings, superannuation or non-superannuation based, including for example, funds held in bank deposit accounts.

This type of income stream is designed to provide a person with income for life regardless of the age of the person. In some cases it may also be possible to have income

payments made for the lifetime of another person, usually a spouse. This is commonly referred to as a 'reversionary' income stream. Because it is a payment for life, it is not uncommon for the payment to be structured to increase annually with movements in inflation or some other set rate of increase.

It is also possible to consider some form of income protection by selecting what is generally referred to as a 'guarantee period' with the lifetime pension or annuity. Should the main beneficiaries die within the guarantee period, income payments may continue to another beneficiary until the end of the guarantee period. The most common guarantee period selected in the past has been 10 years. Where the income stream is reversionary, it is possible to select a guarantee period which is the longer of the beneficiary's life expectancy or the spouse's life expectancy, but not greater than 20 years.

With most lifetime income streams the beneficiary does not generally have ready access to their money. With some there are cashing rights.

3.4 Life expectancy income streams

The life expectancy income streams are guaranteed (usually by the provider of the income stream) to be payable for a time period broadly equivalent to the life expectancy of the primary beneficiary at the time of purchase. There are two types of life expectancy income streams—life expectancy pensions and life expectancy annuities. A life expectancy pension is provided from a superannuation fund, whereas a life expectancy annuity is an annuity contract issued by a life insurance company. As with other types of pensions, only 'superannuation money' can be used to invest in a life expectancy pension, whereas a life expectancy annuity can be purchased with both superannuation and ordinary savings. When a life expectancy income stream is purchased, a person can choose the term over which it is payable, subject to certain limits. The term however will be fixed from commencement. For example, if a person's average life expectancy is over 17.7 years (age 65 male); the minimum term of the investment must be at least 18 years. The maximum term of the investment must be equal to the period from the commencement day of the income stream until a person reaches age 100. Therefore a fixed term of 35 years is permitted. Payments made also take into account the life expectancy of a spouse. Reversionary benefits can be paid to a spouse or dependent.

3.5 Fixed term income streams

A fixed term income stream is simply one that is payable for a set period of time. This can be for any period of time, from one year to around 25 years. There are two types of fixed term income streams—fixed term pensions and fixed term annuities. A fixed term pension is provided from a superannuation fund, whereas a fixed term annuity is an annuity contract issued by a life insurance company. A fixed term annuity can be purchased either with superannuation or ordinary savings.

A term annuity may allow the purchaser to receive back a percentage of the original capital at the expiry of the contract – known as the residual capital value (RCV). Many of the short term annuities specify an income of interest only and 100 percent of capital. Survey data (Plan for life, 2007) suggests sales with terms greater than 5 years account for over 90 percent of the total.

Fixed term income streams are inflexible when it comes to accessing invested capital on an ongoing basis. While generally most fixed term income streams are commutable (that

is, accessible) to some extent, there may be penalties involved for early cashing of benefits. This means that except in very limited circumstances, it is preferable not to plan to access the capital at any time prior to the end of the term. If the purchaser dies within the fixed period, the payments can continue to a beneficiary or to the persons estate, or a lump sum may be payable.

Table 6 provides a summary of the different types of income stream products and shows how their features vary.

Table 6: Comparison of different types of Income Stream products

Features	Market linked income streams ¹⁴	Allocated Income Streams	Lifetime income streams ¹⁵	Life expectancy income streams ¹⁶
Account based	Yes	Yes	No	No
Annual income payment guaranteed	No	No	Yes	Yes
Investment choice	Yes	Yes	No	No
Fixed term	Yes	No	No	Yes
Access to capital	No	Yes	No	No
Recipient can vary annual income received	No	Yes	No	No
Residual Capital Value allowed	No	n/a	No	No
Income tested	Yes	Yes	Yes	Yes
Death benefits payable	Yes	Yes	Possible ¹⁷	Yes

Source: Department of Families, Community Services, and Indigenous Affairs, “Understanding, Retirement Income Streams”.

Australians are generally advised to give themselves some flexibility to meet unexpected lump sum expenses. In relation to lifetime annuities the Department of Families, Community Services and Indigenous Affairs advises that “because of [the] restriction on accessing your money you should not, as a general rule, invest all of your money in them”. (FaCSIA 2007)

In addition to the range of income stream products Australians also have access to some other specific retirement savings products and to a general range of other investment options.

A retirement savings account (RSA) is an account offered by banks, building societies, credit unions, life insurance companies and prescribed financial institutions (RSA providers). It is used for retirement savings and is similar to a superannuation fund. RSAs are capital guaranteed and providers undertake to ensure that fees and charges are kept at low levels. An RSA account is subject to the same taxation and superannuation rules as a superannuation fund account, for example it must be preserved until a condition of release has been met. However, because it is a low risk account it offers low returns and is considered suitable for small balances, and for people with broken and infrequent

¹⁴ Income stream must meet requirements in s.9BA of *Social Security Act 1991*.

¹⁵ Income stream must meet requirements in s.9BA of *Social Security Act 1991*.

¹⁶ Income stream must meet requirements in s.9BA of *Social Security Act 1991*.

¹⁷ Death benefits are payable only when a guarantees period exists and all beneficiaries die within the guarantee period.

work patterns. The balance of an RSA can be transferred to another RSA or superannuation provider on request.

The Pension Loans Scheme is available to part-rate pensioners and some self-funded retirees who own real estate in Australia. Under this scheme, a person who is of age pension age, or the partner of someone who is, may be able to obtain a loan that will increase their fortnightly pension payment up to the maximum pension rate. Repayments can be made at any time or the debt can be left, including the accrued interest, to be recovered from the person's estate. The loan is secured against the value of any real estate they own. By 2004 fewer than 300 people were participating in the scheme.

4 Taxation and Social Security Rules

The regulations surrounding the income tax and age pension means testing treatment of retirement income products are important to understanding the benefits and motivations of consumers, providers and policymakers.

Superannuation is a tax-effective investment vehicle¹, but is known for its frequent legislative change, which in turn has led to increased complexity, mainly due to efforts to 'grandfather' existing entitlements from each change. The complexity covers most areas of the superannuation system including prudential regulation, taxation and disclosure regulation.

Prior to 1 July 2007

Due to various policy changes the taxation treatment of retirement incomes became very complicated. The government introduced a major reform of the superannuation system effective from 1 July 2007. It is nevertheless instructive to examine some of the elements of the taxation system prior to these changes to understand many of the motivations behind the choice by individuals of particular retirement income products.

Despite the complexity of the system, superannuation saving receives numerous taxation concessions which the government valued at \$15.0 billion in 2005-2006. The majority of these taxation concessions arise from the concessional taxation of employer contributions and the concessional taxation of superannuation fund earnings. The amount of taxation benefit that an individual can receive at a concessional rate of taxation was subject to a limit known as the Reasonable Benefits Limit (RBL). The limits in place in June 2007 are shown in Table 7. The RBL is the maximum amount of retirement and termination of employment benefits that a person can receive over their lifetime at a reduced tax rate. Benefits which count towards the RBL include eligible termination payment (like lump sums or commutations), superannuation pensions, and purchased pensions and annuities.

These limits are set for both lump sum payment and for income stream payments (Table 7). Amounts paid which exceed the lump sum limit are taxed at the highest personal income tax rate. A person above the pension RBL receiving an income stream will lose any concessional tax treatment for that income stream.

Table 7: Reasonable Benefit Limits

Income Year	Lump Sum (a)(c)	Pension (b)(c)
2005-06	\$648,946	\$1,297,886
2004-05	\$619,223	\$1,238,440
2003-04	\$588,056	\$1,176,106
2002-03	\$562,195	\$1,124,384
2001-02	\$529,373	\$1,058,742
2000-01	\$506,092	\$1,012,181

Source: Australian Taxation Office Fact Sheet: Reasonable Benefits Limits

(a) The lump sum RBL usually applies when benefits are taken as a lump sums (ETPs), or as pensions and annuities that do not meet the pension and annuity standards.

(b) To meet the pension RBL a pension or annuity must meet be payable for life or life expectancy, be paid at least annually, and must have no residual capital value. Allocated pensions and allocated annuities generally do not meet the pension and annuity standards as they have flexible payment amounts and terms.

(c) For people who take a mixture of lump sum and pension at least half of all benefits must be taken as benefits subject to the pensions and annuities standard to be eligible for the pension RBL.

Pension and annuity payments received by a taxpayer are included in their assessable income and are subject to taxation at the general marginal taxation rates. However, annuities or pensions paid from a taxed fund to a taxpayer aged 55 or over generally attracted a taxation rebate of 15 percent. This favorable taxation treatment was expected to have a major impact in encouraging use of these products but this expectation was never fulfilled. Because the balances within the superannuation system are still building up and those reaching retirement at the present time have tended to take lump sums, the cost of concessions has been noted in government budget statements as being “indeterminate, but likely to be insignificant”¹⁸.

As mentioned previously a number of common retirement products were also treated favorably when calculating a person’s entitlement to the public aged pension. Any funds used to acquire a complying pension or annuity or growth pension income streams are partly exempt from the assets test as indicated in Table 8. Similarly, for the income test special rules apply for most income streams because the income stream payments will generally include a return of capital. The treatment of income streams under the income and asset tests will differ depending on the characteristics of the income stream, the duration over which the income and capital is paid, and the age of the person when commencing the income stream.

Table 8: Income and Asset Test Comparison

Features	Market linked income streams	Allocated income streams	Lifetime income streams	Life expectancy income streams
Assets test concession				
• pre-20 September 2004	n/a	0%	100%	100%
• from 20 September 2004	50%	0%	50%	50%
Income tested	Yes	Yes	Yes	Yes

Source: Department of Families, Community Services, and Indigenous Affairs, “Understanding Retirement Income Streams”.

