Review of Annuity Market

Submission by the Society of Actuaries in Ireland

February 2007

Introduction

The Society of Actuaries in Ireland welcomes the opportunity to make this submission in relation to the review of the annuity market in Ireland that is currently being undertaken by Indecon Economic Consultants and Life Strategies.

We have addressed below each of the questions posed in the request for submissions dated 19 January 2007.

How annuity prices are set

Annuity prices are set by life assurance companies taking into account:

- current and expected future mortality rates
- the yields available on fixed interest investments
- expenses relating to the sale of the annuity (including commission) and expected future administration costs, and
- the required profit margin, which will reflect the level of capital that the company is required by the Financial Regulator to hold during the life of the annuity.

We understand that the mortality assumptions are based on the current mortality rates being experienced by annuitants, together with allowance for future improvements in annuitant mortality. Life assurance companies undertake investigations into their own mortality experience and will also have regard to UK annuitant mortality experience. There have been numerous studies in recent years of the level of improvements in mortality in both the insured population and the general population. The cohort approach is the accepted methodology for allowing for mortality improvements in pricing annuities.

We are advised by actuaries involved in annuity pricing that prices are typically adjusted annually to reflect updated mortality assumptions, but that prices are updated more frequently – daily, if necessary – to allow for changes in investment yields. The yields used are those on Government bonds with a term equal to the expected duration of annuity payments. Some allowance may be made for the higher yield available on corporate bonds, although there is clearly a corresponding additional risk – default and downgrade - for the life assurance company in investing in corporate bonds.

The factors determining annuity prices

The factors affecting prices are those listed above, together with the impact of market competition.

The two key factors affecting prices are investment yields and mortality rates:

- ***Investment***

  There have been suggestions that annuity prices could be reduced if the backing assets were invested in equities. However, investment in equities would significantly increase the risk that the annuity provider would be unable to meet its liabilities and/or become insolvent as a result of investment losses. If an annuity provider were to invest in equities, it would have to hold significantly more capital, and would consequently need a much greater profit margin in order to provide a return to shareholders on that higher amount of capital. As a result, the price charged would not necessarily be significantly different than with a matching asset strategy.

- ***Mortality***

  Various studies, in Ireland and elsewhere, have shown that the mortality rates experienced by annuitants are lower than those experienced by the population generally or by pensioners whose pensions are paid by occupational pension schemes. See for example:

  - UK and Irish Pensioner Mortality Issues, June 2004, http://www.actuaries.ie/Events%20and%20Papers/MgtDetails/Events2004/040601Pensionermortality.htm
  - A (UK) report on a pilot investigation into the mortality experience of pensioners of self-administered pension schemes, http://www.actuaries.org.uk/files/pdf/library/cmir20/part4.pdf

The table below, presented to the Society of Actuaries meeting in June 2004, compares the results of an investigation into occupational pension scheme mortality experience with the mortality experience relating to annuities sold by Irish Life Assurance plc.

Self-administered pension scheme mortality versus insured mortality

	% of PMA92 c=2001	
Age	**Pensioners**	**ILAC Annuities**
62	123%	131%
67	120%	93%
72	115%	98%
77	107%	91%
82	122%	113%
87	133%	
92	120%	
ALL	**120%**	**105%**

The lower mortality rates experienced by life assurance companies, compared with occupational pension schemes, impact on the price charged for annuities.

Life assurance companies must also allow for mortality improvements into the future. The rates of improvement assumed by life assurance companies, as reported to the Society, are supported by analysis of the level of improvement being experienced by the population generally – see, for example, the table below extracted from a presentation to a Society of Actuaries evening meeting in June 2006: (http://www.actuaries.ie/Events%20and%20Papers/MgtDetails/Events2006/060607_%20AGM_Evening_Meeting.htm.

