

# Australia's piece of the puzzle – why don't Australians buy annuities?

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## ABSTRACT

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An individual who purchases a lifetime annuity is guaranteed to receive an income for life. As such this purchase would confer protection against investment and longevity risk for the individual in retirement. Despite these advantages, annuity sales in voluntary markets generally remain low. Reasons for this state of affairs from the current literature are reviewed, and further reasons particular to the Australian context are suggested. This contributes to an understanding of the factors that underlie the lack of popularity in contexts other than Australia as well.

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## KEYWORDS

annuities, annuity puzzle, longevity risk, retirement income

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## INTRODUCTION

In retirement, individuals are exposed to longevity risk, investment risk and inflation risk. Longevity risk for individuals arises from uncertainty around the length of their future lifetime, leading to the possibility that retirement savings may be inadequate to sustain the individual throughout their life. This is exacerbated by overall trends of increasing life expectancy. Investment risk is the possibility that the individual's investment will not yield the returns required to provide an adequate income in retirement. This is also related to inflation risk, whereby levels of savings or returns on investments, or both, may not be sufficient to maintain purchasing power in real terms into the future, as a result of inflationary pressures.

Additionally, the consequences of poor financial decisions and outcomes are particularly significant in retirement, as there is less opportunity to rectify or recover from serious adverse outcomes at older ages – as DiCenzo et al (2011) state: “the allowable margin of error is narrow, the time to ‘make up’ for mistakes short, and the potential consequences of blunders dire”. The combination of all the above risks means there is much interest on how to prevent or at least mitigate the possibility of retirees running out of sufficient funds for a reasonable lifestyle in retirement.<sup>1</sup>

It might be argued that there are many ways to mitigate longevity and investment risks for the individual, particularly in a context such as Australia, where there is some protection against longevity risk due to the provision of a taxpayer-funded Age Pension. Indeed, various options have been proposed within the Australian context:<sup>2</sup>

1. provide incentives for individuals to stay in the workforce for longer, particularly beyond the eligibility age for the commencement of the Age Pension
2. introduce the option, and incentivise the ability, to take up a deferred Age Pension
3. increase Age Pension payments or the age of eligibility or both

4. increase the superannuation preservation age in line with the Age Pension eligibility age
5. introduce a universal Age Pension for individuals over age 85
6. simplify means-testing associated with the Age Pension
7. change taxation arrangements
8. broaden superannuation contributions
9. introduce a broader range of income products that account for investment and longevity risk
10. encourage greater member superannuation contributions through ‘soft compulsion’.<sup>3</sup>

Some options have been challenged: for example, it is argued that the superannuation preservation age should always be below the Age Pension eligibility age to provide flexibility for retirement at various ages according to individual circumstances. Furthermore, aligning the two by increasing the superannuation preservation age could force more older Australians into poverty, and further entrench inequality (Schubert et al 2009).

However, and of particular note, with many individuals expected to outlive their savings and with the Age Pension in Australia providing a standard of living lower than most would consider comfortable (or even modest), there is a growing need for a new range of retirement income products that provide protection against investment and longevity risk. This need could potentially be met by incentivising the development of the Australian annuity market (McNamara & Swinhoe 2009; Patten 2011).

Despite advantages in delivering a guaranteed income in retirement, annuities are not, however, a popular choice of product. This lack of demand is termed the annuity ‘puzzle’ and in this paper we review the reasons for this state of affairs, which provides a complement to a recent paper presented by the Actuaries Institute’s Retirement Incomes Working Group (RIWG 2013). We first summarise a recent and significant US Society of Actuaries study into this matter, to which we add some additional general

