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Too much risk to insure? The Australian (non-) Market for Annuities

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Abstract

This paper discusses the market for retirement income products in Australia, and in particular focuses on the current parlous state of the annuities market in Australia. While retirement products generally have become relatively more important in recent years, the growth in these has been predominantly in phased withdrawal products which offer no longevity insurance. It argues that the virtual disappearance of the longevity insurance market in Australia exposes Australians to much greater uncertainty about their well-being in later life than is necessary, and that this risk is greater than is generally recognised, both because of Australia's reliance on mandated Defined Contribution (DC) structures for income replacement in retirement, and because middle age longevity is increasing very rapidly. It suggests that both the private market and government intervention will need to be harnessed to address this issue, that government policy requires co-ordination across several agencies whose regulatory decisions impact on the retirement products market, and that inaction will lead to a long term prospect of arbitrary and ill-considered government action to meet the realised uninured outcome.

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Too much risk to insure? The Australian (non-) Market for Annuities

John Piggott

Introduction

Products and policies which provide protection against longevity risk – the risk that an individual might outlive his or her resources – are increasingly important in an era of demographic transition. Relatively more people will be older, and longevity risk at the level of an economy – national or global – is therefore higher. This trend is more important than is generally recognised because life expectancy of those in middle age is increasing dramatically and in ways which cannot be simply explained. Thus, longevity risk is increasing not only because large-sized baby boomer cohorts are ageing, but also because uncertainty about longevity at the cohort level is increasing.

Yet the reality is that around the world both governments and the private sector are retreating from the provision of longevity insurance. The lack of formal structures and products offering such insurance does not mean that the risk has decreased, even though its financial implications do not find their way to the balance sheets of commercial or government institutions. Rather, the absence of organised longevity insurance structures suggests that when the outcomes are realised, the response will be arbitrary and likely to be driven by political exigency. Rewards for careful planning on the part of individuals, or of careful management by financial institutions, will be compromised by short term policy reaction to circumstances which, in the large, can be anticipated now, but for which current structures do not encourage planning.

Nowhere is this more true than in Australia, where heavy reliance for income replacement in retirement is placed upon a mandatory Defined Contribution (DC) structure, administered through private institutions. Associated decumulation structures have changed since the introduction of mandatory superannuation in the late 80s and early 90s, but generally speaking, these have made it easier and less expensive to choose lump sums over retirement income streams. Access age for accumulations is being phased from 55 to 60; currently, at age 60, all accumulations are available, free of any tax on withdrawal, as a lump sum. While a relatively generous and widely accessed safety net exists, there are therefore no structures in place to encourage or mandate income replacement accumulations to be taken as an income stream. Australia is the only country which relies predominantly on a mandatory privately administered DC structure for income replacement, not to have incentives or mandates in place for longevity insurance.

The virtual disappearance of the longevity insurance market in Australia exposes Australians to much greater uncertainty about their well-being in later life than is necessary. It blunts incentives to provide for old age, since it encourages the view that future governments will have to respond to the realised needs of the elderly when the time comes. Further, government policy, by downplaying the importance of longevity risk, reinforces a tendency towards myopia about likely elder life-spans – most people seem to think they will not live as long as current life expectancy projections indicate,, and these projections themselves probably significantly underestimate mean remaining lifespan.

For such a small market, the Australian retirement income product market commands extraordinary academic attention, perhaps because of its unique position as the only retirement market in the English-speaking world which operates in the

context of a mandatory funded DC type second pillar. Early papers include those of Bateman Kingston and Piggott (1993), Knox (2000), and Doyle Mitchell and Piggott (2004). Recent analyses have been undertaken by Bateman and Thorp (2007) and Ganegoda and Bateman (2007); Bateman and Kingston (2007) emphasise co-ordination between superannuation and the personal income tax. Brunner and Thorburn (2008) provide a comprehensive overview of the market for retirement income products in Australia..

The paper does three things. First, it lays out the current retirement policy in Australia. Second, it describes the retirement product market in Australia, and relates this to policy change and to changes in longevity. The link between taxation and welfare policy and the retirement product market is demonstrably strong. Third, it explores why annuity markets are in their current parlous state, and suggests ways forward that may provide the potential for a revival of the annuity market.

The Australian retirement policy structure[1]

Australian retirement policy differs from the prototypical OECD structure. It comprises a means tested safety net, a mandatory, privately administered DC type income replacement scheme (the Superannuation Guarantee), and some additional concessions for further retirement saving. Each of these components is described briefly below.

The Age Pension. Retirement provision in Australia relies heavily on an age pension, financed from general revenue, which currently pays 25% of male full time earnings for a single pensioner, and at 40% for a couple. Net replacement rates are higher as the Age Pension is exempt from income tax and payments are indexed to the greater of the growth of the consumer price index (CPI) and male average earnings, which

[1] Discussion of the Australian retirement income arrangements draws on Bateman et al (2001) and Bateman (2007).

ensures that the Age Pension at least retains its relativity to wages. In addition, a rental allowance is provided to those who are not owner-occupiers. The access age is 65.[2]

The age pension is available to all eligible residents regardless of work history, but is means tested. The means tests, applying to both income and assets, have the effect of excluding the best-off quartile of 65+ eligible residents from receiving pension benefits. Rather more than half of this group receives the full pension, with the remainder facing tapers on the means tests which reduce their entitlement below the full pension level. The principal residence is excluded from the assets test, but non-home owners face a higher asset threshold.

