



Institute of Actuaries of Australia

The Case Against Government Support of a Lifetime Annuity Market In Australia

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Abstract

This paper aims to counter a growing debate encouraging the Government to provide support for a lifetime annuity market. There is a genuine concern that individuals need protection against living too long. The issue is, should more wealthy individuals be encouraged, or even compelled, to purchase lifetime annuities. Lifetime annuities, whilst available are rarely sold. Institutions providing these products, or wishing to provide them, argue that they cannot effectively manufacture the products because of the stringent capital adequacy requirements and the lack of assets that enable matching of risks and some regulatory and taxation obstacles.

In reality the Government carries the investment and longevity risk for the vast majority of ageing Australians through the age pension. My argument is that the Government shouldn't risk subsidising wealthy Australians by underwriting institutions to provide lifetime annuities. I will briefly discuss alternate options to lifetime annuities but I will concentrate on my argument that Government support of lifetime annuities is against the public interest because lifetime annuities provide no flexibility to the insured, they increase systemic risk and could ultimately result in the tax payer supporting the wealthy.

Keywords: Lifetime; Annuity; Compulsion; Longevity; Income; wealthy; Insurers;

Introduction

This paper considers issues related to the Government's role in dealing with the financial implications to the individual of longevity risk. In particular there is currently an active debate on the extent to which the Government can or should support a lifetime annuity market and if this is in the public interest. This paper argues that the Government should not be providing support for a lifetime annuity market other than by removing some regulatory and taxation barriers that currently frustrate the development of competitive products. More so, any support for an annuity market would likely lead to the poor subsidising the rich.

There is a genuine concern that individuals need financial protection against living too long. A current debate is focusing on the extent to which more wealthy individuals should be encouraged, or even compelled, to purchase lifetime annuities. Lifetime annuities, whilst currently available are rarely sold. Institutions providing these products, or wishing to provide them, argue that they cannot effectively manufacture the products because of the stringent capital adequacy requirements, the lack of investments that enable matching of risks and some miscellaneous other regulatory and tax issues.

Further, even if these products could be efficiently manufactured they still, on the face of it, do not appear to be a good investment.

In reality the Government carries the investment and longevity risk for most ageing Australians through the age pension. An important issue is, should the Government potentially subsidise wealthy Australians by underwriting institutions to provide lifetime annuities. My conclusion is that the Government should not provide support to the annuity market other than by removing some regulatory and taxation obstacles that are frustrating the competitive development of the market.

The parallel discussions on health costs are not covered in this paper.

Background (Developed from Institute of Actuaries Retirement Incomes Taskforce Discussion paper on Age pension and Retirement incomes reform August 2008)

There are many reasons why a person may outlive their accumulations and run the risk that the Age Pension

alone will not be sufficient to provide them with an adequate income in particular:

1. They save too little (note that there will be a sizeable proportion of the retiring population over coming years who will not have enjoyed superannuation coverage for their whole working lifetimes)
2. They retire too soon
3. They spend too much too soon in retirement or the expenses they encounter are greater than those they planned for (e.g. owing to inflation, or for health or other reasons)
4. Their investment strategy and its implementation do not cope with the market environments they experience in retirement
5. They live longer than expected
6. The risk management products available to them are inadequate or are too expensive, or are perceived as such, or
7. The institution/s providing long term financial security default with no Government support for those people who lose out.

My particular focus in this paper will be the longevity risk. Note that longevity risk has two components – a population-wide (or systematic) component and an individual component (in terms of differences between population and individual experience). The particular problem with longevity risk is that population mortality is improving across the board. Whilst individual mortality varies around a population average, the average is itself also increasing. This particular problem means that insurance in its traditional form does not provide protection against systemic improvements in overall mortality.

In this context, the term ‘longevity risk’ is really a financial notion. People would not normally consider that living too long was a risk other than in financial terms. Longevity risk in this context represents the risk that people may outlive their assets. The ‘risk’ is exacerbated because, from an individual perspective there are significant variables. From a population wide perspective, however, life expectancy is less variable. Calculations that establish the adequacy of community savings at retirement can be accurately made. These community based calculations indicate sufficient assets for an individual in retirement on average. The difficulty from the individuals perspective is that if they die early they don’t get the upside benefit of having more assets than expected whereas if they live longer than the average they could suffer the downside of running out of money. This asymmetry of outcomes from the individual’s perspective is what leads to the legitimate anxiety around longevity. Questions of adequacy could be largely resolved if an expectation was built that a certain level of asset is considered adequate if it met actual financial needs with a probability of 90% rather than 50%. This expectation would require significantly higher personal retirement savings and from a national perspective would be inefficient because it would require the transfer of a significant amount of asset to long term savings that would be sub optimal for the economy as a whole. From a public policy perspective therefore there appears significant benefits from pooling post retirement assets to ensure that the targets for retirement funding can be made on a population expected basis rather than at say 90% individual expectations basis.