1 Establishing to what extent retirees outlive their savings, or otherwise, is not straightforward. Any conclusions are subject to significant uncertainty given poor availability of data, changing mortality, and especially the uncertainty around the level of health and long-term care costs (Max 2003; Metlife 2010). Further complicating this are changing attitudes to bequest motives and responsibilities, as many retirees now feel less pressure to leave money to the next generation (Max 2003). Such changes are colloquially summed up by the emergence of the SKI (spending kids’ inheritance) club (Brown 2012). Nevertheless, one (approximate) approach could be to consider how many people receive or are expected to receive an inheritance from parents, with such an inheritance suggesting that the parents’ retirement savings were reasonably sufficient. However this would assume that people either leave money to their children, or outlive their savings, which is an unreasonable assumption for many (for example, those living on a combination of Defined Benefit (DB) pensions, annuities and government pensions, may leave nothing to their children but certainly do not outlive their savings). Various Australian studies suggest that mean inheritance amounts peaked in 2006 and are now decreasing, that increased longevity and more active lifestyles mean much of retiree’s savings will be spent, and that only one quarter of households felt that their superannuation savings would provide for a comfortable retirement (Brown 2012). Rather than indicate absolute levels of how many are expected to outlive their savings, this might be better viewed as indicating relative changes in expectations about the sufficiency of savings over time.

2 Sources: Actuaries Institute (2012), IAAust (2008, 2009a), Knox (2009), Nance et al (2008), NATSEM (2009), Mercer (2008, 2009, 2013), Schubert et al (2009).

3 Under ‘soft compulsion’ a new employee, or an existing employee who receives a wage increase, would have a percentage of their salary deducted to contribute towards superannuation savings, with the ability to opt out of these additional contributions under certain circumstances.

possibilities that are not necessarily specific to any one context. We then offer some further thoughts relating more specifically to the Australian context.

## 1 ANNUITIES AND THE ANNUITY 'PUZZLE'

A wide range of annuity products are available across various markets. Payments arising from an annuity may be level (payments fixed in nominal terms), inflation-indexed (payments fixed in real terms), or 'graded' (where they increase or decrease at a pre-specified rate). The types of annuities that have been developed include:

- *Conventional (lifetime) annuities*: provide an income with payments at regular periods for life.
- *Temporary annuities*: provide an income stream, with payments ceasing on the earlier of death or when a maximum number of payments is reached.
- *Deferred annuities*: provide an income stream commencing at some point in the future provided the annuitant is still alive at that time.
- *Guaranteed (or term-certain) annuities*: provide payments that are guaranteed for a pre-specified term, regardless of death or survival.
- *Value-protected annuities*: in the event that the accumulated sum of annuity payments is less than the initial premium when death of the annuitant occurs, still pays the difference to the annuitant's estate.
- *Participating annuities*: the profit experience of the insurer is shared with annuitants (but subject to a minimum of payments equal to the principal plus a minimum investment return).
- *Investment-linked annuities*: payments are directly related to the underlying investment fund value, but the mortality risk is still borne by the insurer.
- *Variable annuities*: essentially savings vehicles that allow investment of funds in a range of investment options, with the policyholder in return receiving the accumulated value of funds as periodic payments, guaranteed or otherwise, or as a lump sum.
- *Guaranteed lifetime withdrawal benefits*: allow annuitants the right to withdraw as a regular payment a (capped) percentage of their total investment, thereby providing guaranteed payments for life and offering some protection against investment losses.

An individual who purchases a life annuity is guaranteed to receive an income for life. For an individual who would otherwise outlive their retirement savings, the main advantage of purchasing a life annuity over other retirement income products is therefore protection against longevity risk. The iconic life-cycle work of Yaari (1965) established that, under certain conditions, a rational investor faced with longevity risk is best (in terms of maximising utility) to use an annuity to sustain their standard of living throughout retirement, and that, in the absence of a bequest motive, annuities should actually form the entirety of an individual's retirement portfolio.<sup>4</sup> In addition, purchasing an annuity provides protection against investment risk by transferring this risk to the annuity provider.

As well as the protection against longevity and investment risk, other benefits also exist with annuities: for example, the guaranteed nature of the income can relieve some concern and stress in retirement, as the management of financial planning and budgeting is helped with the guaranteed stability of income. A further benefit could be that an annuity allows individuals more freedom to take a more aggressive investment approach with other assets or wealth, or to plan for bequests or philanthropic endeavours with more certainty (MacDonald et al 2011).