¹⁸ Australian Government Tax Expenditures Statement 2005, Table B1: Concessional taxation of funded superannuation.

Post July 1 2007

Major changes to the treatment of superannuation for people over 60 who have superannuation benefits taken from a taxed super fund became effective on 1 July 2007. The changes seek to provide greater incentives to invest in superannuation by simplifying the arrangements for the taxation of benefits and reducing the amount of tax levied from benefits paid. The main changes are as follows:

- All lump sum benefits paid from a taxed source (such as a superannuation fund) will be tax free;
- All pensions paid from a taxed source will be tax free;
- Reasonable benefit limits will be abolished; and
- A person who receives a lump sum superannuation payment or a pension payment from a taxed source will not need to file a taxation return.

Taxed funds cover around 90 percent of Australian employees and are typically private sector accumulation funds. Presently, the taxation arrangements for receiving lump sum superannuation benefits are more complex. Superannuation lump sum benefits paid from a taxed source comprise up to eight different components that are each subject to different taxation arrangements.

In addition, the complicated system of age-based limitations on contributions which receive concessional taxation treatment will be removed and replaced with a fully deductible limit of \$50,000 irrespective of age. The amount that can be contributed at concessional rates is limited to control the use of concessions by high net worth individuals. Contributions for the self-employed will be fully deductible and the opportunity to participate in the co-contribution will now be available to the self-employed. The present tax on contributions and earnings of 15 percent will remain, as will the preservation age.

Every 'complying' income stream product bought on or after the implementation date (20 September 2007 for this proposal) will be fully asset tested. Currently, if an income stream product meets certain requirements, it was either 50 or 100 percent exempt from the assets test, depending on the date it was bought. This means that the value of some people's assets will increase as calculated under the assets test.

However, to compensate the growing number of retirees for the loss of these concessions the rate at which a person's age pension entitlements are reduced under the assets test is to be lowered, from \$3 per fortnight for every \$1000 of assets above the lower pension assets test threshold to \$1.50 for every \$1000 in assets above these thresholds. The reduction in the assets-test taper rate is designed to increase incentives to save and boost the retirement incomes of pensioners whose rate of payment is determined by the assets-test. It will also increase the number of people who are eligible for a part pension and the associated concessions.

There will be a simplification of the minimum drawdown rates which will set a standard for the payment of a minimum amount annually (no maximum limits will apply), no provision of residual amounts and transfers only to a pensioner's dependents or estate on death. The proposed changes to the required annual minimum drawdown rates for

private superannuation pensions will lead to the capital backing such pensions being depleted at a faster rate than would be the case under current arrangements. This may lead to retiree's private superannuation pensions ceasing to be paid before the person dies.

The removal of tax on funded lump sums paid to those over age 60, and changes to the treatment of income streams for social security purposes reduces the bias in the system for a retiree to receive the benefits as an income stream and erode some of the benefits currently given to annuities and complying pensions. This could lead to an increase in the number of benefits taken as a lump sum and an increased risk that retirees would waste the lump sum amount. However earnings on assets supporting these pensions remain tax exempt providing a modest incentive for people to draw income streams on retirement.

5 Oversight – Regulation and Supervision

5.1 Institutional Structures

The life insurance sector oversight was established formally under a law first passed in 1945. Non life supervision was extended in 1973. Superannuation fund regulation was, as a result of the constitutional arrangements, largely dealt with through taxation laws until the establishment of the Insurance and Superannuation Commission in 1987 bringing life, non life and superannuation oversight together.

The current institutional structures established to oversee the financial sector, including the pension fund and life insurance sectors, emerged following a wide ranging inquiry initiated by the government in 1996 (the 'Financial System Inquiry', known also as the 'Wallis Inquiry'). The Australian Prudential Regulation Authority (APRA) is responsible for the prudential regulation of institutions involved in deposit-taking, life and general insurance and superannuation. The Australian Securities and Investments Commission (ASIC) is responsible for market integrity, consumer protection and corporate financial behavior.

5.2 APRA

APRA was established in 1998 under the APRA Act. It is a statutory authority under the legislation overseen by a management group of three members appointed by the Commonwealth Treasurer; a chairman, deputy chairman and one other member.

APRA sees its role as establishing and enforcing prudential standards and practices designed to ensure that, under all reasonable circumstances, financial promises made by institutions which it supervises are met within a stable, efficient and competitive financial system. APRA adopts a similar supervisory approach to both life insurance and superannuation. The main differences arise only in relation to capital adequacy and funding requirements or due to the different legislative bases under which the industries are regulated. The Australian Constitution gives the federal government powers to regulate insurance but does not give it specific powers to regulate superannuation which is regulated subject to the Commonwealth's taxation and age pension powers.

APRA has adopted a risk based supervisory approach for both insurance and superannuation. The two supervisory tools (PAIRS and SOARS) are designed to ensure that APRA supervisors assess risks rigorously and consistently and that any supervisory interventions are targeted and timely. The PAIRS model seeks to calculate an 'overall risk of failure' for supervised entities. This is an assessment of the likelihood that the

institution will fail to honor its financial promises to beneficiaries (depositors, policyholders and superannuation fund members). SOARS provides a framework of supervisory stances which can be adopted depending on the level of risk in each institution.

There are four supervisory stances involving a step-up in the intensity of APRA's involvement. 'Normal' means that no special action is taken beyond regular supervision activities. Institutions in 'Oversight' have some aspect of their risk position or operations — such as minor but persistent weaknesses in the control framework or insufficient capital — that requires more extensive examination by APRA. 'Mandated Improvement' institutions are operating outside APRA's acceptable bounds for prudent risk management. These institutions must have acceptable plans to correct the deficiencies, and they are likely to be subject to more intense supervisory attention. Institutions in 'Restructure' are no longer viable in their current form and need some combination of new management, new ownership or new capital, or a new business arrangement.

The main differences between insurance and superannuation supervision were that until 1 July 2004, only the trustees of for-profit retail funds open to members of the public rather than to employees of a particular employer were required to meet entry threshold tests of capital and capacity and go through a licensing process. However, in July 2004 a new licensing system commenced, for all trustees of prudentially regulated funds. All trustees must now be licensed by APRA, and all superannuation funds with a licensed trustee must be registered. The universal licensing regime brings superannuation funds into line with all other regulated financial institutions and permits APRA to identify, and to bar, problematic trustees before they have accepted any investments.

5.3 Capital, Funding, Solvency

5.3.1 Pension Funds

The core concept of the funding regulation in the SIS law is divided between accumulation schemes (DC) and defined benefit (DB) schemes. The definition separating these two classes of scheme relies on defining the defined benefit scheme and then considering all other types of scheme as DC. The effect of the law is to restrict the more straightforward rules applying to DC schemes to those schemes that do not carry material levels of risk that would be normally associated with a DB scheme. Hybrid schemes, which offer both DC and DB are, for funding regulation purposes, classified as DB schemes. A defined benefit is interpreted to include schemes that provide a defined conversion factor for a pension benefit or some other form of defined benefit. DC schemes are permitted to provide defined benefits for death or invalidity during the accumulation phase without risking their DC status. It is also possible for a DC scheme to be capital guaranteed (i.e., guaranteed not to credit members with a negative earning rate). Finally, a DC scheme can provide 'member protection' meaning that it may guarantee that the earnings will not be less than the expenses charged (i.e. the accumulated value of the member account will not be eroded due to the income being less than the expense charges otherwise due) and this may be provided for a subset of the members if desired.

Accumulation (DC) Schemes

For DC scheme the rules place the obligation on the trustees to make the assessment of the solvency of the scheme. The basis of the test is that the scheme should be ‘technically solvent’¹⁹. A reference to a DC scheme being solvent is defined as the scheme having a ‘net realizable value of the assets’ equal to or greater than ‘the minimum guaranteed benefits of members’. The ‘net realizable value of the assets’ is defined as the market value less the estimated cost of disposal (illustrated in Figure 5). The ‘minimum guaranteed benefits of members’ is made up of the accumulated value (with interest and less expense charges) of member and SG and award employer contributions, both required to be fully and immediately vested in the member on payment, and to the extent that they become vested, any other contributions made by employers or transfers into the scheme. These benefits also include the vested benefits arising from transfers into the scheme²⁰.