In practice however, longevity insurance/pooling products, in particular lifetime annuities, are currently unattractive to retirees for a number of reasons:

1. The need to pay large amounts of capital to providers and the inability to access this capital if circumstances change

2. The “loss” of capital on premature death. This can be mitigated by annuities with features such as minimum payment periods or death benefits equal to a return of purchase price less payments already made. However such features reduce the amount of annuity income stream
3. The perceived poor return on their “investment”. In reality, this poor return reflects the relatively low interest rate regime we have experienced in recent years and the need for insurers to service high capital adequacy requirements. The need to hold capital is exacerbated by the need to hold additional capital recognising systemic longevity risk.
4. Annuity income streams often do not match the needs of the retired. Immediately post retirement the retiree/s are usually at the healthiest they will be and hence fit to take on travel and other active pursuits. As the retiree ages they become more passive and ultimately frail. This decline in health encourages access to more funds immediately tapering off as the non subsistence demand for money reduces. Annuity products generally provide a fixed or inflation adjust income out of line with actual needs.
5. There is a high timing risk which is difficult for the individual to diversify. In particular the investor purchases the annuity in a specific interest rate market. It is feasible to spread purchases but this is rare and potentially more costly because of relationship between provider fixed and variable costs.
6. The disappointment of longer life, i.e. the gap in most people’s understanding of what their expected life expectancy may be and hence the cost of funding their retirement. The reality is that the high price of annuity products is a reflection of the fact that the upfront purchase does often provide the first indicator that a retiree has of the true cost of funding their retirement, and in most circumstances this cost would be much higher than expected.

The paper by Sherris and Evans (prepared to discuss Longevity Management Issues for Australia’s Future Tax System, The Treasury August 24 2009)

http://taxreview.treasury.gov.au/content/html/commissioned_work/downloads/Longevity_Management_Issue_s.pdf illustrates that an inflation adjusted lifetime annuity for a 67 year old man provides a return of only around 6% in the first year based on current prudential regulatory regime.

Discussion

The attachment to this paper provides some discussion on private sector options for providing a hedge against systemic longevity risk. The following discussion focuses mainly on the Governments options given that private sector hedging is problematic.

Ways that the Government can support lifetime annuity market

1. To make purchase of lifetime annuities compulsory for all people with superannuation balances above a prescribed level.

Under this option the Government will force a market for lifetime annuities. This will enable the more efficient manufacture of product with potentially lower costs. If this is a private market then there will still be the need to hold capital and hence transferring significant capital to the estates of life insurers. If this were to be a public market, i.e. Government provided then there will likely be no private provider and the payments to pensioners could be expected to be higher.

2. Government provides a financial instrument that enables the hedging of longevity risk

The hedge would be against systemic increases in longevity, i.e. where the average life expectancy increases. The government would likely assign a cost to this. The cost could be

determined on a theoretically correct method where there is an actuarial assessment of the risk. In this case, whilst the insurer would not need to provide capital to support this additional risk, there would still be a price to pay which would reduce the return to the pensioner. Lifetime annuities would still appear to be poor value for money.

3. Government provides a hedge against long term inflation and longevity risk

As above, if priced properly this may not have a material impact on the effective return on the investment. If the Government charges less than proper price then there is a demonstrable subsidy to wealthy.

4. To allow foreign annuity providers to enter Australia.

Even in a best case scenario with an efficient and open annuity market in Australia, the market will still, be small compared to other countries. There is an option for the Government to open up the annuity market to global players, in effect by allowing them to write products on a non Australian balance sheet and/or by backing products from international capital reserves. This appears problematic, since given the long term nature of the liabilities the local regulator would want to have some leverage over the institutions that are able to sell long term financial products in Australia. It is difficult to imagine a situation where the regulator requires prudential control over local banks but not over providers of very long term guaranteed financial payments.

5. The Government can underwrite annuity products directly e.g. by enabling the purchase of additional aged pension on a voluntary basis.

There is potentially significant selection risk for the Government since this facility would be most attractive to healthy and wealthy individuals with an expected longer life expectancy than the population average. There would also be issues around the fairness of payments to impaired lives.