### 1.1 The Annuity Puzzle

Despite the apparent strengths of annuities, although some exceptions exist, they are generally not popular other than in markets where annuity purchase is compelled, such as in Singapore and the United Kingdom (Cannon & Tonks 2008). Indeed, in the United States, less than 10% of retirees receive guaranteed income for life from private annuities (LIMRA, SoA and InFre 2009), and in Japan and New Zealand the annuity markets are also small, stemming from relatively generous state-provided pension systems (Rusconi 2008). In Australia the number of companies providing regular quotes on life annuities fell from eleven in 1998 to four in 2008 (Brunner & Thorburn 2008; Ganegoda 2007), with the RIWG (2013) also pointing out that almost all retirement income streams come from account-based pensions, across both the retail and industry fund sectors.

The lack of demand for annuities, known as the 'annuity puzzle', is the significant difference between expected annuity purchase behaviour based on a fully rational model, such as that proposed by Yaari (1965), and actual annuity purchase behaviour (DiCenzo et al 2011).

<sup>4</sup> Yaari's lifecycle model and conclusions have been challenged, tested, extended and varied by many subsequent researchers. For example, extending the mortality assumption from deterministic, as used by Yaari, to stochastic, as considered by Milevsky et al (2011).

## 2 GENERAL REASONS FOR THE PUZZLE

The US Society of Actuaries (SoA) recently released a comprehensive review of the reasons why people do not purchase annuities to the extent expected (MacDonald et al. 2011).<sup>5</sup> These reasons fell into three main categories:

1. rational decisions arising from personal preferences and circumstances
2. rational decisions arising from environmental limitations
3. decisions arising from behavioural biases.

We summarise the SoA report's main reasons for the annuity puzzle, in tables 1 to 3.

<sup>5</sup> This was also more recently published in the *North American Actuarial Journal* (MacDonald et al 2013).

**Table 1: Rational decisions arising from personal preferences and circumstances**

Reason	Explanation
Loss in liquidity	An annuity, once purchased, cannot be cancelled, regardless of financial need.
Loss of bequest	Annuitised wealth cannot be left as a bequest as, by design, unused premium subsidises other annuitants in the pool.
Benefit to delay	Annuitisation may be delayed to older ages, with the perception that this provides better value or a better price for benefits received.
Low risk aversion	Some retirees may be willing to accept a volatile income stream, so less value is placed on the stability offered by an annuity.
High personal discount rate (hyperbolic discounting)	Higher priority is placed on some consumption (e.g. travel, or considerations due to health/practical issues prioritised) in the short and medium term, rather than longer term.
Short life expectancy	Those in poor health, or perceived poor health, view annuities as expensive.
Risk pooling within families	Families (whether couples or intergenerational) can pool their risk, with consequently lower utility to be gained by annuitisation.
Confidence in personal financial abilities	Those with high financial literacy are less likely to choose to annuitise and more likely to choose to self-manage their retirement funds.
Other sources of guaranteed income	Other guaranteed income streams may be present, such as employer pension plans or social security or both.
Illiquid wealth	Some assets may be illiquid (e.g. business ownership) and not easily made available for annuitisation.
Discouraging level of income	Low levels of savings may discourage individuals from annuitising as the income stream is perceived as too low to be of any practical use.
Debt	A better use of retirement funds may be to pay off immediate debt, rather than consider longer term income streams.

**Table 2: Rational decisions arising from environmental limitations**

Reason	Explanation
Expensive pricing	The premium exceeds the actuarial present value of the benefits, giving rise to the perception of expensive pricing.
Poor financial market environment	Purchasing at a point in time locks in the investment rate assumption prevailing at that point in time.
Incomplete annuity market	There may be a mismatch between the desired pattern of payments for consumption purposes and the payments arising from an annuity (for example, level versus decreasing payments, or nominal versus real).
Access	In the US the process to purchase an annuity can be complicated and it is rare for retirement savings plans to offer an annuity.
Distrust of annuity providers	With no government guarantee, even a minor risk of a provider's default would be expected to have a significant impact on annuity purchases.
Sex-distinct mortality assumptions	Annuities are generally priced using sex-distinct mortality tables, so that a male pays less than a female for an equivalent payment stream. This may discourage women from annuitising. Conversely, the introduction of unisex rates would discourage males from annuitising.
Tax treatment	The extent of encouragement or discouragement of annuitisation varies significantly across countries according to their taxation policies, but this is often ignored in the literature.