One way of thinking about the age pension is to view it as a poverty alleviation instrument which excludes the rich, rather than a safety net targeting the poor. It is still the major source of income for most retirees, and along with the owner-occupied home, is the major asset with which they enter retirement.

The Superannuation Guarantee. The age pension is supplemented by a mandatory, predominantly defined contribution (DC) pension. The minimum contribution rate is 9% of earnings, payable by an employer, although the 9% is gross of taxes and fees. Known as the Superannuation Guarantee (SG), it was legislated in 1992, after a period of several years when a 3% pay-in was negotiated through centralised bargaining arrangements.

The rationale behind the SG can be provided easily enough, although it is not clear that this rationale actually underpinned the policy initiative. If an unfunded transfer is to be provided to the elderly to alleviate old age poverty, then compulsory saving will go some way to correcting the resulting price distortion, which might be

[2] The Age Pension age for females was age 60, but is being gradually increased to age 65. See Annex 3 for details.

expected to lead at least some to save less. This idea, attributed initially to Hayek (1960) and elaborated elsewhere (e.g., Hubbard, Skinner, and Zeldes 1995), has been formally incorporated into a mandatory saving model by von Weizsacker (2003).

The SG contribution rate was phased in, with the 9% pay-in finally reached in 2002. Access age is 55, increasing slowly to 60[3]. It follows that for the majority of private sector employees who enjoyed no superannuation entitlements before mandation, the SG will not yield substantial lifetime income streams for some time. It will be another 25 years before full working life contributions will be available to retiring cohorts.

Superannuation saving is subject to a complex tax regime. Employer contributions are generally tax deductible to employers but taxed as income in the hands of the fund[4], and superannuation fund earnings are taxed, but at different rates depending on the income type. Superannuation benefits taken after age 60 have been free of tax since July 2007.[5] This last change has meant that tax incentives towards income streams relative to lump-sums, and between different kinds of income streams, have almost disappeared for this age group, although those retiring earlier will still face differential tax rates depending on benefit type. In addition, means test provisions distinguish between different forms of benefit.

Voluntary retirement saving. Many people contribute more than 9%, either because employers already have superannuation plans in place which make more than the minimum contribution, or because employees supplement the 9% with contributions of their own. This may be thought of as voluntary employment related saving. One of

[3] See Annex 3 for details.

[4] Employee contributions are not tax deductible but may be eligible for tax concessions or government co-contributions, contributions by the self employed are tax deductible and from July 2006 will be eligible for the government co-contribution.

[5] Where the superannuation has been accumulated in a 'taxed' fund. As well, earnings on assets underlying superannuation income streams are untaxed where legislated minimum draw downs apply. Benefits taken prior to age 60 remain subject to tax.

the advantages of the SG is that it has encouraged further voluntary saving of this type. Voluntary contributions are encouraged by the concessional tax treatment of superannuation savings, as well as the government co-contribution scheme which provides a government contribution of 150 per cent of the employee/self employed contribution for low and middle income earners. Individual contributions of baby boomers averaged $2000 per year in 2004 (AMP-NATSEM 2007).

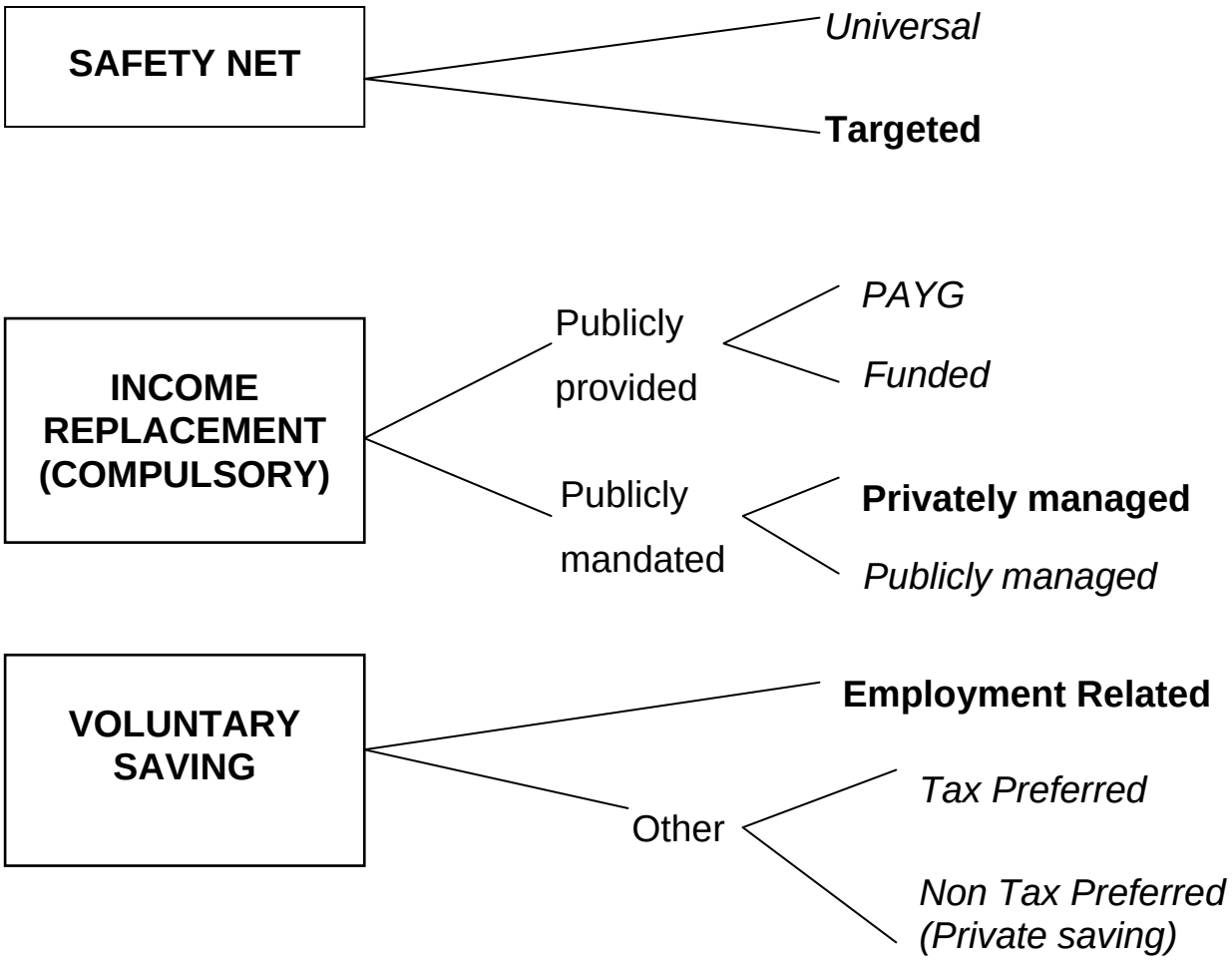
Voluntary retirement saving includes not only superannuation, but other forms of long term saving through property, shares, managed investments and, especially, home-ownership. Homeownership is the most important non-superannuation asset for most Australians. Owner-occupied housing is worth more than half of the nation's private wealth, and more than 80 per cent of retirees own their home (most of them with no mortgage).