6. Indirect support offered through for example, tax penalties on assets not used to purchase annuities, tax incentives for monies used to purchase annuities, tax exemptions related to annuities, means test or other incentives that will make annuities appear more attractive.

These measures clearly have costs and associated distortions in the proper workings of the market. I will not discuss these options.

In summary, I believe the only way that the government can enable a deep lifetime annuity market is to make it compulsory for more wealthy individuals with a superannuation lump sum above a trigger level. Within a compulsory market the Government could either provide directly, e.g. purchase of an additional aged pension, or open up to the private sector with potential access to Government guaranteed longevity and inflation adjusted bonds.

Reasons for Government supporting a lifetime annuity market.

As explained above, there is a real risk that people will underestimate their potential life expectancy and hence financial needs. Even if there is no increase in systemic life expectancies some individuals will live much longer than the average. These issues have been well documented in the past. Systemic increases in longevity will exacerbate the ‘live to long’ concern. Many people therefore underestimate how much money they require to put aside during their working life and risk running out of money and will need to fall back onto the age pension. The lack of people purchasing annuities is also potentially indicative of the fact that the real cost of longevity is not recognised. Lifetime annuities therefore have an “inbuilt” element of financial advice (framing expectations and assisting members to determine the suitable level of income in retirement to make their lump sum last – something which is not present in account based pensions).

From the communities perspective there is a strong economic argument to pool post retirement monies. As discussed above, total population life expectancy and financial needs can be projected with a reasonable degree of accuracy. If longevity risk could be pooled then the amount of assets put aside for the community as a whole to meet their retirement expectations would be significantly lower than if, in an environment without pooling, individuals needed to accumulate assets on their own account to protect their own financial needs with a high (say 90%) probability.

Reasons for Government not supporting a lifetime annuity market

The Government is already covering longevity risk for 80% of people aged over 65 (only reducing to 75% in 2047ⁱ). Why should the Government also cover the financial risk of wealthy people living longer?

In a compulsory market the very wealthy will dominate the purchase of lifetime annuities since they will have a greater proportion of assets above the required trigger point. On the basis of the work by Sherris, the return for an indexed lifetime annuity would be in the range of 6% for a male and less for a female at age 67ⁱⁱ. In practice, it wouldn't seem worthwhile forcing people to buy a pension unless it was providing an income of at least \$50k per annum which will have a capital value of around \$840k. If the individual were allowed to take up to the first say \$500k in lump sum then the only people who would be expect to be forced to take an annuity would be those with over say \$1.4m at least. For couples this may be at least \$2.5m.

There would therefore be 3 classes of people. Those relying solely on the age pension, those with below \$1.4m (or\$2.5m per couple) and those with compulsory lifetime annuities. Clearly there would also need to be a phase in for new vs. old retirees and also for new retirees to make sure that people above a certain level of lump sum accumulation are not disadvantage compared to people just below the threshold.

The public policy issue for the Government therefore is, does the Government have a role in protecting more wealthy Australians from spending their money too quickly. Some potential adverse outcomes could be

1. If the Government underwrote the compulsory lifetime annuity and wealthy people outlived expectations then the Government would be providing a subsidy from general tax revenue.
2. If the Government enforced the purchase of annuities from private sector institutions then there would be a substantial forced transfer of capital to insurers with potential pressure on the Government if the insurers suffered financial stress.

There is also an argument that since the wealthy receive a tax subsidy to contribute to superannuation the Government should have some influence over ensuring that this subsidy is not waisted by the risk of the person falling back onto the age pension. The reality however is that there are effective means of the Government controlling the drawdown of post retirement superannuation assets other than by supporting a lifetime annuity market.

As discussed above, lifetime annuities also don't meet timing of cash flow needs for retirees and have a high timing risk given that individuals will have little flexibility as to the interest market they will buy into.

There is considerable effort in the industry to determine optimal retirement strategies and products. It is quite possible that the better strategies involve a diversification of products and drawdown patterns. Support for a lifetime annuity over these other strategies may lead to less than optimal outcomes.

Other issues surrounding the private provision of lifetime annuities.

If the Government decided to support the private sector in the lifetime annuity market as discussed above, then there are is potential for some perverse outcomes.

The key issue is that purchasing an annuity for life is a once off non revokable decision by an individual.