**Table 3: Decisions arising from behavioural biases**

Reason	Explanation
Decision framing	The annuity decision can be framed as a means to guarantee an income for life (a 'consumption' frame) or an option that could result in loss of all assets due to early death (an investment frame). An example of a pure framing effect in the UK, for example, is that members of defined benefit schemes who receive a pension and a tax-free lump sum appear to be relatively happy with this arrangement, while members of defined contribution schemes who are subject to compulsory annuitisation appear to resent this requirement (Cannon & Tonks 2008).
Longevity gamble	Some may view an annuity as a gamble regarding time to death, with the odds in the favour of the insurance company.
Perception of insurance	Individuals may perceive insurance as covering "bad" events only, and since living a long time is not considered "bad", the longevity aspect of an annuity is not valued.
Absence of comprehensive plans	Rules of thumb or intuition, rather than something more comprehensive, which includes all assets, income sources and potential expenditure, may dominate wealth management plans.
Control	Greater control may be perceived in holding wealth rather than receiving income. This is particularly relevant in the context of financial needs varying over time, especially with respect to health-related costs in retirement (Auty 2014).
Buyer's remorse	The fear of not getting an optimal price or missing out if changing investment conditions lead to an aversion to annuities.
Regret aversion	The possibility of regretting a purchase (through, for example, diagnosis of a fatal disease soon after purchase) is avoided permanently by not annuitising.
Misinformation	Most individuals are likely to have little knowledge of how annuities work and the benefits they offer.
General financial illiteracy	Even if access to information was readily available and shared, the appreciation of investment and longevity risks is likely to be intangible for many.
Individuality	The predominance of individual perceptions and interests rather than collective solutions does not lend itself to the concept of risk pooling in retirement.
Default options	Where annuities are not the default option in a pension or savings plan, the choice of annuitising is lessened.
Historical view on personal retirement savings	Savings not tied into traditional defined benefit pension schemes may be seen as extra, discretionary wealth, rather than something needed for longevity protection purposes.
Other	People are simply averse to thinking about unpleasant events such as dying or being old and poor. People are ignorant of the probability of survival, with most people underestimating how long they are likely to live for (Auty 2014). Procrastination reigns for important decisions: it's easier to do nothing than something.

The reasons outlined in the SoA report could arguably be extended, to also include the following issues that may apply generally and not necessarily specifically to any one particular context.

**Table 4: Additional reasons for not taking an annuity**

Reason	Explanation
Ambiguity aversion	The familiar is preferred to the unfamiliar. This might also be exacerbated by 'optimism bias', which is akin to 'confidence in personal financial abilities' listed in Table 1 above.
Mental accounting	MacDonald et al (2011) also suggest mental accounting as a factor when taking a 'longevity gamble' (see table 3 above), which includes asking whether one will live long enough to make an initial investment worthwhile. Other aspects to mental accounting include (Thaler 1999): <ol style="list-style-type: none"> <li>1. How situations are perceived—for example, choosing between a 500 mL can of coke for \$1.50 and a 1.5 L bottle for \$1.75: does the decision depend on a comparison of price and volume, or actual need at the time?</li> <li>2. Assigning certain activities to certain accounts.</li> <li>3. How frequently these separate accounts are evaluated, and whether their separation and intent has a short or long time horizon.</li> </ol> Various implications of such categorisation of financial needs may impact how an individual ascertains and assigns value between 'future income' and 'immediate needs'.
Peer influence	Many investment decisions are influenced by peer choices (Duflo & Saez 2002), so given that annuities are not popular, negative opinions of others regarding annuity purchases may be influential on potential purchase decisions. This also relates to behavioural biases of 'herding', social norms and groupthink.
Conditioning	The focus is usually on option-taking at retirement, but the period to influence annuity purchase is potentially during an individual's working life, as attitudes to annuities may be in place well before retirement (DiCenzo et al 2011).