These arrangements may be contextualised by reference to Figure 1, which provides a schematic representation of the broad alternatives of retirement saving policy and practice. The boxes on the left may be thought of as three pillars of retirement provision policy - although definitions vary. The alternatives in bold on the right side of the chart indicate Australia's policy choices. Using the taxonomy of Figure 1[6], the three pillars of retirement income provision in Australia comprise the public Age Pension (pillar 1); mandatory superannuation under the Superannuation Guarantee (pillar 2), under which more than 90% of Australian employees are currently covered; and voluntary superannuation and other long term saving through property, shares and managed funds (pillar 3). Currently, more than 90 per cent of Australian workers are covered by mandatory superannuation. In the present context, it is important to note that there is neither compulsion nor incentive to take a

[6] Figure 1 is adapted from Bateman et al (2001).

retirement benefit as an income stream, making Australia unique among those countries relying principally on a mandatory DC plan to deliver income replacement in retirement.

Figure 1: Components of Retirement Provision



It is important to appreciate the implications of the long lead-time required for a fully funded retirement saving scheme to have its full impact. Currently, superannuation accumulations for baby boomers are quite low, particularly for women. The per-person superannuation wealth for baby-boomers[7] is reported at

[7] Baby boomers are defined here as aged 45 – 64 in 2004.

$65,100 in 2004, with the highest value age group the 55-59 year olds ($78,900). Per person values for 60-64 year old couples without children stood at $87,000. Lone males of the same age group held $88,000; lone females $24,900 (AMP-NATSEM 2007).

Individual reliance on the Age Pension will continue to fall as more retirees leave the workforce with increasing years of superannuation coverage. However, with the ageing of the population, government estimates suggest that the cost of the Age pension will rise from 2.5 per cent of GDP in 2006–07 to 4.4 per cent of GDP by mid-century (Treasury 2007). This fiscal burden is quite modest by OECD standards, reflecting the relatively low level of unfunded benefit payable, and the gradual encroachment of funded support into the means tested areas of the age pension.

Retirement Income Policy Evolution

Products and their properties

Pension payout structures from mandatory funded accumulations can take many forms. In Australia, both traditionally and currently, lump sums are common. There are, however, a range of retirement income products available. These include life annuities, phased withdrawals (known in Australia as allocated pensions or allocated annuities), and term-certain variable annuities (known as term Allocated Pensions, or TAPs).

Of these, only the life annuity provides genuine longevity insurance, and these are unpopular in Australia, as elsewhere. Allocated pensions and TAPs are typically calibrated to life expectancy, which means that roughly half the participants will be alive with their funded accumulations exhausted. While ensuring more provident use of accumulations than a lumpsum payout, limited self insurance against outliving one's resources is all they offer. This limitation of phased withdrawals is well-

recognised, and some analysts (e.g., Walliser 2000) have for this reason argued against their use in national DC plans.

An alternative approach is to mandate annuity purchase from mandatory accumulations. Few countries have attempted this, although Chile limits choice in a way which encourages annuity purchase, and Sweden requires annuity purchase from individual account accumulations as an add-on to its unfunded employment-related retirement benefits. The UK mandates annuity purchase from age 75, a policy currently being introduced in Singapore. Often, these mandatory annuities are escalated or indexed to inflation, to provide protection not only against outliving one's resources, but also erosion of purchasing power.

Table 1 provides a schematic representation of the relationship between different kinds of retirement products and insurance coverage over the major financial risks confronted by the retired – longevity, investment, and inflation risk.