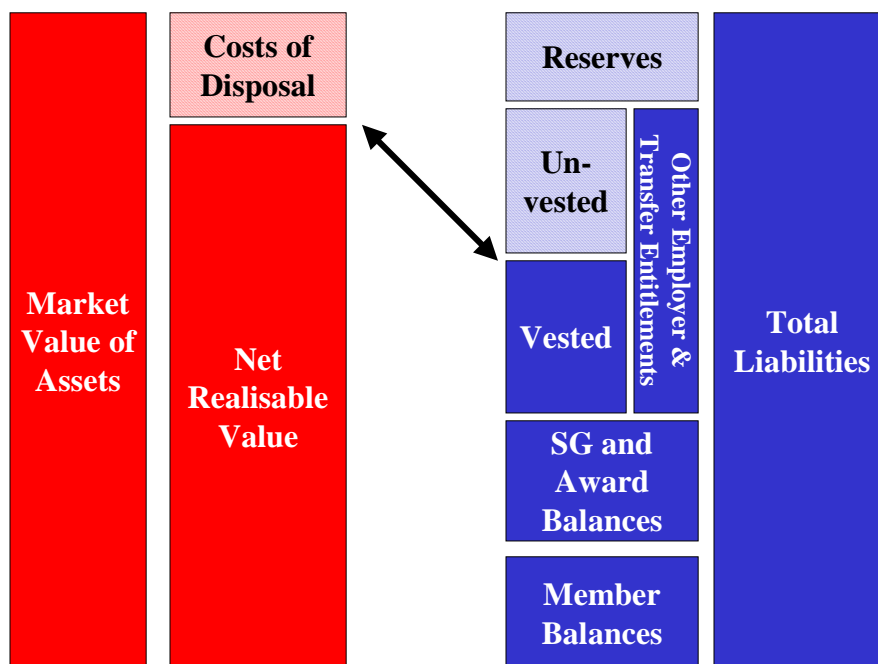
Reserves in a DC scheme may arise from specific contributions from the sponsor for the purpose, or from investment returns in excess of that credited to the various accumulating balances, or from the difference between the charges made on member accounts and the actual cost of the services (for example, rebates received on insurance arrangements) or from the unvested benefits of members who withdraw early or from other sources. These reserves may be considered to support a smoothing of crediting rates over time, an element of mismatch in the investment strategy, the provision of a guarantee on account balances when assets are not invested fully in assets of a capital guaranteed nature, or to pay for the cost of member protection, amongst other purposes. They may even be used to facilitate the retention of some of the death and disability risk rather than to insure it in full. There is a prohibition on deferring costs so it is not possible to reduce expense charges in the current period in the expectation that they will be recovered at a later date (i.e. smoothing of expenses is not permitted)²¹.

¹⁹ Division 9.6 of the SIS Regulations provides definitions.

²⁰ The concept of vested benefits can be considered to be the benefit that a member would receive if they voluntarily withdrew from the scheme.

²¹ SIS Regulation 5.18

Figure 5: Balance Sheet Comparison for Defined Contribution Schemes



All funds are expected to have policies in areas such as a crediting rate policy or an insurance risk policy or an investment policy such that the level of risk actually retained is manageable. Developing these policies, in the case some risk is retained, is expected to include sophisticated risk analysis and, as most schemes have only small reserves, it is generally the case that trustees seek to avoid rather than retain and manage risks. Aside from the fiduciary liability of the trustees, retention and management of risk requires a far more extensive and detailed policy to be developed than the policy that simply does not retain the risk at all.

In the event that a scheme is determined to be solvent at the beginning of the accounting and reporting year, then the trustees may increase the benefits (usually through the process of determining the addition of investment earnings) but are not permitted to increase the amounts to such an extent that the scheme would become insolvent at the end of the year. In other words, the trustees may not increase benefits by more than the scheme can afford. This obliges trustees to consider the actual solvency position before adding to benefits.

If the scheme is technically insolvent, it is still possible to add to the benefits in certain circumstances. First of all, a scheme must obtain the report of an actuary and that report should propose an arrangement where the scheme would be expected to become solvent again within not more than five years. If this is not possible then the scheme must be wound up. Second, any addition must only be made after the actuary has approved it and it is in compliance with the arrangement to restore the scheme solvency. During a period of insolvency, any payment from the scheme is also banned except with the approval of the actuary. Such an arrangement also has to have the approval of the supervisory authority.

Defined Benefit Schemes

For defined benefit schemes, the key concept is that the financial position is “unsatisfactory” as outlined in the legislation and related regulations. These rules rely on and place obligations on the actuary or auditor to report to the supervisor and the scheme trustees if they form “the opinion that the financial position of the entity may be, or may be about to become, unsatisfactory”²². From a legislative perspective the solvency of a DB scheme is measured with reference to the Minimum Benefit Index (MBI) and is determined in the normal case as follows:

$$MBI = \frac{NRV - BEF}{FMRB}$$

where NRV is the net realizable value of the assets, BEF is the value of the benefit entitlements of former members²³ and FMRB is the ‘funded minimum requisite benefits’ arising from an employers SG obligation (illustrated in Figure 6). This calculation is made after setting aside the benefits of former members of the fund, including pension beneficiaries.

All defined benefit funds must have an actuarial investigation at least every three years. Such an investigation values the assets and liabilities of the fund and determines whether they are adequate to fund accrued benefits of members. Actuarial projections for long-term investment returns and wage growth are key assumptions in this process. The actuary also recommends the rate at which employer contributions should be made for the next three years. A DB Scheme must also have a ‘funding and solvency certificate’ from the scheme actuary. It specifies a minimum level of contribution and the frequency of their payment that should be made by the employer sponsor that is ‘reasonably expected by the actuary to be required to secure the solvency’ of the minimum requisite benefits.

If the scheme has a MBI less than 1 it is considered to be technically insolvent under the law. This triggers the requirement for a program to resolve the situation or, failing that, for the fund to be wound up. Schemes in this state must also have a new funding and solvency certificate prepared and then renewed not less frequently than annually during the resolution stage. These special funding and solvency certificates specify contributions required with the aim to restore solvency over a period not exceeding five years so, in a normal course, are designed with the assumption of the continuing availability of the employer sponsor to meet these contributions.

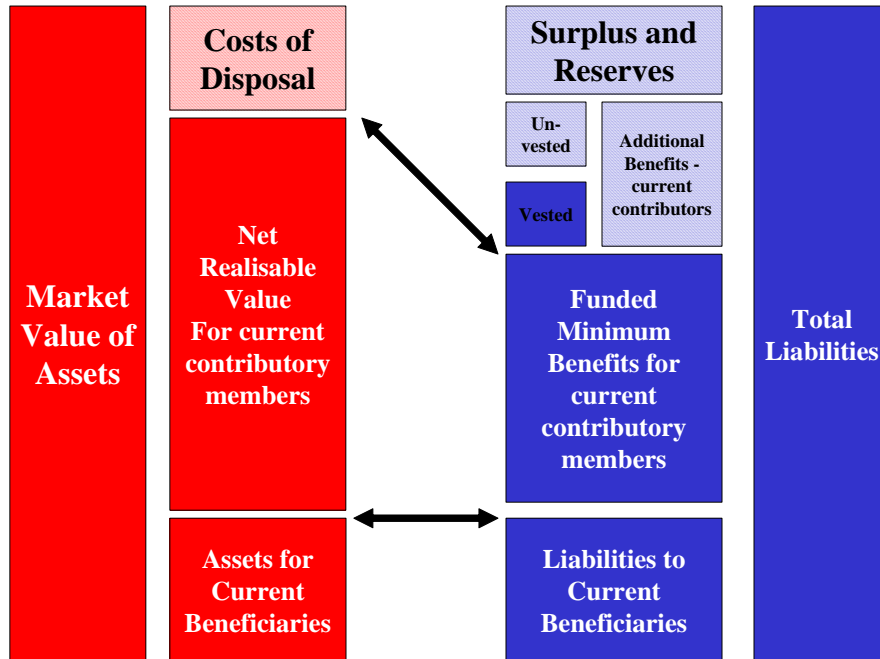
The funding and solvency certificate also should consider adverse situations where it may cease to become valid. Such situations may be many and varied and depend on the particular financial circumstances of the scheme as well as the level of benefits provided in different circumstances. For example, where a scheme provides for one benefit on normal resignation but for a higher benefit on early retirement, it would normally be expected that the actuary would allow for the demographic progress of the membership over the next five years and anticipate any increase in members taking early retirement as

²² SIS Act Section 130 (1) (a)

²³ In the case of a scheme providing pensions, former members includes current pensioners.

part of the normal calculation of the minimum contribution rate²⁴. Another example would be the case where normal resignation benefits are increased (say by not imposing a vesting effect on otherwise unvested contributions) in the event of redundancy. In the event that a large and unexpected redundancy program was implemented in the future then this may lead to a need to revise the minimum contribution rate. In this second case, the actuary may specify this case as a ‘notifiable event’ where the trustees are obliged to notify the actuary and the certificate may cease to have effect and a new certificate will be required.

Figure 6: Balance Sheet Comparison for Defined Benefit Schemes



In the early 1990s the presumption was that the market for superannuation pensions would be restricted to relatively secure superannuation funds operated by governments, those sponsored by large employers, or those arranged by life insurance companies. However, government policies to encourage more superannuation funds to offer long term retirement income streams in the late 1990s raised concerns that some funds might not have the capacity to ensure payment over the long term of such pensions. In early 1999 APRA issued rules giving it the ability to seek an annual actuarial investigation of superannuation funds paying pensions with respect to the probability that the pensions will continue to be paid under the governing rules of the fund. This built on the existing requirement that DB funds were required to prepare the triennial actuarial investigation. The 1999 requirements highlighted the need for a fund to be in a satisfactory financial position as demonstrated by strong actuarial ratios such as the vested benefits index (VBI) and the accrued benefits index (ABI) which go beyond the MBI requirements²⁵.