Some examples of perverse outcomes are that

1. In making a decision on a provider the individual is assuming that the insurer will 'outlive' them or that the insurer, if it gets into financial difficulty, would be absorbed into another insurer.
2. Whilst the Government will prudentially regulate the insurance market there will not be a Government guarantee. In the case of HIH, the Government didn't stand behind pension liabilities. People receiving sickness benefits lost their income. If institutions are deemed to be 'not too big to fail' then we need to expect failures. The regulator walks a fine line between stringent capital adequacy requirements and pricing products out of the market.
3. In a competitive annuity market, there will be price competitiveness. Given that the capital adequacy standards will be similar across the industry, then price could be driven by,
 - a. Lower prudential capital than competitors
 - b. Product complexity, i.e. product may have other bundled features that make it difficult to compare.
 - c. Lower fees e.g. through different distribution channels and/or critical mass efficiency
 - d. Product sold below cost through differences/errors in key assumptions
 - e. Products sold below cost to buy market share and potential boost value of business in advance of a sale
 - f. Products sold below cost because of expected cross sell opportunities or other related business issues

What criteria will an individual, or their advisor, employ to decide where they should purchase an annuity? It is difficult to argue that should go for a higher priced product! Could argue that the higher priced product is being sold by an organisation with a higher credit rating and hence risk of default is lower, but the provider could sell portfolio the day after individual signs up to an organisation with a low credit rating. Therefore longer term, price is the only basis on which the annuity can be purchased other than product features. The incentive therefore is for the insurer to build complex products that do not allow the easy comparison of products.

What confidence do we have in the long term financial viability of insurance companies? How do we compare products when the incentive is to build product complexity?

Once purchased the annuitant has no choice around the organisation that will ultimately back their annuity other than a promise from the Government that they will prudentially manage the organisation. This with the background that the Government has allowed annuity providers to collapse!

An alternative

An option could be for the government to require the wealthy to purchase long dated term certain annuities. These could be provided with significant lower requirements for capital by the provider because of the removal of the systemic longevity risk. People could also structure term certain income by purchasing a number of products recognising the need for relative higher incomes in the earlier phases of retirement. This option does not remove the provider or the market timing risk described above.

Or else the Government could prescribe that lump sum payments cease for people above a certain asset in superannuation. The balance would need to be paid out in the form of a structured income. This approach would also avoid much of the provider risk discussed above but would not avoid systemic longevity risk. If there were a quantum increase in life expectancy then people will ultimately have the safety net age pension to fall back on. This will not enable wealthy to live at the style they were used to but this is potentially part of the price paid to not risk the taxpayer paying these older Australians significantly more than those on the age pension.

Some Defining Questions

The public policy issues for the Government depends on their, and the communities attitudes towards protecting, mainly the more wealthy, from either not saving enough or spending their money too quickly.

How big an issue is longevity risk and which groups are we trying to “assist”? 75% of people will be accessing the age pension in any case. The balance is generally people who are financially astute and have assessed their financial options. The Government can establish incentives/penalties that will drive the extent to which people can draw funds from their superannuation assets. Any support of a lifetime annuity market will be of most value to high net wealth people who have longer life expectancies and can afford the best advice to potentially opportunistically game the system.

Attachment

Capital market alternatives (Drawn primarily from Institute of Actuaries Retirement Incomes Taskforce Discussion paper on Age pension and Retirement incomes reform August 2008)

The attractiveness of annuity products could be improved if insurers were able to reinsure their longevity risk, reduce the need to hold capital to support these risks and to pass the investment mismatch risk to individuals. This would require structural change along the following lines:

(a) Provision of mortality swaps or longevity bonds to allow insurers to share or eliminate their exposure to longevity risk

(i) Conceptually, some capital markets participants could find it attractive to accept longevity risk for an appropriate price. For example, investors could be attracted by low correlations with returns from other markets, or - life insurers who are exposed to mortality risks and annuity providers who are exposed to the complementary longevity risk may regard themselves as natural hedge counterparties.

(ii) There have been limited attempts internationally to develop such products with only partial success. A mortality bond was successfully issued by Swiss Re involved principal repayments linked to a mortality index based on mortality rates in five countries. However, a longevity bond, launched by the European investment Bank and BNP Paribas was withdrawn before being issued. The bond was designed for UK pension funds and was an annuity with payments linked to the number of the cohort of English and Welsh males aged 65 in 2002. In particular the very long term nature of the risks (30-40 years or more) has not been adequately dealt with by products developed to date.

(iii) In Australia, the size of our market and population may make it difficult to achieve adequate risk diversification without the Government or other party enabling some form of population-wide coverage. At the very least, the development of appropriate mortality or longevity indexes will require access to data held by government agencies.