The first three of the product types listed in Table 1 are available currently in Australia, although under current policy settings most income stream purchases are phased withdrawals. The fourth product, a term certain annuity known in Australia as a Term Allocated Pension (TAP), provides a fixed withdrawal per period over a life expectancy term. It was offered between 2005 and 2007, but a change in means test provisions has since closed this market down. Pooled annuity funds, or Group Self Annuitisation (GSA), products which provide idiosyncratic risk pooling but which leave systematic longevity risk with the annuitizing cohort, have not been offered. Neither have variable life annuities, nor deferred life annuities. In particular, minimum income guarantee deferred annuities of the type which have recently proved so popular in the US are not currently offered, although annuity providers are now looking for ways to market this latter product.

TABLE 1: Coverage against income uncertainty offered by alternative annuity designs

	Type of Risk			Cost
Retirement Product	***Longevity***	***Investment***	***Inflation***	
Immediate life fixed	High	High	Low	High
Immediate life indexed	High	High	High	High
Phased withdrawal	Medium	Low	Medium	Low
Term allocated pension	Medium	High	Medium	Medium
Variable annuity	High	Low	Medium	Low
GSA	High	High	Medium	Low

The current retirement product landscape

Table 2 presents the current landscape, calibrated (approximately) to 2005-6[8]. The columns in the left panel give estimates for all people aged 55 and over; the second and third panels increase the catchment age to 60 and 65. These are important age brackets because of the varying access ages operating in Australian retirement policy.

[8] Not all data are available for all years.

TABLE 2: Demographic and Retirement Income Product Coverage, Australia, 2005-2006

	55+			60+			65+		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Population 2006	2344746	2608749	4953495	1709103	1972898	3682001	1212927	1479732	2692659
Retired population **(1)**	846200	843600	1689800	804000	797900	1601900	702500	693100	1395600
Age pension recipient **(2)**	N/A	N/A	N/A	N/A	N/A	N/A	778626	1143503	1922129
Disability support pension 2006	174774	117508	292282	102356	50423	152779	6052	1132	7184
Private pension / superannuation: **(3)**									
People with Annuity Pension Offset	229154	169655	398809	206144	149387	355531	161470	107864	269333
People without Annuity Pension Offset	107251	71376	178628	89998	65521	155520	73439	57490	130929
Total	336403	241032	577435	296140	214909	511049	234907	165354	400261

Note
DVA (for 2006 only): 103273
(1) For year 2007 only
(2) Assuming the same proportion as 2004 data
(3) Australian pensions or annuities in 2005-06. People with an annuity/pension offset are largely private recipients; those with no offset are mostly public servants

Sources:
Australian Bureau of Statistics, Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA), Australian Treasury.

Nearly a quarter of Australia's population is 55 or older; nearly 20% are 60 and above; 15% are 65 or above. But only about half the 65+ group think of themselves as "retired". Relatively few continue to work; most of the rest see themselves as in caring roles, or do not regard themselves as having had serious labour force attachment through their lives. At the risk of some oversimplification, age pension support is assumed to begin at 65. About 75% of this group receives at least some age pension. For earlier age groups represented in the table, the major source of transfer payment is the Disability Support Pension. This is increasingly used as a means of accessing public support in the years immediately before reaching Age Pension eligibility. More than half of age pension recipients move to the age pension from some other support program.

The lower part of the table provides data on private retirement income recipients, drawn from income tax data. These are available from age 55. At age 60 and above, about 30% of retirees enjoy these benefits, but as a proportion of population, coverage is low. Only 18% of males aged 60 and over have private pensions and annuities, and only 15% of the 65+ population enjoys such access. Individuals who buy long term annuities will have received the annuity/pension offset. Those who have not received this are probably public servants. A more detailed table, giving information on holders of private pensions and annuities by taxable income range, is provided in Annex 2.[9] Note that many recipients of annuities and private pensions will also receive some age pension.

[9] Because all superannuation benefit taxation has been abolished for those over 60, these data are no longer available.