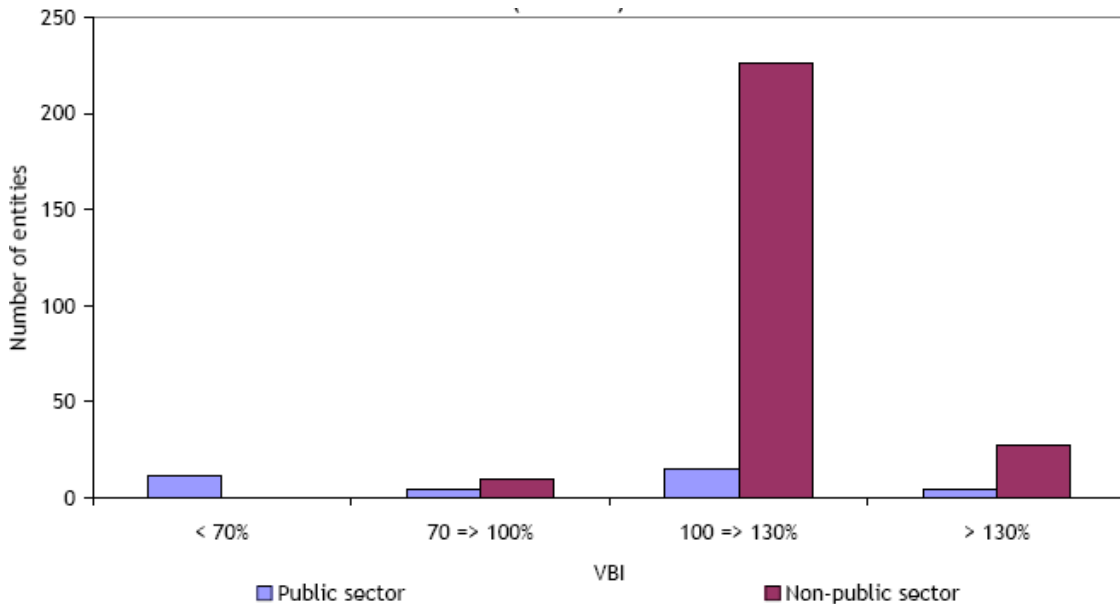
²⁴ For example, in such a case, the actuary may recommend higher contributions in the initial years and lower contributions in the later years.

²⁵ However, many DB funds offer benefits that call for significantly higher contributions than the statutory minimum.

The MBI captures only those benefits under the SG. The VBI represents the total amount that a fund would be required to pay if all members were to voluntarily leave the fund on the valuation dates, together with the value of all pensions. The ABI provides an indication of progress towards funding member’s accrued retirement and other benefits. These benefits represent the present value of expected future benefits arising in respect of membership of the fund up to the valuation date. The VBI indicates whether the fund is in an unsatisfactory financial position as defined in the regulations but there is also an expectation by APRA that the ABI should be greater than 100 percent. The actuarial standards also make it clear that actuaries should set funding rates which keep a fund’s VBI above 1.

These measures of fund solvency have not, until recently, been made public by APRA. However, in response to concerns about the ability of defined benefit funds to meet their obligation following the stock market correction in 2002 APRA undertook a “health check” of all defined benefit funds to assess their solvency. Subsequently, in March 2007 APRA, for the first time, reported information about the VBI for defined benefit and hybrid funds.

Figure 7: Vested Benefit Index (VBI) – June 2006



Source: APRA Annual Superannuation Bulletin June 2006

As demonstrated in Figure 7, over 91 percent of defined benefit and hybrid funds reported a VBI of at least 100 percent at June 2006. The majority of funds that reported a VBI of less than 100 percent were unfunded public sector funds. Just over 96 percent of non-public sector funds reported a VBI of at least 100 percent.

5.3.2 Life Insurance Companies

Australia developed a well respected system of financial reporting and capital obligations for life insurance companies when it completely overhauled the legislation and regulation of life insurance companies in the early 1990s. The regulatory regime is governed

primarily by the Life Insurance Act 1995 and by prudential standards issued by APRA²⁶. This legislation establishes a two tier regulatory regime for life companies: the first tier is Solvency and the second Tier is Capital Adequacy. Profits are reported based on Policy Liabilities which are the sum of “best estimate” liabilities and future profit margins.

The Overall Approach in Summary

Three separate but related valuations are carried out. The methodology is similar but the assumptions are different in each case and there are some additional provisions applied.

1. **The Best Estimate Valuation:** This valuation, using assumptions that are neither deliberately conservative nor optimistic, determines the fundamental provision for the contracts. At the point that the contract is issued, the best estimate valuation will be different to the premiums charged. This difference represents the profit (or loss) that will result from the contract if these assumptions are borne out in practice. For the contract, as the valuation is done on a contract by contract basis, this margin is then treated as follows:

If it is positive, then the profit margin is expressed as a margin on the service provided (termed the ‘profit carrier’). For example, for a life annuity the margin may be a percentage of the annuity payments themselves. A provision is then established as the present value of the ‘future profit margins’. In aggregate, the best estimate liability and the present value of future profit margins will then be equal to the premium at the point the contract is issued.

If the margin is negative, then the profit margin is set to zero.

2. **The Solvency Liability:** The solvency standard is based largely on a run-off assessment of the company.
3. **The Capital Adequacy Liability:** The capital adequacy standard considers a going concern assessment including a need to reflect on the future capacity of the company to meet business plan objectives for new business and continue to meet the solvency standard.

The approach is not explicitly a risk-based approach in the sense that set risk factors are used in calculating the value of assets, liabilities and sums insured. However, it does seek to take into account risk factors and the likely volatility of assets and liabilities through the use of conservative prudential buffers. These buffers attempt to put a value on the impact of economic shocks such as a significant fall in equity markets, sudden changes in interest rates or other adverse events, and to ensure that adequate reserves are held in order to mitigate the impact of these events.

Most life insurers hold assets in excess of the capital adequacy requirements and many have a policy of monitoring these excess or “free assets” against what is known as a target surplus. The target surplus has been described by the Institute of Actuaries as “an amount of buffer capital, additional to regulatory requirements, that a life insurance company chooses to hold, given its risk tolerance levels, to allow for adverse performance²⁷. Although there are no regulatory requirements in relation to the target

²⁶ Prior to January 2008 responsibility for setting actuarial standards rested with the Life Insurance Actuarial Standards Board.

²⁷ Australian Institute of Actuaries, Life Financial Reporting Tax and Legislation Sub Committee Discussion Note: “Target Surplus”, April 2006.

surplus, and APRA has observed that the methodologies and rationale behind the development of target surplus by life insurers varies widely. Nevertheless, APRA has signaled its increasing focus on the target surplus policies and practices of insurance companies. APRA is interested in seeing that the life insurer (and its Board) has developed a target surplus philosophy, that it have considered the desired level of probability of failure, and that are steps in place to deal with the situation when the target surplus level is under pressure. APRA expects the Appointed Actuary to comment on whether a target surplus philosophy has been developed, how the present capital position measures up against the target, and what action steps, if any, are planned.

APRA has noted that “the level of free assets that an insurer holds above its regulatory requirements is a matter for the insurer itself. However, the way an insurer manages and develops its target surplus, and the level of this surplus, bears on APRA’s own risk rating of the insurer and, hence, on the level of resources which APRA devotes to its supervision”.²⁸ This focus on the target surplus also moves APRA towards the Solvency II capital model being developed in Europe. This model draws on the Basel II approach to banking and has three components – solvency capital, minimum capital and supervisory review.

The role of statutory funds

The Australian law requires that life insurance companies operate a series of ‘statutory funds’ and that policies issued are attributed to a fund. Although the legal structure is that the fund is part of the company accounts and not a separate legal entity, there are some constraints and protections provided that separates the funds from other assets and liabilities of the insurer.

Companies may, and often do, establish separate funds for particular business lines. It has been popular to establish a separate statutory fund for annuity business. Although this practice has considerable administrative advantages, and facilitates the management of asset liability risks, one additional reason could be the favorable taxation result that would emerge as the investment earnings on free capital in the annuity statutory fund would be subject to a lower tax rate.

²⁸ APRA, “APRA Insight, Quarter 2, 2004

Figure 8: High Level Outline of Statutory Fund Operation

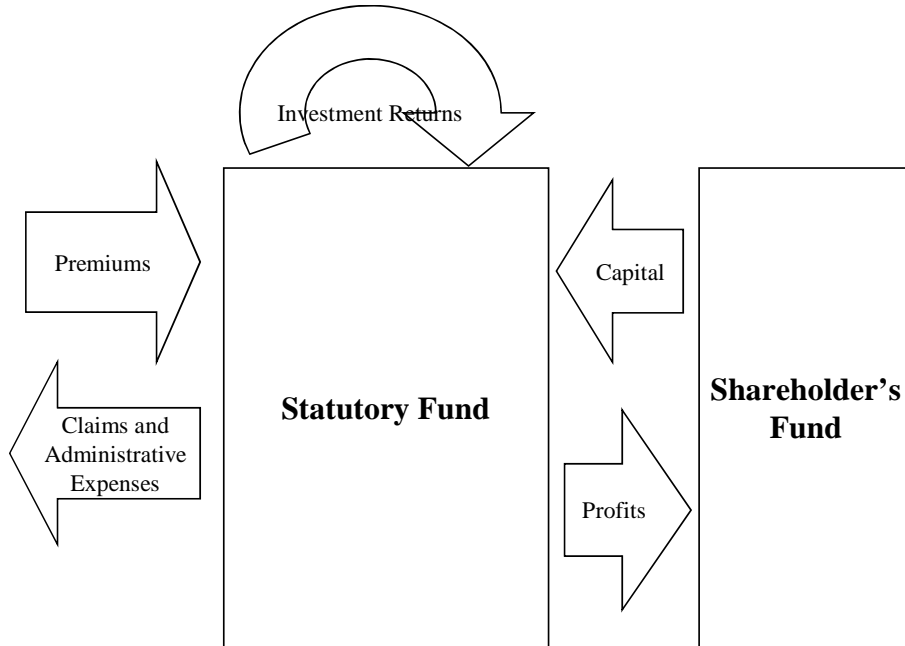
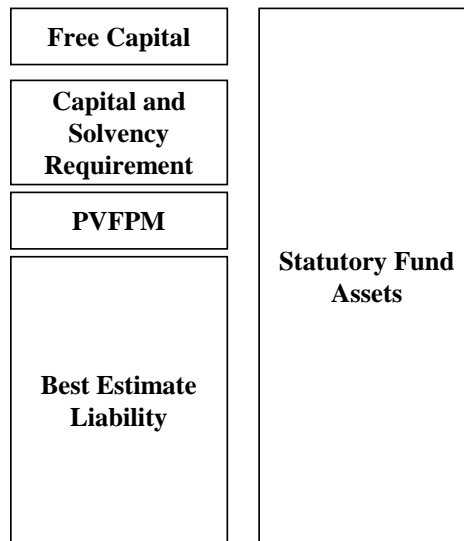


Figure 9: Asset and Liability Structure for Statutory Funds



The first step – Best Estimate Valuations and Profit Margins

The determination of the liabilities for life insurance companies is governed by a Prudential Standard issued by APRA²⁹. This standard forms the basis for all actuarial valuations of policies issued by life insurance companies and the public reporting of information that is ‘realistic’ as well as reflecting a ‘proper and timely release of profit’ and the disclosure of information that is ‘transparent and comparable’.