### 3 REASONS IN THE AUSTRALIAN CONTEXT

In this section we discuss further some reasons that may add to an understanding of the annuity puzzle, based on some of the factors more specific to the Australian context. We focus on four issues of potential influence: the structure and some regulatory aspects of the Australian system of retirement provision; the perception of expense; issues relating to marketing and distribution of annuities; and societal trends to individualisation.

#### 3.1 The Australian System of Retirement Provision

The Australian retirement income system consists of three major pillars:<sup>6</sup>

1. a means-tested Age Pension that is financed from general taxation revenue
2. a mandatory private retirement savings component with minimum employer contributions (9.5% as of 1 July 2014)
3. a voluntary private retirement savings component, with additional contributions made at the discretion of employers or individuals or both.

We highlight two issues that arise from this system – the impact of the Age Pension, and the lack of encouragement for using superannuation and other savings to purchase an annuity.

##### 3.1.1 The impact of the age pension

The Commonwealth of Australia first introduced a means-tested ‘flat-rate’ Age Pension that was financed from general tax revenue in 1909, paid to men from age 65 and women from age 60, subject to a residency qualification (ABS 1988). Many changes have occurred since then, relating to eligibility criteria, the adequacy or level of payments, and the level of coverage across all those of entitlement age. Such changes have occurred in line with cost pressures, public policy goals and political will, highlighting that the Age Pension is not and is not likely to be a limitless source of outlay for government that is independent of other public needs. In fact, the current means testing of the Age Pension places Australia relatively lightly in terms of Age Pension spending when compared with other OECD countries, especially those whose pensions are based on pre-retirement income (Treasury 2007).

By default, the Australian Government ends up insuring many individuals against longevity risk

through the provision of the Age Pension. However, it is not just longevity risk that the Age Pension provides some mitigation against – as Gribble (2012) highlights, additional benefits arising from the fact the pension is government-provided includes the mitigation of investment, inflation, and counter-party risks. As such, it is possible that some ‘crowding-out’ of the need for annuitisation occurs (RIWG 2013).

However, although the full Age Pension rate provides an income close to a rate that could provide for a modest lifestyle (RWA 2012), it does fall short of what is perceived as a comfortable income according to various measures, such as the Westpac ASFA Retirement Standard and the OECD (2009) poverty threshold. Furthermore, given the observation that many retirees continue to draw on significant assets in retirement, a need for annuitisation of some significance should still be apparent, with any crowding out effects more likely to be applicable for those with lower levels of assets (RIWG 2013).

##### 3.1.2 Lack of encouragement for annuity purchase

The introduction of the Superannuation Guarantee Charge (SGC) in 1992 made the provision of superannuation savings compulsory for virtually all employees. Previously, superannuation was only provided for a more select group, including higher paid white collar staff in large corporations, financial sector employees, public servants and defence force members (APRA 2007). The legislation initially required employers to make tax-deductible superannuation contributions of 3% of salary to their employees, which gradually increased to 9% in 2002–03 (APRA 2007), and again to the current level of 9.5%. The RIWG (2013) highlighted two issues with this system of superannuation savings: first, superannuation is generally framed in terms of wealth accumulation rather than a provision of income; and second, the incentives for the derivation of an annuity income are limited.

In terms of the framing issue, pre-retirement savings and post-retirement planning have tended to be treated separately, so that what an individual sees accruing over their working life is not placed in the context of what that could provide in retirement as an income. This is curious, given that the major aim of the SGC was to provide a mechanism for individuals to fund their retirement (FaHCSIA 2009; IA Aust 2009b), which infers the derivation of income. Given this separation, it is perhaps unsurprising that the most popular retirement income product in Australia, an allocated pension, is one in which the policyholder

6 Some industry experts also describe home ownership as a fourth pillar of the Australian system (for example, Knox 2010).

essentially carries both longevity and investment risks.<sup>7</sup>

As well as the issue of 'framing' pillar 2 as a savings scheme, there are or have also been regulatory disincentives to annuitise. For example, the attractiveness of annuities in Australia suffered when their exemption from the Centrelink assets test was phased out between 2004 and 2007 (Korporaal 2011). Additionally, the Actuaries Institute itself has made recommendations to have deferred lifetime annuities, in particular, made more readily available. It has suggested that a deferred lifetime annuity be treated as a pension, so it is exempt from income tax in its payment phase after the deferment period (Actuaries Institute 2012). The RIWG (2013) highlighted that in response to this and other advocacy from various sources, the government has agreed that deferred lifetime annuities would receive the same taxation concessional treatment as other income streams which arise from superannuation.