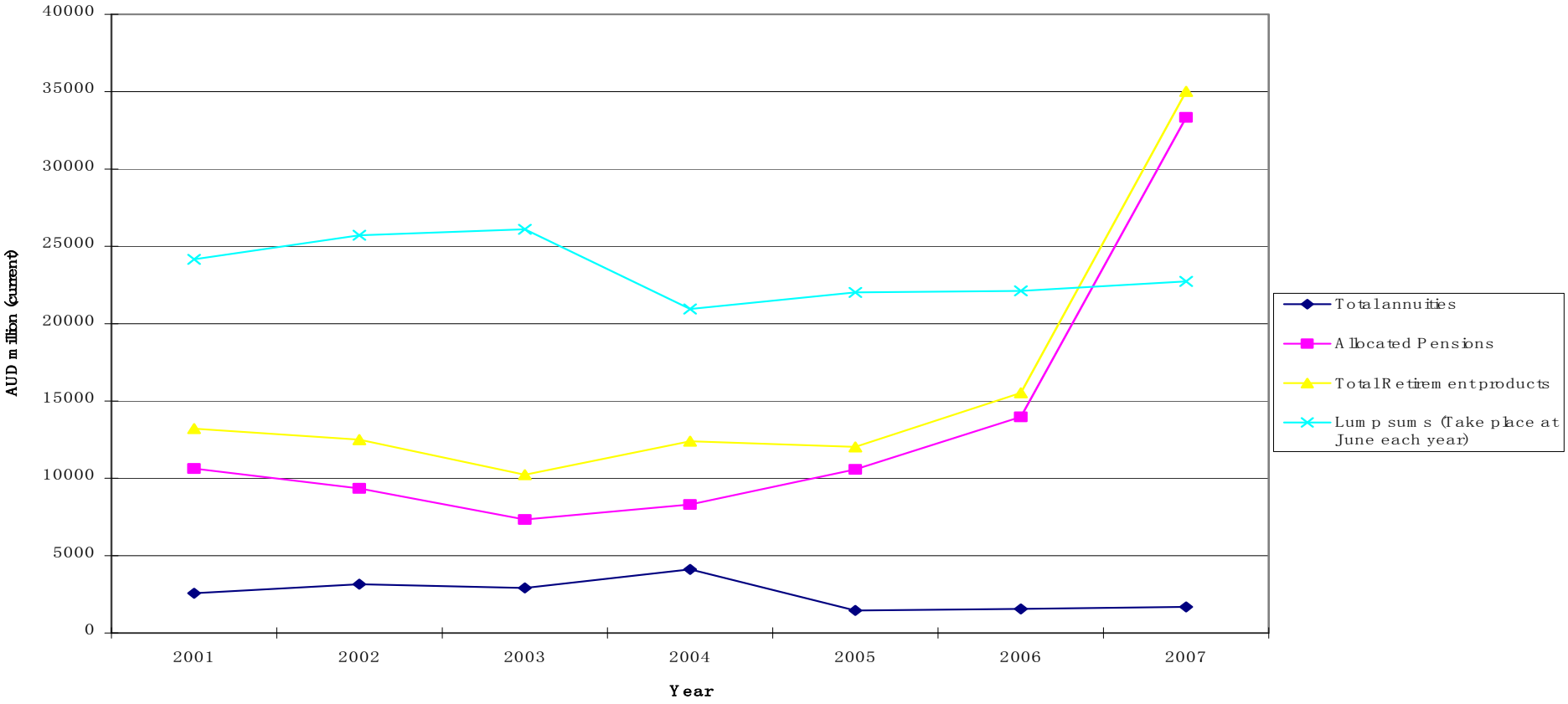
Policy changes and Patterns of Demand for Retirement Income Products

In what follows, I relate the sales performance of retirement income products to policy specification. It is important to appreciate that some products, including those mentioned above, are not offered because of policy specification. Even more important, several agencies are involved in the various aspects of the policy environment within which retirement products are sold. Taxation provisions, social security means test rules, and prudential supervision decisions all combine to generate the specific conditions met by each product, and these are not coordinated – each agency pursues its own agenda independently. Changes to these provisions are detailed in Annex 1.

Chart 1 plots the annual value of new products bought over the period 2001 – 2007. It compares lump sums with all retirement income products, and further splits retirement income products into allocated pensions and all other annuities. Up until last year, the majority of funds accumulations released for retirement purposes has been in lump-sum form. In 2007, for the first time, allocated pensions dominated lump-sums. This can almost certainly attributed to the introduction of the "Transition to Retirement" legislation, which allows individuals to simultaneously contribute to a fund, continue to work, and draw down benefits if taken in certain forms, combined with the tax-free status of income draw-downs after age 60. This allows additional contributions to be made from before- tax income (taxed at 15% in the hands of the fund), and simultaneous tax-free withdrawals. The tax arbitrage advantages are obvious. Plan-for-Life estimate that about $10 billion of the allocated pension market in 2007 can be attributed to this policy mix.[10]

[10] Plan-for-Life, *Retirement Monitor*, June 2008.

CHART 1: Value of Retirement Benefits Taken 2001 - 2007



Sources: Plan for Life, Australian Prudential Regulatory Authority

Table 3 reports on trends and values in the annuities market. These are largely accounted for term annuities. Of total sales of less than $900 million in the first 9 months of 2008, $840 million were Term Certain annuities. A term annuity may be specified to pay back a percentage of the original capital on expiry of the contract — a residual capital value (RCV). Many of the short-term annuities specify an income of interest only and 100 per cent return of capital at the end of the contract, while many of the longer-term annuities specify an income comprising both interest and capital. Short-term annuities are the most popular form of immediate annuity offered in Australia, relative to genuine longevity and long-term annuities (life and life expectancy products).[11]

The early part of the decade saw a small upsurge in long term annuities with no residual capital value, in response to more generous treatment of what came to be called TAPs, term annuities whose payouts were not discretionary, as with a phased withdrawal, but moved with market conditions, like a variable annuity. But changes to means test rules in 2005 effectively shut this market down.

Life annuities have almost collapsed as a traded market, with only 44 sold in the first 9 months of 2008. However, in spite of its small size, I would like to pay special attention to this market, because it so clearly exhibits sensitivity of the retirement income product market to policy environment, and sometimes economic circumstances.

[11] Short-term annuities are an attractive and tax-preferred means of preserving superannuation accumulations between preservation age and actual retirement.

TABLE 3: Patterns of annuity purchase in Australia: 2001 - 2008

Time	Term Certain Annuities without RCV				Term Certain Annuities with RCV				Lifetime Annuities		
	Number	Value (AUD Millions)	Average value (AUD)		Number	Value (AUD Millions)	Average value (AUD)		Number	Value (AUD Millions)	Average value (AUD)
2001	11072	88	7911		19725	1616	81901		1927	167	86700
2002	15004	126	8424		20326	1902	93575		1750	155	88777
2003	18606	131	7025		12530	1352	107893		1477	200	135667
2004	37296	179	4791		9159	1069	116751		2801	280	99889
2005	7233	42	5834		7664	877	114413		293	27	93072
2006	6566	34	5231		7187	945	131450		341	32	92669
2007	7355	31	4276		6010	830	138152		403	36	88759
*2008	762	16	21351		4459	840	188332		44	10	219568

Note
*Data for 2008 covers the year to the end of September only

Source: Plan-for-Life.