The standard does not prescribe a single method of valuation of policy liabilities, rather setting out detailed principles. Normally, but not in every case, a prospective approach is taken using discounted cash flow techniques and this would be the case with respect to annuity business.

The basic policy liability reflects both the value of the benefit payments and the value of expected expenses. The actuary is obliged to reflect assumptions about future investment returns, inflation, taxation, expenses, mortality and morbidity, policy discontinuance, and reinsurance. Where the distribution of likely outcomes is reasonably expected to be symmetric then assumptions of a more deterministic nature reflecting the mean are to be adopted. If, however, significant optionality or other circumstances exist then the actuary must consider these in determining the approach taken. Also, if adversity is likely to be correlated, then this has to be given consideration.

With respect to investment earnings, the standard directs the actuary to the actual assets backing the liabilities. As a result, where the asset portfolio has unique features, it is open to the actuary to reflect this in the discount rate assumption. This is in contrast to the alternative approach where the actuary would base the discount rate on risk free assets even where the investment policy does not and is unlikely to lead to such assets being held in practice. Consequently, the discount rate should reflect credit risk and any prepayment risk in the case of fixed interest assets rather than a separate allowance being made for these risks. Taxation of insurers is also reflected in the assumptions of the base liability rather than elsewhere. For annuities, the taxation basis for providers implies that they largely exempt investment income from tax and assume a gross or tax rate.

Allowance for expenses has to consider the expected servicing cost both in terms of administration and the management of investments. As such, the liability established should be sufficient to cover both the benefits themselves and the cost of providing them. Special attention is given to outsourced arrangements. In such cases, where the potential administrative cost is higher through direct management and the contract is not at ‘arms length’ then the higher cost should be reflected.

The standard has the effect that profit emerges over the life of the contract as the services are provided. Each year, the planned profit margin will be translated into actual profit in line with the service delivered. In addition, as the assumptions are estimates, there will be some variation (positive and negative) from these assumptions and this is called the ‘experience profit or loss’. Companies report both figures. The emerging planned profit may be considered to reflect the underlying long term business performance from the contracts and the experience profit or loss as variation around this mean. Normally,

²⁹ Prior to 1 January 2008 Standards were set by the Life Insurance Actuarial Standards Board (LIASB) which was vested with responsibility for this task under the Life Insurance Act. From 1 January 2008 APRA has responsibility for issuing all standards; it has reissued the standards, and the LIASB has ceased to exist.

experience profits and losses are small relative to planned profit emergence so profit reporting results should be relatively smooth. However, because assets are valued at market, then there is an element of variability from investment market volatility and this is the main cause of experience profits or losses (see below regarding updating profit margins).

A key principle is that profits are earned in a manner that is neither deferred nor prematurely recognized. The choice of the profit carrier is critical to this outcome. Profits are to be earned on the later of the provision of the service and the receipt of the income relating to the service. In the case of annuities, this would always be the provision of the service given that all premiums are received at inception of the contract.

As noted above, although profits are recognized over the life of the contract, losses tend to be recognized immediately. The effect of this obligation is to strongly discourage loss making pricing even in the short term. Although pricing is not regulated directly, companies are obliged to obtain actuarial advice on pricing and the supervisor can determine, from the reports on experience profits and losses and the actuarial financial condition report, whether prices are considered sustainable.

As experience emerges, the actuary determines if the change compared to the assumptions is transitory or expected to be a permanent feature in future. Where it is transitory, the effect of the favorable or unfavorable experience will be reflected in the current year profit (particularly the experience profit). Where the change is permanent, the effect is reflected in a change in the profit margin. When adverse, the profit margin is reduced and the present value of future profit margins is reduced correspondingly. The result, in such a case, is that the effect of the change emerges over the life of the contract as the now lower profit margin emerges. When sufficiently adverse to lead to the profit margin becoming negative then, as the PVPM cannot be negative (treated as an asset) the losses are capitalized and reflected immediately. A third case, when previous considerations have led to negative profit margins but this adversity is now considered to be less severe, is treated as a special case. The profit can emerge immediately up to the point when the profit margin becomes positive again when it is reflected and emerges through the profit carrier mechanism once again. Profits can be 'released' to the extent that previously recognized losses have been recognized.

Although of limited practical relevance to annuities as the volumes are small, provision is made for participating contracts. In this case, the liability separates the future profits between the expected bonuses and the expected shareholder component of these profits.

With respect to annuities, one normal profit carrier is the payment of annuity benefits. This means that the profits emerge in proportion to the actual annuity payments. The service of establishing the contract is permitted as a secondary profit carrier however caution is expressed in the standards about more than one profit carrier to ensure that profit is not realized and released prematurely. Once chosen, the profit carrier has to be used consistently so the decision is somewhat 'cast in stone'. Even if a profit carrier is changed along the way, the profit margins are recalculated so that no profit release takes place as a result of the change itself.

The consequence of these rules is that annuity profits emerge largely over time as the annuity payments are made, that the provision includes allowance for taxes and expenses as well as benefits on a 'best estimate' basis plus the emergence of a profit on the

provision of the services, and that losses are realized early whilst profits are generally left to emerge over time. The Solvency and Capital Adequacy standards build on this basic premise.

The Solvency Standard

The basic philosophy of the solvency standard is to ensure that the company has sufficient resources to meet currently committed obligations. As such, it is a ‘run-off’ basis although the usual course would be to transfer the obligations and their associated assets to another firm. When a company finds itself in the situation where such a closure to new business and transfer are contemplated, it may also find that difficulties arise that compound the problems and, therefore, some provision for conservatism is justified. Also, it can be expected that strong supervisory pressure and intervention will be occurring at the same time. The solvency requirement is expressed as the difference between the liability determined on best estimates and that determined on a more conservative basis.

The Life Insurance Act establishes that the solvency standard should ensure, as far as practicable, that ‘at any time, the financial position of each statutory fund of a life company is such that the company will be able, out of the assets of the fund, to meet all policy and other liabilities referable to the fund at that time as they become due’. This definition highlights that the Act envisages solvency on a fund by fund basis rather than for the company as a whole. The standard is deliberately prescriptive. Although it describes this as being ‘to facilitate comparability across the industry’ it is understood also that a more prescriptive approach is required compared to the capital standard for legally enforceable reasons – it is necessary to define the ‘line in the sand’.

Although the statutory funds should largely be able to support themselves financially, the standard does also reflect some interaction between the shareholder’s fund and the statutory funds.

The solvency requirement considers a specific solvency liability. For annuities, as with most of the other business of the company, the mortality table and rates of improvement are prescribed for this valuation. It is recognized that the solvency liability will be more conservative (anticipates more adverse experience) than the best estimate liability.

Additionally, the solvency requirement adds obligations relating to other (non-policy) obligations³⁰, expenses, asset liability mismatches, and inadmissible assets³¹. With respect to expenses, the Best Estimate Liability already allows for expected expenses. The Solvency ‘Expense Reserve’ makes provision for overruns in expenses that may occur where a fund is forced to operate on a closed basis. Mismatch is established through a ‘resilience reserve’ determined through a stress test to determine the net effect of movements in asset and liability values in defined scenarios.

³⁰ This part of the standard also addresses the situations where subordinated debt can be excluded from the liabilities (so included in capital).

³¹ Inadmissible asset reserves provide for assets held that may have limited value in a run off situation or may not be directly available to meet policyholder benefits. In general, these are assets that depend on the ongoing conduct of the business, associated financial entities, but also concentrated asset exposures. As such, the requirements address elements of group capital as well as credit and liquidity risks.

Relevant for participating contracts, it is permissible for consideration to be given to available discretions open to the company when assessing the solvency risk. The ability to reduce bonuses can be taken as a credit.

As such, the solvency requirement could be considered to be a margin determined as a stress test supplemented by specific provisions for certain risks not provided for directly in the basic policy liability. The basic policy liability is a floor for the solvency liability as is the value available to customers on voluntary termination.

The Capital Adequacy Standard

The focus of the capital adequacy standard is to ensure the financial soundness of the life company as a going concern. The capital adequacy standard for a statutory fund is aimed at ensuring the fund can remain financially viable, continues to write new business, and is likely to meet the solvency requirement for the next 3 years with a high degree of probability. Some of its elements are less conservative than the solvency standard because it is based on a continuing rather than a close down scenario, but the new business growth plans can make it more onerous than the solvency standard. Also, the capital adequacy requirements can not be less than the solvency requirements, so in practice they are quite similar for mature stable funds, but capital adequacy is more onerous for quickly growing funds.

The capital adequacy standard adopts a less prescriptive approach than the solvency standard, recognizing different business strategies of life companies. This means that much reliance is placed on the role of the Appointed Actuary for assessment of capital adequacy requirements.