### 3.2 Pricing and perception of expense

Although it is likely that no single reason can explain the annuity puzzle in a given market, of particular interest is the perception that expense is a barrier to annuity purchase. Indeed, it does seem to be a relatively widely held view that annuities are expensive, or represent poor value for money,<sup>8</sup> and that the demand for annuities is sensitive to pricing (Brown 2008). A further explanation for the annuity puzzle may, therefore, reside in how the supply side of the equation drives the pricing of annuities, with various factors suggested as unhelpful to the marketing and development of more attractive annuity products.

One factor is the size of the Australian market. In terms of potential purchasers, the market is limited in numbers and hence raises difficulties in pooling longevity risk. In terms of the very small number of annuity providers, the lack of competition could potentially lead to monopolistic-type behaviour (Cannon & Tonks 2008). With limited choice, consumers are not able to shop around for options, as would be the case in larger markets, such as the United Kingdom (see, for example, Gosden 2014).

A major influence on pricing is the influence of adverse selection. This occurs when individuals with longer life expectancy, or higher levels of self-perceived

health status, are more likely to purchase an annuity than those who have lower life expectancy or perceive themselves as being in poorer health. Given that the insurer has less information about the health status of applicants than the applicants themselves, insurers therefore assume that it is the healthier group that purchases annuities (in a voluntary market) and hence would likely account for this within their pricing. This results in the annuity becoming poorer value for those perceiving themselves to be of poorer health. A cyclical effect can kick in as higher premiums are charged to protect against adverse selection, which in turn deters potential customers and decreases purchases, thus creating an even more select group of purchasers, and so on. The cost of adverse selection in annuity markets in the Australian context is considered significant (Ganegoda 2007).

Another factor relating to mortality is that mortality risk cannot be totally diversified away, no matter how large the exposure is. Systematic mortality improvements are those that impact the entire population, and insurers also have to account and price for this (Brown 2008; Rashbrooke 2008). This may also result in insurers adopting relatively conservative assumptions, which again would increase the premium.

A further factor in pricing and perceptions of expense is the claim that the limited availability of inflation-linked securities and long-term government bonds to match the long-term nature of annuity liabilities is impeding the ability of insurers to hedge inflation, interest rate and longevity risks (Cannon & Tonks 2008). There have been attempts internationally to develop mortality and longevity-based capital instruments to allow successful management of investment and longevity risks in retirement. However, the success of instruments such as mortality and longevity bonds, and mortality swaps has been mixed to date (Blake et al 2006; LIWMPC 2009; Nance et al 2008). It seems that unless relevant capital instruments are developed and available to annuity suppliers, there is likely to be limited potential for annuity market growth in the Australian context.

In terms of the resultant perceived high cost of annuities, many researchers employ the concept of 'money's worth' to quantify the value of an annuity, which is the ratio of the present value of annuity

7 Allocated pensions make up 85% of the retirement income market (IFSA 2007). Colloquially, an allocated 'pension' is so called when it is purchased from superannuation savings (pillar 2), otherwise it is an allocated 'annuity'. There are many reasons to invest in such a product: it allows single premiums from which regular withdrawals can be made to provide an individual with an income; favourable tax treatment applies compared with other products, by providing tax-free earnings on the assets backing the investment and potentially providing a tax-free portion of overall income. Individuals also have flexibility to decide how to invest their funds (IAAust 2009b). Nevertheless, the longevity and investment risks are significant: for example, for a starting retirement savings account balance of \$360,000 which is invested in an allocated pension with 30% in domestic equities, Rawlinson and Cater (2008) project a 46% chance that the retirement savings of a 60-year-old male will be depleted by age 86. The seriousness of investment risks has also been highlighted by the recent volatility of equity investments stemming from the global financial crisis (GFC).