Life annuities. Prior to the introduction of mandatory accumulations, life annuities were not offered in Australia as a traded product. Under the tax regime introduced in the late 80s, a small life annuity market emerged, and has continued to exist until the present time. However, while their sales have varied with policy change, in absolute terms they have never held a substantial share of the market.

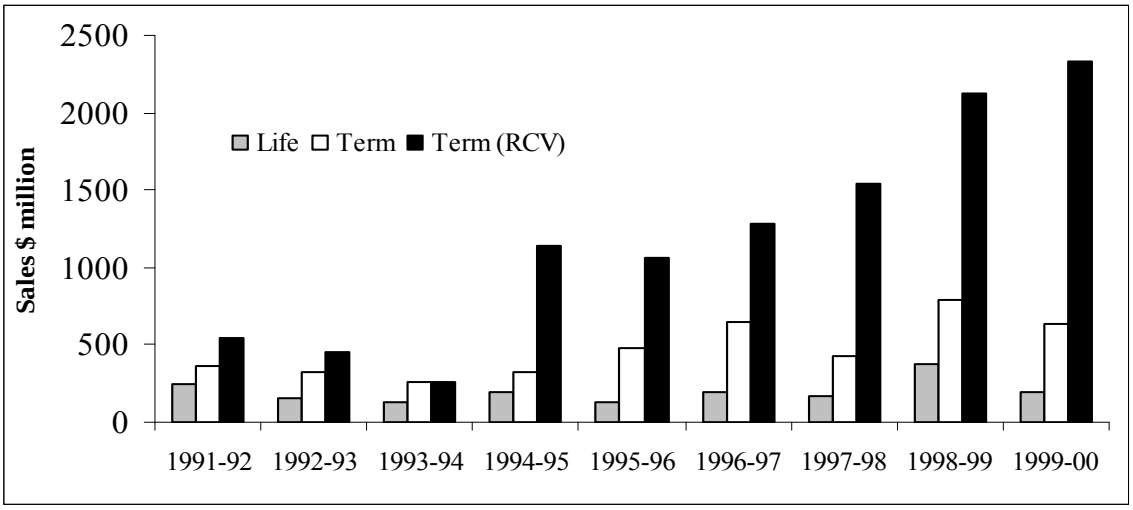
Taxation provisions relating to retirement income products were changed in 1988. They were ostensibly designed to encourage annuity purchase as against lump sums, offering a 15% tax rebate, which, when compared with the 15% tax then imposed on lump sums, gave a 30% advantage to life annuity purchase. However, the treatment of the principal repayment component of life annuities purchased with tax-preferred accumulations nullified this advantage (Bateman et al 1993).

Initially, means test rules for the age pension reflected this treatment of capital repayment. But in 1998, full asset test exemption and income test concessions were offered to life and life expectancy annuities[12]. This existed until 2005, when the assets test exemption was reduced to 50% of the annuity value. When, in 2007, all taxation of superannuation payouts made after the age of 60 was removed, almost no incentive to purchase long duration annuities remained.

Figure 2 shows a small increase in the sales of life annuities in the late 90s, consequent upon the changed means test provisions. But although the effect is clear, the changed provisions did not result in a large swing towards these types of income stream products.

[12] Longevity annuities meeting certain criteria are income and asset test exempt under eligibility criteria for the Age Pension.

Figure 2: Immediate Annuity Sales in Australia ($A million)



Source: Plan for Life Research, reproduced from Doyle et al 2004.

In 1998, full means tests exemption was offered to purchasers of life annuities, and a small peak. But available market data suggest that very few people in the retiring population in Australia buy genuine longevity annuities at retirement. In 1999, of 33,001 immediate annuity policies sold (worth $A 2.75 billion), only 3,000 were life annuities and 10,000 term annuities with no RCV. Based on Australian Treasury data, this indicates that only 3 per cent of the estimated 100,000 Australians retiring that year purchased a life annuity.[13] The average monthly payout for a 65 year old, for a $100,000 purchase price, was $A666 for males and $A617 for females. The following year saw a significant decline in interest rates, which affected the annuity rate, and sales declined further.

Table 3 documents more recent trends. Life annuities enjoyed a small niche in the retirement product marketplace until 2004, when their exemption under the assets test was cut to 50%. Tax concessions remained, and supported a very small number of

[13] A life annuity can be purchased at any time by a retiree, not just at their initial retirement date. The retiree estimates are based on unpublished Treasury data on workers over 55 withdrawing from the labour force.

sales. Later in the decade, after the removal of benefits taxation to retirees over the age of 60, all incentives towards life annuities ceased other then for those retiring before 60. Between 2007 and 2008, the market declined by 90% in value, and by two thirds in number of sales. In the third quarter of 2008, only 10 life annuities were sold.

From an economic theory standpoint, however, what is striking about retirement income streams in Australia is not the response in demand for longevity insured products to changes in policy incentives. It is that almost no privately chosen superannuation benefits are longevity insured, no matter what the policy in place.