Failure to meet the capital adequacy standard raises concerns with the regulator and would lead to a call for remedial action.

6 Trends in Industry Composition

6.1 Superannuation Funds

The vast expansion in coverage and gradual increase in the contribution rate brought about a huge rise in annual contribution flows (Table 9). These equaled 7 percent of GDP in 2001. After a brief decline in 2002 and 2003, they rebounded sharply and reached 11.8 percent of GDP in 2007. Adding investment income and allowing for the young age of the new pillar (which implies relatively low levels of benefits and withdrawals, which amounted to 4 percent of GDP in 2007), the overall result was a massive increase in the level of superannuation assets, which reached 106 percent of GDP in June 2007 (Table 10).

Table 9: Annual Contributions and Total Assets of Superannuation Funds

Year to June or end June	2001	2002	2003	2004	2005	2006	2007
GDP (AUD billion)	711.3	759.0	809.7	859.7	933.7	1003.5	1083.8
Contributions (AUD billion)	50.1	51.6	53.5	60.8	68.9	85.1	122.6
Contributions (% of GDP)	7.0	6.8	6.6	7.1	7.4	8.5	11.3
Benefits (AUD billion)	30.6	32.6	33.2	30.7	32.6	37.7	41.1
Benefits (% of GDP)	4.3	4.3	4.1	3.6	3.5	3.8	3.8
Total Assets (AUD billion)	519.0	518.1	546.7	641.0	759.3	917.8	1143.2
Total Assets (% of GDP)	73.0	68.3	67.5	74.6	81.3	91.5	105.5

Source: IFS and APRA, Annual Superannuation Bulletin, June 2007

Table 10: Superannuation Fund Assets by Type of Fund

	1995	2000	2006	2007
	percent of total assets			
Corporate	21.4	13.8	5.7	6.1
Industry	4.4	10.1	16.6	17.3
Public Sector	22.7	21.1	16.7	15.5
Retail (incl RSAs and ERFs)	22.7	27.5	32.8	32.3
Small Funds	8.7	15.5	23.6	25.1
Balance of Statutory Funds*	20.1	12.0	4.8	3.7
Total	100.0	100.0	100.0	100.0
Total (AUD billion)	229	484	918	1143
Total (% of GDP)	49	74	92	106

Source: APRA

Of funds with more than four members in June 2006, some 66 percent were accumulation, or defined contribution, funds and another 28 percent were in funds offering a combination of accumulation and defined benefits. Only 7 percent were in pure defined benefit funds, compared with 22 percent ten years before. While the importance of defined benefit funds has declined sharply in the past decade, the reported assets of defined benefit funds understate the present value of their future payment obligations because some large public sector schemes are not fully funded.

The Productivity Award and Superannuation Guarantee developments were a large contributor to the trend toward defined contribution arrangements. Multi employer arrangements were established under the auspices of trade unions, industry associations and by other promoters on a defined contribution basis to assist in compliance with the SG requirements. In addition, there was a general transition where the extremely generous taxation benefits for superannuation were wound back. Legislation for both the new positive coverage arrangements and the taxation elements tended to be developed with a view to DC schemes first and defined in terms of contributions (reflecting the deferred pay approach) then adjusted to include how DB schemes could also comply with the regulation. DB compliance often required additional actuarial certification (for

example, to certify that the effective level of benefits is equivalently generous to meet the SG obligations). As a result, many employers revisited their ongoing interest and cost effectiveness in maintaining their single employer DB schemes and many have since been closed to new members, and in a large number of cases, wound up transferring members to DC schemes

All classes of funds (other than ‘small funds’) have been consolidating for some time. Corporate funds have declined particularly rapidly in both number and share of industry assets as costs of administration have increased and the introduction of near-universal employer superannuation has eroded any competitive benefits from offering in-house superannuation. Public sector funds have also experienced large declines. In contrast, industry funds and especially retail and small funds have registered large increases in market shares.³²

The consolidation trend was given substantial new impetus by the recent introduction of more stringent prudential regulations, including for fund governance and risk management, and the requirement that all funds be licensed by the middle of 2006. As a result, the number of funds, excluding ‘small funds’ and pooled trusts was 575 at end-June 2007, almost one-tenth of their number 12 years earlier (Table 11).

Table 11: Number of Superannuation Funds by Type

	1995	2000	2007
Corporate	4,211	3,389	289
Industry	152	155	74
Public Sector	97	81	40
Retail	541	293	172
Subtotal	5,001	3,918	575
Small Funds	100,447	212,538	365,992
Pooled Superannuation Trusts			101
Total	105,448	216,456	366,668

Source: APRA

The number of accounts continued to expand even after the attainment of near universal coverage in 1995 (Table 12). This signifies a trend to multiple account holding and may also imply a large number of inactive accounts. Retail funds have more than half of all outstanding accounts, followed by industry funds. The large presence of retail funds raises concerns about the operating efficiency of the second pillar because retail funds are notoriously more expensive than other types of funds and also suffer from a much wider dispersion of operating costs and fees.

³² The balance of statutory funds of life insurance companies is the difference between superannuation assets reported by life insurers and the assets that superannuation funds report as held with insurance companies. This mainly covers assets backing various types of annuities and capital funds.

Table 12: Number of Accounts in Superannuation Funds

End June	1995	2000	2007
		million	
Corporate	1.4	1.2	0.7
Industry	4.9	7.0	10.7
Public sector	3.1	2.4	2.9
Retail	6.0	11.1	15.4
Small Funds	0.1		0.7
Total	15.5	21.5	30.4

Source: APRA

6.2 Life Insurance Companies

The Australian life insurance industry represents a significant though declining part of the financial services sector. As at end June 2007 total industry assets were \$257 billion. Superannuation business represents around 90 percent of the total life insurance office assets. The life insurance industry accounts for 20 percent of superannuation assets, down from 41 percent a decade ago.

There are currently 35 life insurance companies operating in Australia down from 50 ten years ago. The major industry participants include the large wealth management groups including independent, bank-owned and foreign institutions. Major banks have acquired a strategic stake in the industry: they now account for over 50 percent of industry assets. The wealth management companies typically have a range of legal entities to provide for the management of wealth. Despite the large number of players the industry is quite concentrated. The top three life insurance groups accounted for 63 percent of total industry assets and 75 percent of new business premiums in 2006. The top ten life insurance groups represented 93 percent of total assets.

The major products offered by the life insurance industry are pure risk, annuities, investment account and investment-linked (Table 13). The superannuation premiums mainly flow into investment-linked products. Of the two broad types of life insurance products, regular (or annual) premium and single premium, single premium business now accounts for 80 percent of life insurance premiums, of which, 97 percent relates to superannuation business. The vast majority of premiums are directed to investment accounts, of which investment-linked predominate.

Table 13: Life Insurance Premiums (\$ billion; year to 30 June)

	2002	2003	2004	2005	2006	2007
			percent of total			
Investment-linked	61.3	62.0	60.6	65.3	61.7	69.2
Investment Account	10.1	8.7	6.3	5.9	5.3	5.1
Annuities	16.6	15.9	19.1	12.6	16.8	13.3
Risk	10.6	12.5	12.6	15.0	15.2	11.6
Conventional	1.4	1.6	1.1	1.2	1.1	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total (AUD billion)	36.7	32.1	35.0	34.0	37.6	41.5
Total (% of GDP)	4.83%	3.97%	4.17%	3.79%	3.89%	4.01%

Source: APRA Life Office Market Reports

Annuities form only a small component of life insurance business (Table 14). Annuity business attracts about one-sixth of total premiums. The business has shown some volatility in recent years, usually in response to changes in government incentives under its retirement income policy. However, as shown in Table 15, allocated annuities, mostly related to superannuation, dominate total annuity business. Since 2005 lifetime annuity business has almost completely disappeared.³³

Table 14: Annuity Business of Life Companies (year to 30 June)

	2002	2003	2004	2005	2006	2007
	percent of total					
Individual						
Allocated: non-investment linked	4.4	3.2	0.8	0.8	1.2	2.2
Allocated: investment-linked	44.1	36.4	32.7	57.9	71.7	74.1
Market-linked (a)	0.0	0.0	0.0	0.6	1.0	1.1
Lifetime	2.8	5.1	6.3	0.6	0.5	0.4
Term	45.9	49.6	53.4	29.8	19.8	20.8
Group						
Allocated: non-investment linked	1.4	3.4	4.9	8.6	0.9	0.8
Allocated: investment-linked	1.4	2.4	1.9	1.8	2.0	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total(AUD billion)	6.10	5.10	6.70	4.30	6.30	6.8
Total (% GDP)	0.80%	0.63%	0.80%	0.48%	0.65%	0.66%

Source: APRA Prudential Rules 26 and 32 collections

Table 15: Superannuation Assets of Life Companies (year to 30 June)

	2002	2003	2004	2005	2006	2007
Total Assets (AUD billion)	188.4	186.5	196.9	211.4	231.7	256.6
Total Assets (% GDP)	24.8%	23.1%	23.4%	23.6%	24.0%	24.8%
Superannuation Assets (% total)	86%	86%	87%	88%	89%	90%
	percent of total superannuation assets					
Lifetime Annuities	2.4	2.8	2.6	2.5	2.1	1.7
Term Annuities	3.3	4.3	3.6	3.9	3.2	2.8
Allocated Annuities	13.5	12.7	12.3	12.2	12.4	13.7
Investment Account	14.1	13.8	12.6	11.0	9.6	8.4
Investment Linked	66.7	66.4	69.0	70.4	72.7	73.4
Total Superannuation Assets	100.0	100.0	100.0	100.0	100.0	100.0

Source: APRA Life Office Market Reports

One factor, which has a bearing on the popularity of lifetime annuities, is the value that they provide to their purchaser as measured by the money's worth ratios. Knox (2000) found that the majority of money's worth ratios for Australian annuities are in the range of 85-95 percent of the purchase price. He also observed that the results in Australia, even though the market is poorly developed, are consistent with major international markets and that the MWRs compare favorably with recent research for the UK and US markets. However, in more recent research Ganegoda (2007) reports that when compared with previous calculations for Australian annuities, it appears that the money's worth of Australian annuities have dropped significantly reflecting high loadings, such as

³³ Only four companies are currently providing regular quotes on life annuities compared with 11 in 1998 (Ganegoda 2007)

administrative costs and profit margins. Allocated annuities receive the same tax and income test treatment as life annuities. Despite the higher risks retained by their holders, they are perceived by many investors as having considerable advantages over life annuities, mainly because of their greater flexibility.