Percentage Fall (p.a.) in Irish Male Mortality Rate over Decade Ending

Age	1941	1951	1961	1971	1981	1991	2001
0	-0.39	4.87	4.47	4.02	5.93	3.16	2.13
10	**2.59**	**4.91**	**5.72**	0.40	2.59	6.10	3.14
20	0.70	**6.98**	**6.01**	-2.44	0.20	1.20	-0.17
30	1.24	5.17	**5.87**	**1.34**	**1.22**	-0.51	0.14
40	1.66	3.54	3.63	-0.05	**1.91**	**3.02**	0.42
50	0.88	1.53	1.87	-0.31	**1.19**	**3.67**	**1.81**
60	0.32	1.11	0.52	-0.53	0.80	**2.11**	**3.30**
70	-0.10	0.28	0.66	-0.66	0.27	1.28	**3.02**
80	-1.16	-0.96	0.83	0.27	-0.07	1.16	1.68
90	0.56	-2.40	-0.78	1.23	0.18	0.46	0.95

We understand that in aggregate the cost of capital, commission and lower mortality levels (compared with those experienced by occupational pension schemes) amounts to between 10% and 15% of the annuity price (approximately 6% in respect of the cost of capital, 1.5% in respect of commission and 5% in respect of the mortality selection effect).

Size and scope of the annuity market

Annuities are provided by life assurance companies, with increasing support from reinsurers. While most life assurance companies offer annuities, we understand that typically only a small number of companies are competitive at any time. The market is price sensitive, since most business is placed through intermediaries, who will shop around on behalf of their customers for the best price.

Data relating to current levels of annuity business should be available within the market statistics published by the Financial Regulator. Data on potential additional volumes of business, in the form of pensions being paid by occupational pension schemes, may be available from the Pensions Board or the Irish Association of Pension Funds.

The availability of annuity products to meet consumer needs

Apart from inflation-linked annuities, there is an active annuity market which offers all the options permitted under current Revenue rules.

Defined benefit schemes need to be able to insure the pension benefits that have been promised to members. Apart from index-linked pensions, the annuity market meets this need. Members retiring from defined contribution schemes are required to purchase an annuity. Our understanding is that most such individuals choose the annuity that maximises their initial income i.e. a flat pension. Where individuals have the option of transferring their pension fund to an ARF (Approved Retirement Fund) on retirement, there is little demand for annuities.

There appears to be little demand for with-profit or unit-linked annuities. We understand that one such product was recently withdrawn due to lack of demand.

There is often criticism that annuities do not provide a death benefit. Current Revenue rules do not permit death benefits to be provided (although it is possible to choose an annuity with a guaranteed period of up to ten years and/or additional dependants' pensions). Otherwise, they could be incorporated in annuity products, although this would obviously impact on the price of the annuity.

Inflation-linked annuities could be provided if the Government issued bonds linked to Irish inflation. Euro index-linked bonds are of limited assistance, because defined benefit schemes that promise index-linked benefits typically do so with reference to Irish inflation. We have asked the Irish Government to consider issuing Irish inflation-linked bonds with a view to addressing this issue, so far without success.

We note that there is currently no market for impaired life annuities in Ireland, so it is not possible to obtain better annuity rates for individuals whose life expectancy is reduced as a result of their medical condition. It should be noted, however, that if such a market were to develop, it would increase annuity costs for non-impaired lives.

How efficient is the annuity market?

There are a number of life assurance companies operating in the market, although, as noted above, only a small number of companies may be competitive at any time. There are no particular barriers to entry for established Irish insurers or for insurers outside Ireland, as any EU authorised life assurance undertaking may enter the market. There are barriers to entry for newly established Irish life insurers, however, as the Financial Regulator requires newly established insurers to maintain solvency cover at a minimum of 200% of the minimum margin required by the EU for the first three years of operation.

As an annuity is essentially a commodity product, there would appear to be little scope for providers to widen their margins. There is also now a very active secondary market.

There are, however, perceptions in the pensions community that the market is uncompetitive. It has been suggested, for example, that the market has been slow to translate recent increases in investment yields into lower annuity prices. This perception may not be borne out by an examination of annuity pricing bases. It would be helpful, therefore, if the current review of the annuity market can shed further light on the competitiveness of annuity pricing.

The capacity of the annuity market

The key issue for life assurance companies is the capital required to support large volumes of new business, having regard to the relevant regulatory requirements.

Market capacity appears to be more than sufficient in terms of current volumes of fixed annuity business. These volumes are very small relative to the size of the Euro fixed interest market and there appears to be sufficient capacity for the amount of longevity risk involved. There are, however, capacity issues relating to index-linked annuities, which are discussed further below.

We are aware of concerns in the pensions industry about a potential lack of capacity in the annuity market. Such concerns appear to relate primarily to the potential for a major Irish defined benefit scheme to wind up and find itself unable to buy out its liabilities in respect of pensions in payment. The level of pension liabilities in a large scheme could be very significant relative to current volumes of annuity business. It is likely, however, that further capacity could be sourced, either directly or through the secondary market, if needed.