8 For example, see Blake (1999), Blight and Longden (2007), Brown (2008), Ganegoda (2007), Harmer (2009), Heijdra and Mierau (2009), Henry (2009), Heyman and Hickey (2007), Mitchell and McCarthy (2002), Orszag (2000), and RIWG (2013).

payments to its current price. A money's worth ratio less than 1 implies that annuitants will receive less in future payments than they pay to buy the annuity, on an expected present value (EPV) basis. This is not only due to the required conservatism around mortality as described above, but also due to the need for insurers to cover expenses, tax, profit and the cost of reserves. Evidence from Australian experience has found money's worth ratios consistent with international norms, the majority of ratios lying between 0.85 and 0.95 for level annuities (Knox 2000). More recent evidence however finds a significant fall in the money's worth of level annuities to between 0.75 and 0.80, and ratios as low as 0.66 for index-linked annuities purchased by males (Ganegoda 2007). It should be noted in this context, too, that arguably it is doubtful whether the public's aversion to annuities would be eliminated, even if the money's worth ratio was much higher. Commonwealth employees, for example, upon reaching preservation age are offered a lifetime pension (in essence an annuity) that has an actuarially fair value of 1.6 times the lump sum value offered. Despite this, almost half of employees opt to take a lump sum (Mercer 2009).

### 3.3 Marketing and distribution

However, all is arguably not lost in terms of generating demand in a situation where an individual has a choice to invest or not invest in an annuity. Indeed, an annuity having an EPV of premiums greater than the EPV of benefits makes it little different from other insurance products. For example, consider a yearly renewable term (YRT<sup>9</sup>) product in terms of its 'money's worth' value. In the Australian market this would typically be in the range of 0.40 to 0.70 after taking into account expenses, profit, commission and tax. Clearly the psychological aspect of paying a regular and relatively small premium versus a large single premium plays a part in comparing the two products, but nevertheless the 'value' of a YRT product is arguably lower than the lower estimate for an annuity, and yet levels of YRT sales are very significant in Australia.

Therefore, when discussing the merits or otherwise of annuities, it might be informative to turn the concept of a 'money's worth' ratio on its head: if an adviser has a client who has been a YRT policyholder, then a comparison of respective money's worth ratios of that product with that of an annuity may help show that a key decision for the client is one of 'value', not necessarily 'expense'. In other words, if the client has been happy to pay YRT premiums for a number of

years on a product with a money's worth ratio of 40% to 70%, then informing them of options around an annuity contract with a far higher money worth's ratio may be helpful. Perhaps this could even be more easily presented in the context of a product like a Guaranteed Lifetime Withdrawal Benefit (GLWB), whereby the longevity insurance is paid for via regular fees, thereby slightly circumventing the issue of parting with a large single premium. Indeed, it would be interesting to compare consumers' perceptions of combinations of various ways to pay for longevity insurance, through regular payments for life, regular payments for a fixed term (for example, through a deferred annuity), or payment of a single premium. This may give interesting insights into the trade-offs made by consumers (probably unknowingly) between the 'palatability' of parting with premiums or fees, or both, of a certain magnitude, and the consequent impact on either actual or perceived 'value'.

Nevertheless, if the cost of annuities is indeed perceived as expensive relative to the value embedded in the product, then perhaps a way to encourage annuity sales is to adopt a similar approach as that used for popular risk products (such as YRT). Other than for tax and issues around the entitlement to the Age Pension, two major issues may be highly relevant in the Australian context: the framing of the product and the incentive for the adviser to sell or recommend an annuity. An annuity framed in an insurance context is clearly a different proposition to one framed in an investment context – an interesting study would be to investigate advice and marketing in this regard. Furthermore, have the levels of remuneration for advice or recommendations on annuities been at the required level to encourage this market? Indeed, Macdonald et al (2011) also raise 'seller incentives' as a 'rational decision arising from environmental limitations' (Table 2) and suggest that perhaps annuities also need to be 'sold and not bought'. However, advisers may be averse to sell single premium immediate annuities due to the lack of financial incentives, such as a lack of renewal commission or future asset advice (DiCenzo et al 2011). Yet, it has also been suggested that, in the United States, variable annuities are perceived as being pushed by agents looking for a large commission, which is offputting for consumers (Mills & Mills 2011). Quite clearly the contrapositive and logically equivalent claim that high levels of sales implies that commissions are low is not particularly illuminating, yet in the Australian context the relationship between adviser remuneration and annuity sales has not been explored

