## Underwritten annuities Pricing products

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The UK underwritten annuity market is growing rapidly, challenging actuaries and underwriters to constantly review their pricing decisions. **Peter Banthorpe** discusses how the underlying drivers will shape the market's future

# Steering through the rapids

Today's underwritten annuity market is highly competitive: each life is individually underwritten, and up to 10 companies are likely to be competing for each risk. As a result, we have the paradox of a product that is bespoke but is also now commoditised. This means good-quality pricing and risk management practices are essential and that underwriters and actuaries must work very closely together.

As the volume of sales has grown, so has the volume of data. Although that's good news, the number of deaths for holders of these products is still relatively small and, as with all lines of actuarial work, the skill is interpreting that data in the context of the evolving marketplace.

The rapid growth in sales of underwritten annuities, especially in recent years, is well documented. From 2005 to 2010, UK sales of underwritten annuities more than quadrupled, and growth since then has been around 30% per annum [1]. Although it is unlikely to continue to grow at 30% per annum indefinitely, we believe it will continue to grow – and quickly – in the foreseeable future. This is because the whole at-retirement marketplace will continue to grow, and because market developments will mean a larger proportion of retirees will apply for an underwritten annuity product.

The market's rapid expansion has attracted many insurers and reinsurers. Each will most likely have different pricing and underwriting structures, which will select against current players that do not refine their rating structures to the same degree of granularity.

We have seen this in the market already, with many companies adopting an approach to underwriting these annuities that is reminiscent of how life insurance is rated: relatively detailed mortality loadings, customised for individual conditions and severities. This approach – in theory, at least – will attract more severely impaired lives than the traditional approach in the market of using a relatively small number of mortality tables, each reflecting a group of diseases from which an annuitant might suffer.

### **Granular rating**

As you might expect, companies are also seeking to offer enhancements to impairments not currently covered, especially for applicants with minor risk factors.

Taken in total, this suggests that to create risk pools by condition, which are stable over time and suitable for analysis, requires considerable insight and adjustment to successive cohorts of business.

A granular rating basis for this product will consist of several hundred impairment codes. Commonly, a life will have a number of impairments, and so will also be assigned multiple impairment codes. It would not be unreasonable to expect well over a thousand different combinations of impairments in a

live portfolio. Clearly, analysing such a varied risk pool in detail has its challenges. Even with a huge number of deaths, statistical credibility will exist for only a small number of the very common combinations of impairments. As a result, the market will always need to rely on interpretations of medical studies and data by medics and underwriters to provide rating information. Relating the results of that work accurately to the base mortality cost derived by actuaries is a complex problem.

Unlike other life and health insurance marketplaces, the underwritten annuity market has had a standardised application form for all participants for many years [2]. It enables advisers to efficiently obtain multiple illustrations and quotes from providers, speeding product recommendation.

The quality of the standardised application's approach has been much improved by the recently implemented ORIGO 3.7 project. This is the new data exchange protocol for the pension annuity marketplace. It has increased the number of questions being asked, as well as the underwriting details the questions elicit, resulting in higher acceptance rates and a better understanding of each individual risk. That better comprehension of risk should

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allow sharper pricing than previously. However, understanding how to adjust past data for those changes is a key challenge.

### One product or two?

We believe that 'underwritten' and 'nonunderwritten' annuities will increasingly be seen not as two products but as one, just as there is no such distinction in the life assurance market. Every applicant will undergo the same underwriting process and receive the same product. The only difference will be the size of the mortality loading applied to the price for a healthy life.

A single process to access the full range of offerings is efficient for the consumer and the insurer and will be encouraged by a number of factors. For instance, the Association of British Insurers' code of conduct on retirement choices, issued in March 2012, encourages shopping around by customers at retirement by ensuring that pre-retirees use the open market option (OMO). And, more recently, the Financial Services Authority announced that it was undertaking a "thematic review" [3] of the underwritten annuity market to determine whether older individuals were losing out by not shopping around for the best annuity solution to their retirement income needs.

These initiatives will lead to more retirees being exposed to the underwritten annuity market and will undoubtedly reveal more impaired lives. Another factor is anticipated growth in annuities being sold directly through insurers' websites, aggregators, or 'direct' sites sponsored by independent

financial advisers. This will be a consequence of the UK Retail Distribution Review (RDR), which became effective on 1 January 2013, for many annuity customers may choose to buy directly rather than pay the explicit fee for advice. With over 40% of pension funds being less than £20,000 [4] at retirement, the cost of advice will appear prohibitive in many cases.

One market element that might change is the risk of over-disclosure by applicants. As the benefits of impairment-driven enhancements to annuity payouts become better known, potential buyers might exaggerate ailments to obtain the highest possible payouts. Most applicants are remarkably honest when applying for annuities, and insurers have good monitoring processes in place. But this could change and, if it does, it will have to be managed.

## Future pricing improvements

Mortality trends are driven by a wide range of factors. Thinking specifically about individual diseases, we can look at medical improvements to prevent onset of the disease, earlier detection, improvements in treatment and also better post-treatment care.

Of course, those buying an underwritten annuity have already developed a medical problem, so primary prevention, detection and initial treatment of that disease are no longer going to benefit our cohort of lives. And since the lives are older, they will frequently have multiple conditions.

Also, people with medical condition X may later also develop medical condition Y. We need to look at mortality improvements by medical condition, as drivers of mortality improvement that have only a small impact on a population as a whole may have a significant impact on specific conditions. For example, consider a cure for a rare form of cancer: over the whole population, the impact on mortality is tiny, but for the cancer patients the impact is significant. When analysing past data, we need to be aware of factors that may have had a significant effect.

The underwritten annuity market is a sizeable and growing portion of the annuity market. Accurate pricing of these products will be critical to its long-term success, and requires a blend of input from actuaries, underwriters and medical practitioners. Analysing past data can provide insights into the impact of disease and the behaviour of consumers, but the ability to interpret these insights in the context of the evolving market is the key challenge for actuaries in this field. A

### REFERENCES

[1] ABI market size statistics

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[4] ABI market statistics