(b) Pooled life funds (e.g. tontines)

(i) These products involve groups of retirees pooling their longevity risk. Essentially the “survivors” benefit from the capital released by participants who die earlier.

(ii) This passes most of the longevity risk back to the retirees reducing the capital requirement of the product issuer

(iii) Similar difficulty getting meaningful mass into a pool within Australian market in order to achieve adequate risk diversification.

(c) With profits, variable or unit linked annuities

(i) These products allow issuers to invest in a wider range of assets such as equities by passing the investment risk and opportunity for reward to individuals. This is a risk that they are already required to take on and manage under alternatives such as account based pensions to take on investment.

(d) Inflation-linked bonds

(i) Most retirees need an income that maintains its purchasing power during potentially long periods in retirement. This suggests income streams should be indexed to some measure of inflation (such as the CPI) or wider measures of community living standards such as GDP growth or wages growth (AWE).

(ii) As noted above, the availability of investments which provide a direct hedge against inflation is very limited in Australia, and those investments which are available are of much shorter duration than the likely period spent in retirement.

While the above discussion is couched around insurers, the appeal of these instruments is not limited to insurers. Retirement product innovation for superannuation funds, for example, might be spurred by the availability of such instruments and the scope of advice available by financial planners would also be extended.

Government alternatives

Government can play different roles in the provision of effective income stream products ranging across:

- (a) Acting as a product provider to individuals in areas where there is no private sector market
- (b) Acting as a longevity risk reinsurer or pooling facilitator for product providers that leverage off its population-wide coverage, a coverage not available to individual or individual institutions
- (c) Issuing capital instruments or guarantees with the same effect to allow private sector providers to issue new products, and
- (d) Ensuring the regulatory environment is as efficient as possible and does not impose unreasonable constraints on the development of innovative new products.

Some examples include:

- (a) Government issuing inflation linked bonds with durations consistent with life expectancies and/or longevity bonds in order to support capital market product development.
 - (i) Financial service providers (insurers, banks and super funds etc) could then use these building blocks to innovate and create product, without existing high level of capital.
 - (ii) Offshore providers may be attracted by such market developments and act to broaden competition.
 - (iii) The Future Fund may provide a means to limit increases in net liabilities.
 - (iv) A disadvantage may be that the Government takes on additional population longevity risk. Even if risk was mitigated by limiting this by either quantum or age, is any additional longevity risk acceptable over and above the substantial risk the Government already bears? It may be argued that, to the extent that such assistance forestalls retirees taking up the Age Pension, there may be a replacement effect as opposed to a net increase in risk.
 - (v) There may also be issues of equity given that the better off would initially be the buyers of such products.
- (b) Government allowing individuals to purchase the Age Pension
 - (i) Given the lack of availability of lifetime pensions from the private sector, another option may be to allow individuals to purchase an Age Pension (or multiples thereof) from the government from an advanced age, say 85, in return for premiums paid to the Government (either lump sum or from an earlier age).

(ii) This option already exists for people eligible for Age Pension but the issue is whether this should be extended to allow individuals to purchase annuities in excess of Age Pension from the government?

(iii) Again, this would mean the Government taking on additional population longevity risk over that which they already have.

(iv) Also, this option could easily crowd out capital market product development, which may go beyond an appropriate role for Government.

At the very least, the Government should ensure that the regulatory environment is conducive to sound product development. The number of different regulators, who are involved in any new product development, often with conflicting goals, makes this difficult in the current environment.

The legislative issues which would benefit from Government review are summarised in the Institutes submission at http://taxreview.treasury.gov.au/content/submissions/retirement/Institute_of_Actuaries_of_Australia_20090312.pdf. In particular

- The *Superannuation Industry (Supervision) Regulations* are overly prescriptive and narrow in the type and form of pensions that are investment tax exempt and do not allow for variation of income payments each year beyond inflation.
- The rules for assessing income for the Commonwealth Seniors Health Card (CSHC) and assets for an aged care bond may disadvantage the purchase of lifetime annuities.
- The number of different regulators (ATO, ASIC, APRA and DFACS), who are involved in any new product development, often with conflicting goals, makes this difficult in the current environment.

ⁱ Intergenerational Report 2007 and Retirement and Income Modelling Unit Department of Treasury, *The Adequacy of Australian Retirement Incomes – New Estimates Incorporating the Better Super Reforms, 2007*

ⁱⁱ I note that the paper does not make allowance for, amongst other things, profit and distribution loadings. The returns therefore overestimate the actual annuity income