The boost in term and lifetime business in 2004 appears related to a desire by retirees to seek a guaranteed income source following the poor investment performance of investment-linked products in the previous couple of years, and the impact of government policy which brought forward purchases. In February 2004 the government announced that from September 2004 monies invested in term and lifetime annuities would only be 50 percent exempt from the asset test for the age pension instead of 100 percent, making them considerably less attractive; this brought forward purchases of these products resulting in a spike in sales in 2004 and a sharp fall in subsequent years.

7 Trends in Product Composition

7.1 Product Mix – a story of attitudes

Until the late 1980s Australians had a voluntary system of retirement savings. The age pension was seen as the principal form of support in retirement and private savings were viewed as providing funds which they could use freely as they chose. Employees who changed jobs were able to cash their entitlements. The average balance in private superannuation was relatively small. In the mid-1990s fewer than 10 percent of lump sums exceeded \$200,000. Those receiving a smaller lump sum were more likely to use it to clear debts, for home improvements and for general living expenses. Data on intended disbursement of lump sums appear to indicate that as a lump sum increases in average size, a greater proportion will be spent on financial investments.

For the whole of the superannuation industry, lump sum payments declined in recent years from representing 79 percent of all benefits in 2002 to 68 percent in 2005 and further to 55 percent in 2007 (Table 16). Total benefit payments have fluctuated around 4 percent of GDP.

Table 16: Composition of Benefit Payments

	2002	2003	2004	2005	2006	2007
	percent of total benefit payments					
Lump Sums	79.1	78.6	68.4	67.7	58.6	55.2
Pensions	20.9	21.4	31.6	32.3	41.4	44.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total (AUD billion)	32.5	33.2	30.7	32.5	37.7	41.1
Total (% of GDP)	4.3	4.1	3.7	3.6	3.9	4.0

Source: APRA

This pattern conceals large differences across types of funds, even though all superannuation funds report a decline in the relative importance of lump sum payments (Table 17). Public sector funds, reflecting the historical importance of defined benefit and pension paying funds, show a high proportion of pension payments. These grew from 42 percent of all benefits in 2002 to 69 percent in 2007. In corporate funds pension payments

rose from 15 percent in 2002 to 33 percent in 2006 but fell to 23 percent in 2007.³⁴ For retail funds, pension payments have grown from 8 percent of total payments in 1997 and 15 percent in 2002 to 30 percent in 2007. In 1997 virtually no pensions were paid by industry funds, but pension payments have grown, particularly in the last 3 years, to represent over 12 percent of total benefit payments. Other funds, which comprise small funds with less than 5 members, show an erratic pattern, which may be due to gaps in the statistical data

Table 17: Proportion of Pension Payments

	2002	2003	2004	2005	2006	2007
	percent of total benefits					
Public Pension Funds	41.5	46.6	51.2	66.0	64.8	68.6
Retail Funds	15.0	14.0	18.1	21.0	24.8	29.6
Corporate Funds	14.7	18.2	26.7	30.0	33.3	23.1
Industry Funds	5.6	4.8	10.0	11.5	11.1	11.9
Other	3.7	50.0	5.1	5.1	51.2	61.8

Source: APRA

It should be remembered that prior to the legislative changes in 1998, government and large corporate funds were generally the only type of funds offering superannuation pensions and that members of other types of funds were compelled to take lump sums. However, the legislative changes in 1998³⁵ made it more attractive for a wider range of superannuation funds to offer pensions and pension payments as a percentage of total benefits have been increasing since that time, although most would be allocated pensions rather than lifetime pensions.³⁶ The decline in the proportion of benefits taken as a lump sum has been associated to some extent with the rapid growth in superannuation balances as a result of the increase of regular mandatory contributions. As these balances have grown there appears to be a greater desire by people to take them as income streams to support them in retirement.

Until the introduction of compulsory superannuation and the growing realization that in order to live comfortably in retirement additional savings will be necessary there was a strong incentive for people to manage their financial affairs with a view to maximizing their access to the age pension. Retirees could also “double dip” by taking their lump sum, spending it as they wished and then apply to receive the age pension. The system provided encouragement for early retirement for those with accumulated superannuation which they would use to live on until they became eligible for the age pension. This was a function of the wide difference between the age at which a person could take early retirement (55) and the age at which they could get access to the age pension (65) and the fact that the early retirees needed funds on which to live until they reached the pensionable age, making double-dipping a natural outcome of early retirement.

³⁴ There was an increase in the value of pension payments but a large jump in lump sum payments, perhaps related to industry restructuring.

³⁵ In 1998, the Government extended the income streams qualifying as complying pensions and annuities to include non-commutable income streams that pay a guaranteed income for a person's life expectancy.

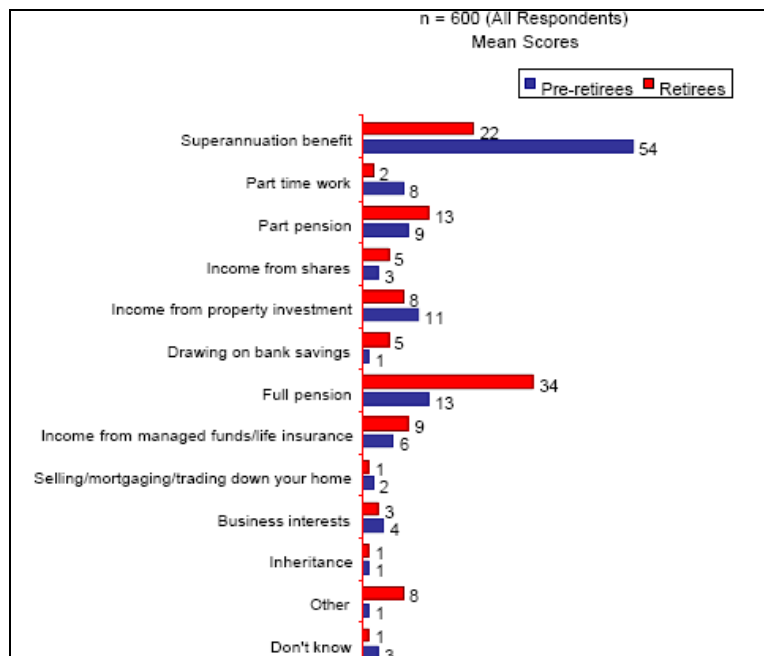
³⁶ The definition of pension benefits includes the total value of benefits paid to fund members in the form of a pension. It includes complying pensions, allocated pensions and annuity payments.

Despite these incentives, there is no compelling evidence of deliberate rapid run down of balances during that period. Some survey evidence³⁷ show that there was little dissipation of lump sums on such things as overseas trips and other forms of consumption: just over 85 percent of the lump sum value was directed toward investments in securities, property or businesses.

Over the last 20 years Australia has put in place a retirement system with a much greater focus on self provision (either in full or in part) for a growing number of the population through the superannuation guarantee. The system is still designed to be a mix of the age pension, superannuation and voluntary savings but people have been encouraged to provide for their own retirement so that they can enjoy a standard of living much higher than they would get on the basic age pension. Entreaties by both the government and the retirement industry seem to have caused a significant shift in attitudes over time. For younger workers today there no longer appears to be an expectation that the government will support them in retirement, and for most, compulsory superannuation is considered both necessary and desirable³⁸.

People today have a clear understanding that superannuation and private savings will be needed if they are to have a comfortable retirement. These changes are evident in Figure 10 which shows expectation about sources of retirement incomes, and contrasts views of the previous generation (i.e. current retirees) against those who are yet to reach retirement.

Figure 10: Sources of Income in Retirement



Source: “Retirement Savings: Drivers and Desires”, IFSA 2001

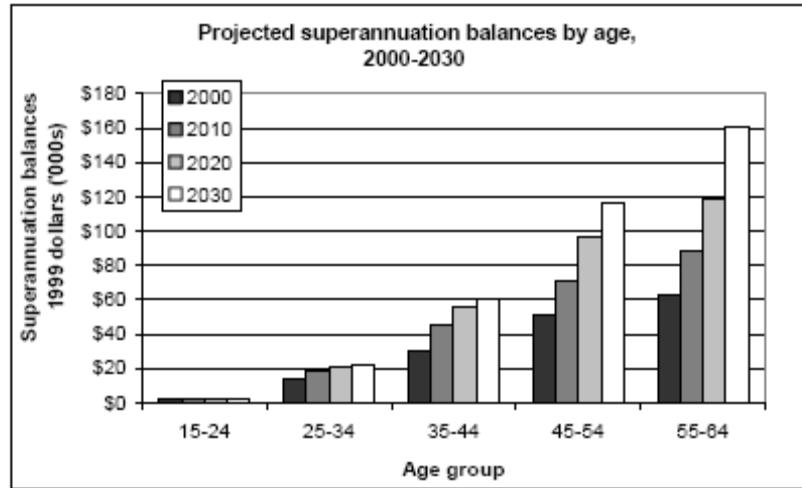
³⁷ Kalisch 1992

³⁸ “Superannuation: Survey of Key Voter Attitudes” Survey prepared by Wirthlin Worldwide Australasia for the Australian Association of Superannuation Funds.