The Way Forward: Market Potential, Product Risk Sharing, and Public Private Partnerships

Although, on the face of it, the picture painted here is a bleak one in terms of encouraging longevity insurance, the market has developed new longevity insurance products which appear have greater consumer appeal, and which have been selling well in the US. Equally, there is potential for improvement in policy settings and practice which would significantly expand the longevity insurance market, although significant reform would be required to achieve this. But properly executed, these may well obviate the need for compulsory annuitisation, a course which other nations have considered.

While economists since Yaari (1965) have argued that a consumer with no bequest motive should completely annuities all wealth, annuities remain very unpopular. Many explanations have been advanced for this puzzle – information asymmetry, crowding out, bequest motives, lack or reinsurance opportunities, prudential capital requirements. But here I wish to emphasise just one. A traditional annuity offers a guaranteed payment for life, sometimes indexed to inflation. To hedge against this liability, an insurer must invest in fixed income assets. At the point of purchase of the annuity, therefore, the annuitant must alter his portfolio from

whatever it was – property, equities, bonds – to a portfolio of fixed income assets. There is nothing in life cycle theory to suggest that such an abrupt change in asset allocation is optimal, or even sensible. This is one reason for the lack of appeal of life annuities. In theory, it would be possible to overcome this by offering a variable life annuity, but the varying payout offered by such a product does not insure against a prolonged bear market, so that while payments may continue until death, they may become vanishingly small.

The most exciting recent product development is the evolution of variable annuities, which in the US have been mainly investment vehicles, to embrace a minimum income guarantee for life. Essentially, this operates as a special type of deferred annuity, added to the standard variable annuity, which cuts in not at a pre-specified date, but in the event that a particular account has been exhausted, either because of market conditions or longevity. (In both cases the payment is contingent on survival.) In the Australian context, this may be thought of as an allocated pension, coupled with a wealth-depletion triggered deferred annuity. To make these worthwhile, the deferred annuity must operate with no surrender value, or RCV, should the holder die before they come into payment. The survivor bonus component is an important piece of the insurance pay-off.[14] Such a product is more economical than a standard deferred annuity advocated elsewhere.[15] It may not be needed at all if the market remains strong throughout the life of the individual, and its pricing takes this into account.

For a retirement income product of this kind to have wide appeal in the Australian context, however, it is likely that the policy and regulatory environment

[14] Huang, Milevsky and Salisbury (2009) suggest that such a deferred annuity could be offered as a separate product – what they term a Ruin Contingent Life Annuity, or RCLA.
[15] For example, Bateman et al (2001), chapter 5.

would have to be changed. Until the abolition of all taxes on superannuation benefits in 2007, there would have been taxation issues relating to capital repayments which would have likely made the product unappealing. In the present environment, means test rules are likely to be problematic. There would be no assets test exemption for such a product, partly because an allocated pension allows the annuitant to vary drawdowns, and thus potentially manipulate income to exploit the structure of the income test. In addition, the Australian Prudential Regulatory Authority may well have heavy requirements around capital adequacy, and may also insist that a deferred annuity holder dies before the annuity is in payment, a surrender value must be paid to the estate.

Each of these agencies is acting in what it sees as a responsible fashion in light of its own mandate. But the overall effect may well be to effectively ban an appealing longevity insurance product. What is needed is a coordinated approach to the regulations and policies impacting on retirement income products so that greater longevity insurance is encouraged.

References

AMP-NATSEM, 2007. “Baby-boomers – doing it for themselves”, *Income and Wealth Report*, Issue 16, March.

Bateman, H., 2007. “Old age income protection in Australia”, *Discussion Paper 06/07*, Centre for Pensions and Superannuation, Australian School of Business, University of New South Wales.

Bateman H and G Kingston, 2007. ‘Superannuation and Personal Income Tax Reform’, *Australian Tax Forum*, 22, 3: 137-163.

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

Bateman, H., G. Kingston and J. Piggott, 1993. "Taxation, Retirement Transfers and Annuities", *Economic Record,* 69, 206, September, 274-84.

Bateman, H. and S. Thorp, 2007. “Choices and constraints over retirement income streams: comparing rules and regulations”, *Economic Record*, 84, September, S17-S31.

Brunner, G., and C. Thorburn, 2008. “The Market for Retirement Products in Australia”, *Policy Research Working Paper 4749*, World Bank, Washington DC.

Department of the Treasury, 2007. *Intergenerational Report 2007*. Australia.

Doyle, S., O. Mitchell and J. Piggott, 2004. “Annuity Values in Defined Contribution Retirement Systems: Singapore and Australia Compared”, *Australian Economic Review,* December, 402-416.

Ganegoda, A. and H. Bateman, 2007. “Australia’s disappearing market for life annuities”, *Discussion Paper 01/08*, Centre for Pensions and Superannuation, Australian School of Business, University of New South Wales.

Huang, H., M. Milevsky and T Salisbury, 2009. “A Different Perspective on Retirement Income Sustainability: The Blueprint for a Ruin Contingent Life Annuity (RCLA)”, *Journal of Wealth Management*, Spring, forthcoming.

Kelly, S. and Harding, A. 2007, “Baby boomers - doing it for themselves”, *Australian and New Zealand Institute of Insurance and Finance Journal*, 30, 4, 16-19.

Knox, D., 2000. “The Australian Annuity Market”, *Development Research Group*, World Bank, Washington DC.

Plan for Life, 2008. *Retirement Monitor*, June.

Walliser, J., 2000. “Regulation of Withdrawals in Individual Account Systems.” *Social Protection Discussion Paper series, No. 0008.* World Bank.