We note that a specialist buy-out market is emerging in the UK in response to demand from defined benefit pension schemes to transfer risk to the insurance market. While the Irish market is much smaller than the UK, it is likely that it would respond similarly to a rise in demand for annuities and/or longevity risk transfer. It is also worth noting that analysis by the recent UK Pension Commission suggested that supply was not an inherent block to expansion of the annuity market, and the UK market has in fact absorbed a tripling of demand over the past fifteen years.

There are difficulties in relation to index-linked annuities, as not only is the Euro index-linked bond market much smaller, there is a mismatch between Irish inflation and general Euro inflation, which means that bonds linked to Euro inflation rates are not an exact match for annuities indexed to the Irish Consumer Price Index. As noted above, we have asked the Irish Government to consider issuing Irish inflation-linked bonds with a view to addressing this issue. However, there does not appear to be significant unmet demand for index-linked annuities currently. Moreover, a recent change in pension legislation means that in the event of a scheme winding up, the trustees may substitute fixed rate pension increases for index-linked pension increases.

A comparison of the annuity market in Ireland and in the UK and in other relevant markets

There are a number of comparative studies of international annuity markets which may be of interest, including:

- 1999, James E. and Vittas D., Annuities in comparative perspective: do customers get their money's worth?
- 2001, Yermo J., Private annuities in OECD countries

Both of the above studies are published in the OECD's Insurance and Private Pensions Compendium for Emerging Economies, Book 2

The likely future of the annuity market

A key challenge for the annuity market is the widely held perception that annuities do not provide value for money. Annuity rates have fallen sharply as a result of the combined effect of lower interest rates and rapid improvements in life expectancy – in respect of both improvements to date and further projected improvements. Most people appear to underestimate their post-retirement life expectancy, and therefore underestimate the likely duration of annuity payments. This impacts on the perceived value for money. The position is compounded by low interest rates, which mean that annuities provide lower "returns" than the potential returns available from other types of assets.

In addition, alternatives such as ARFs are preferred because capital is retained by an individual's estate in the event of early death.

Therefore, a key factor for the future of the annuity market is whether the current requirement for individuals retiring from defined contribution schemes to purchase an annuity remains in place. The removal of this requirement would be likely to result in demand for annuities falling away.

The other area of "captive" demand is constituted by defined benefit schemes that wind up and have to purchase annuities to secure benefits for pensioners. It has been suggested that there should perhaps be alternatives to the requirement to secure pensioners' benefits by purchasing matching guaranteed annuities. The legislation could potentially be changed to invest trustees with the power to secure the pensioner liabilities in alternative formats, which could include:

- the substitution of a higher amount of level pension for a pension with guaranteed increases
- the substitution of an annuity that carries a limited level of investment risk for a guaranteed annuity, or
- converting pensions in payment to lump sum transfer values which could be invested in ARFs.

Any changes of this nature could also have a significant impact on the future of the annuity market.

A submission by the Society of Actuaries in Ireland to the Pensions Board last year suggested that serious consideration should be given to alternatives, such as those outlined above, to the requirement to secure pensioners' benefits by purchasing matching guaranteed annuities in the event of a scheme winding up. To the extent that the substitute benefits could be provided at lower cost, it would enable a higher proportion of the benefit entitlements for active and deferred members to be met in the event of the scheme being underfunded on wind-up. The substitute benefits could also have attractions for the pensioners concerned.

We believe, however, that the ARF alternative should only be available to trustees in respect of pension benefits in excess of a specified threshold that is considered adequate, from a public policy perspective, to ensure an appropriate level of income security. It would also be important to ensure that all concerned understand clearly the trade-offs involved in any of the above benefit substitutes e.g. in the case of the ARF alternative, the trade-off for pensioners is between flexibility and control of capital on the one hand, and income security on the other.

Uncertainty relating to the extent of future increases in life expectancy may also affect the future of the annuity market. We note that the new mortality tables published recently by the UK Actuarial Profession do not incorporate projections of future mortality because of the uncertainty surrounding future improvements. The profession has emphasised that actuaries need to consider the financial repercussions of this uncertainty (http://www.actuaries.org.uk/Display_Page.cgi?url=/pr-rels/2006/060801mortality.html).

Finally, the potential impact of the Solvency II project on the capital requirements for annuity business should be considered.