Over the past decade superannuation balances have grown in size due to the maturing of the SG system and this trend will continue for the next three decades (refer Figure 9).

Cohort studies indicate that age pensioners are, on average, drawing down their wealth in retirement (Figure 11). However, this drawdown is apparently at a very slow pace. If this pattern persists this would allow these pensioners to maintain significant assets through many years of retirement. This may indicate that part-rate age pensioners are managing their money effectively and are drawing on their assets in a way that has regard to their expectations of a long life.

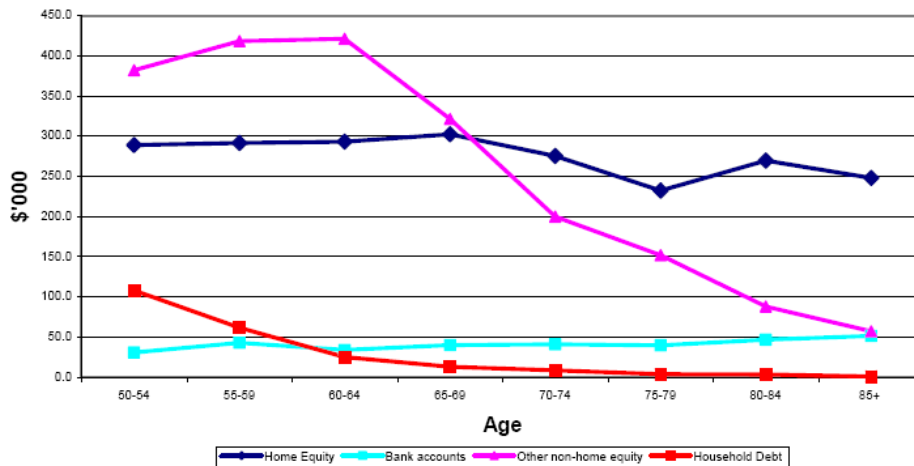
Figure 11: Projected Superannuation Balances by Age, 2000-2030



Source: National Centre for Social and Economic Modeling (NATSEM) Projections in Kelly, 2003

In addition to the findings on the rate of drawdown, there is also a substantial portion of this group who has increased real wealth – again suggesting careful management of money in retirement (Figure 12). RIMs methodology in projecting investment income of retirees assumes an aggregate leakage of 25 percent from superannuation lump sums.

Figure 12: Average Household Wealth and Indebtedness



Source: FaCSIA, Household Income and Labour Dynamics Australia (HILDA) Survey

Despite attempts in the past to encourage Australian to take up annuity-type products people still have a strong bequest motive and are very averse to products with little or no residual value and no possibility of withdrawal of capital. Allocated pensions accord with retirees stated preference for products which offer taxation advantages, the possibility of a residual sum, a control of the portfolio supporting the pension and flexibility regarding the timing and size of a pension. Over the past decade sales of allocate pension products have grown dramatically whereas the market for annuities has stagnated as shown in Table 18. The data indicates that in the last two years sales of lifetime annuities have almost completely dried up.

Table 18: Sales of Annuities and Allocated Pensions

	Annuities				Allocate Pensions		Total
	Term	Term with Residual Capital Value	Lifetime	Total Annuities	Allocated Pensions and Annuities	Term Allocated Pensions	
2006	519	1,008	29	1,557	13,570	527	15,654
2005	547	877	27	1,451	10,352	457	12,260
2004	2,757	1,073	279	4,106	7,888	47	12,041
2003	1,357	1,352	200	2,909	5,935	-	8,844
2002	1,100	1,897	155	3,152	6,595	-	9,747
2001	794	1,631	167	2,592	7,613	-	10,205
2000	672	2,324	183	3,179	6,607	-	9,786
1999	666	1,835	246	2,747	5,717	-	8,464
1998	603	1,766	194	2,663	4,153	-	6,816
1997	563	1,625	201	2,386	3,522	-	5,908
1996	646	1,224	190	2,060	1,838	-	3,898
1995	390	1,171	184	1,745	881	-	2,626

Source: Plan for Life (Victoria) Pty Ltd

Only \$29 million in lifetime annuities were sold in 2006 of which \$9 million was from superannuation moneys and \$20 million was from private savings. With few providers, declining sales, declining competitiveness (as measured by the MWR) and the removal of the of the asset test exemption for long-term annuities, sales are likely to fall further and may even result in the extinction of lifetime annuities from the Australian market.

7.2 Equity Release Products

Almost one-quarter of Australians have indicated that they will rely on home ownership to support them in their retirement³⁹. However, far fewer have indicated an intention to sell their home as part of their financial plans for retirement.

Equity release products allow a person to access the equity which they have in their home without having to sell and move from the home. They provide the opportunity for people to add to their retirement funds. The most common equity release product is a reverse mortgage. In a reverse mortgage, the consumer's house is used as security for a loan, which is provided to the consumer in the form of a lump sum, a regular stream of payments or both. The consumer retains title to the property but grants the provider a mortgage to secure repayment of principal and interest under the loan. The outstanding balance of the loan grows over time, as the interest is capitalized (rather than repaid). The

³⁹ Cameron (2001)

loan and interest on it are paid back when the home is sold, when the borrower permanently moves away (for example, move into long-term care), or upon death. In Australia the products are generally available to consumers aged 55 and over who own their own homes or only have a small mortgage outstanding. The amount available to be borrowed is usually restricted to between 20 percent and 40 percent of the total property value.

The market for equity release products in Australia is developing rapidly. According to a recent study⁴⁰ reverse mortgages grew from \$459 million at the end of 2004 to \$1.5 billion at 31 December 2006. The average age of borrowers is 74, although younger borrowers are the fastest growing group. Although lump sums continue to dominate, accounting for over 80 percent of all outstanding loans, regular draw-downs are increasing and represented 20 percent of new loans in 2006 indicating that more people are using the product to supplement their pensions (SEQUAL 2007). This growth of reverse mortgages has the potential to further impact attitudes towards annuities by giving many Australians access to additional income streams without purchasing an annuity product.

Reverse mortgages have not been without their problems in the United States and the United Kingdom where there have been cases of mis-selling and evictions. In Australia the product is subject to a range of existing consumer regulations. In addition, some reverse mortgage providers have established an industry association, Senior Australians Equity Release Association of Providers (SEQUAL) which has a Code of Conduct and compels its members to belong to an approved External Dispute Resolution (EDR) scheme.

Reverse mortgages may have significant taxation implications, and can affect a consumer's entitlement to the public pension and associated benefits and concessions. It can also affect the amount of daily care fees that will be levied if the retiree has to enter an aged-care facility.

8 Concluding Remarks

Observers have often puzzled over why the annuities market, especially the market for lifetime annuities, is not more developed in Australia. Australians are living longer and face uncertainty regarding the level of their retirement income. The two main reasons for the lack of lifetime annuities appear to be that people can rely on the age pension if they have to, and a great desire to have flexibility in investment options which is not available if they purchase a lifetime annuity. In the past 20 years there has been a dramatic change in the attitudes of Australians towards saving for retirement. Most now feel that if they are to have a comfortable standard of living in retirement they will need to supplement the government provided age pension.

Australians are building up substantial balances in the private pension system, mainly as a result of the compulsory SG requirements, but increasingly for many through additional private savings. These continue to be taken as lump sums but there is evidence to suggest that the funds are being invested prudently in a range of retirement income products. The greatest motivation is to ensure that the funds will last people through retirement, and

⁴⁰ Senior Australian Equity Release Association Lenders/Trowbridge Deloitte, "Reverse Mortgage Study", April 2007.

that there will be something left when the person dies to leave to their beneficiaries. The funds are not being exhausted rapidly and there does not appear to be a fear that people will be left without as they grow older.

The build up of retirement savings will act to some extent as a cushion to the impact of an ageing population. Forecasts in the governments' intergenerational report indicate that there will be fiscal pressures building from about 2020 onwards, not only due to age pensions, but also due to higher spending on healthcare. The sense is that there is no 'ageing crisis', although some changes will have to be made in the level of benefits, taxation or private contributions to superannuation in the longer run. The government seems more than comfortable to leave the investment of retirement income savings to individuals. Most people seem to be investing their funds wisely and the rundown of accumulated assets is only occurring slowly. Although some concerns have been expressed that the current system may lead people to undertake excessive consumption in their early years of retirement and have to rely on the age pension in later life. With changing attitudes towards the need to secure their retirement the opposite may in fact be true. It may be the case that people are too conservative in their spending and spend too little rather than too much. This reduces individual welfare, but it does reduce recourse to the age pension.

There do not appear to be any significant concerns about longevity risk among Australians and hence there is very little demand for products, such as lifetime annuities, which provide a hedge against this risk. Many expect that they will have sufficient resources to ensure that they have a comfortable retirement, while those that do not can rely on the age pension. Finally, for many Australians their home provides an additional buffer, particularly given a growing understanding of equity release products.

Over a number of years the Australian government has taken a number of initiatives aimed at reducing incentives for early retirement. These include the standardization of the retirement age for men and women by phasing in a higher age for women; the increase in compulsory preservation age for occupational superannuation from 55 to 60; the introduction of higher RBL limits for retirement benefits taken at least half in annuity form; and the introduction of a deferred pension bonus plan. The Government appears satisfied that it has its parametric settings broadly correct.

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