Annex 1:
Timeline of Policy Changes to Retirement Income Products

Time	Age Pension Means Test Treatment	Taxation Treatment
Pre 1983	Superannuation benefits take full value under income and asset tests	5% of lump sum amount taxed at marginal rates Income stream taxed at Personal rates
1983-1988	↓	30% tax rate to lump sum if amount greater than $50,000 indexed, 15% otherwise Income stream taxed at Personal rates 1988: Tax rulings IT2480 and IT2492 defining an annuity for taxation purposes
1988-1998	↓	Annuities UPP treatment
1998	Complying Annuities introduced 100% assets test exemption up to certain limit 1997-98 superannuation surcharge introduced Change in Age Pension income test taper to 40%	↓
1999	↓	Reduce capital gains tax rate for superannuation funds to 10%
2004	Amount of exempt assets reduced by 50%	↓
2005	2004-05 superannuation surcharge abolished	Transition to retirement
2007	Assets test exemption for complying annuities and TAPS abolished Income adjusted for return of capital	No tax of benefits (60+) Earnings on underlying assets tax exempt if satisfy minimum standards.

Sources
Plan for Life: Unpublished data and communications
Chronology of retirement income policy in Australia
Appendix B: History of superannuation

Annex 2:
Australian pensions or annuities - including superannuation pensions by taxable income in 2005-06*

	Less than $15,000			$15,000-$24,999			$25,000-$34,999			$35,000-$44,999			$45,000 and above			All		
	Average	Total Amount	Number	Average	Total Amount	Number	Average	Total Amount	Number	Average	Total Amount	Number	Average	Total Amount	Number	Average	Total Amount	Number
	$	$m		$	$m		$	$m		$	$m		$	$m		$	$m	
Less than $10,000	6734	157	23250	18714	89.668665	4792	28912	44	1530	39123	15	395	70329	37	522	11238	343	30489
$10,000-$19,999	7,655	748	97,724	18,680	572	30,613	28,905	194	6,700	38,819	79	2,025	62,574	72	1,144	12,038	1,664	138,207
$20,000-$29,999	9,291	616	66,285	19,664	1,301	66,166	28,568	615	21,536	38,844	178	4,571	61,572	197	3,198	17,969	2,907	161,755
$30,000-$39,999	8,385	151	17,980	20,584	511	24,848	29,901	1,106	37,000	38,172	484	12,669	59,350	232	3,912	25,769	2,484	96,410
$40,000-$49,999	8,499	86	10,148	19,855	200	10,067	30,311	335	11,065	39,816	627	15,746	57,347	468	8,156	31,101	1,716	55,181
$50,000-$59,999	8,566	63	7,409	19,523	150	7,664	30,143	174	5,769	39,891	227	5,687	57,511	545	9,478	32,186	1,159	36,008
$60,000-$69,999	8,503	45	5,332	19,357	115	5,944	29,819	113	3,773	39,582	133	3,361	66,211	468	7,073	34,308	874	25,482
$70,000-$79,999	8,572	26	3,070	19,626	87	4,451	29,750	81	2,728	39,887	76	1,912	69,046	313	4,540	35,003	585	16,701
$80,000-$89,999	8,371	17	1,994	19,665	63	3,204	29,941	55	1,836	39,602	54	1,354	74,326	251	3,370	37,318	439	11,758
$90,000-$99,999	8,203	13	1,575	19,802	39	1,947	29,445	39	1,320	39,429	41	1,051	77,762	198	2,553	39,105	330	8,446
$100,000-$124,999	7,772	19	2,491	20,000	62	3,093	29,807	53	1,769	39,982	55	1,378	86,137	348	4,037	42,042	537	12,769
$125,000-$149,999	7,937	15	1,928	19,586	33	1,675	29,884	33	1,107	39,952	28	704	94,644	219	2,313	42,481	328	7,727
$150,000-$174,999	7,939	10	1,198	19,943	22	1,127	29,731	25	832	39,304	24	612	94,593	171	1,803	45,110	251	5,572
$175,000-$199,999	8,227	6	711	20,412	12	585	29,920	12	417	39,383	16	405	102,898	128	1,246	51,854	174	3,365
$200,000-$224,999	8,256	4	430	19,656	7	355	30,269	7	231	39,270	7	187	112,809	91	810	57,752	116	2,014
$225,000-$249,999	8,388	2	268	19,123	5	237	30,028	3	112	39,346	4	94	123,905	71	573	66,102	85	1,284
$250,000 and above	8,410	5	630	19,746	12.311214	623	30,049	13	430	39,793	18	461	198,154	546	2756	121,408	595	4900
All	8,181	1,983	242,420	19,598	3280.514492	167392	29,571	2,903	98157	39,269	2,066	52612	75,758	4,355	57486	23,602	14,587	618067

Source: Australian Treasury, unpublished data.

Annex 3:
Phase-in arrangements

Age Pension – women

For a woman born:	They qualify for Age Pension at:
Before 30 June 1944	63 years
Between 1 July 1944 and 31 December 1945	63.5 years
Between 1 January 1946 and 30 June 1947	64 years
Between 1 July 1947 and 31 December 1948	64.5 years
After 1 January 1949	65 years

Access ages for superannuation benefits

For a person born:	Their preservation age is:
Before 1 July 1960	55
Between 1 July 1960 and 30 June 1961	56
Between 1 July 1961 and 30 June 1962	57
Between 1 July 1962 and 30 June 1963	58
Between 1 July 1963 and 30 June 1964	59
After 30 June 1964	60

Source: Australian Treasury