<sup>9</sup> YRT is a "death only" product that pays out upon the death of the policyholder. The premium paid for YRT increases with age of the policyholder to reflect the increasing probability of death, and the policyholder is guaranteed the right to renew his or her policy without any proof of health as long as the premium is paid (IAAust 2009b).

in great detail. With the Australian financial advisory business moving from a commission-based system to a fee-for-service model (now mandated for new investment products, and for some but not yet all life insurance products), the impact of this regulatory and cultural change on the sales of annuities remains to be seen – but may be particularly enlightening.

### 3.4 Individualisation

A societal trend to greater individualisation may also be a factor in annuity demand being low. Many baby boomers no doubt perceive a push to become more self-sufficient in retirement as their superannuation balances grow and as means tests and age of entitlement for the Age Pension increase, as just two among many trends that suggest a culture of self-interest rather than community interest being paramount. However, self-sufficiency is not necessarily synonymous with having no other help: indeed, many people rely partly on their family to help and provide for them in retirement, given the role of families to provide some pooling of resources in a financial and practical context (MacDonald & Moore 2011). Nevertheless, having to enter into more involved financial decisions and strategies as individuals has also been unwittingly forced upon people through other trends in recent years, including deregulation of the financial services industry and, in particular, the availability of significant sums of money and options for shareholding in demutualised institutions for individuals who have not previously been concerned with such things.<sup>10</sup>

As a result, risk in providing for an individual's retirement has been transferred, by and large, from employers and the government to individuals. This is perhaps even more pointed in the Australian context because of the compulsion, magnitude and growth in superannuation across all employees. The lack of a link between such growth and significant funds with any income derivation as such is, to reiterate an earlier point, potentially a strong conditioning aspect of the system that is not given enough credit. Individuals are not attuned to the concept or worth of pooling mechanisms, particularly for the purposes of income derivation, and familiarity with such mechanisms declines even further as defined benefit superannuation schemes diminish as well. In effect, a push to greater individualisation and self-sufficiency leaves less scope and interest in the collective pooling of financial welfare.

## 4 CONCLUSION

In this paper we have reviewed various reasons that have been suggested for the apparent 'puzzle' that the demand for annuities in voluntary markets falls significantly short of what might be expected. Many of these reasons apply to general contexts that are not specific to any market in particular, but some aspects of these and other potential reasons may be highly relevant in the Australian context. These include the provision of an Age Pension, which provides some mitigation against longevity, investment, inflation and counter-party risks; the nature of Australia's superannuation system, which predominantly focuses on the attainment of savings rather than the provision of a retirement income; a lack of incentive for retirees to annuitise; the perception that an annuity's value is low; issues around marketing and distribution; and implications of societal trends to greater individualisation and self-sufficiency.

With longevity risk, investment risk and inflation risk being tangible and significant factors that retirees should be cognisant of and accordingly plan for, an understanding of these reasons may help inform a stronger market in the future for products that mitigate against these risks.

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10 Others such as John Brogden (CEO of IFSA) have highlighted that "we have had a whole generation of people forced to be investors. We have had a whole generation of people who have had shares arrive in the mailbox through government actions or demutualisations and the like" (Canberra public hearing of 28 August 2009 of the Parliamentary Joint Committee on Corporations and Financial Services, p.57 of transcript at [http://www.aph.gov.au/~media/wopapub/senate/joint/commttee/J12378\\_pdf.ashx](http://www.aph.gov.au/~media/wopapub/senate/joint/commttee/J12378_pdf.ashx)).

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