HYMANS ROBERTSON LLP

Longevity risk transfer market consultation

Hymans Robertson, an independent pensions and risk consultancy, has been active in helping pension funds, primary insurers, reinsurers and other financial institutions understand the benefits of disposing or acquiring UK pension fund longevity risk for around five years. In 2009, Hymans Robertson founded Club Vita as a community of UK pension schemes sharing a common interest in improving their understanding of longevity. Club Vita is now supported by 175 pension funds and tracks the emerging longevity patterns in a population of almost 1.5m live pensioners.

We welcome the BIS's timely review of the dynamics of the LRT market. Your report provides a clear introduction of this emerging market to a wider audience. We believe your eight recommendations are all sensible principles for both the banking and insurance markets to adopt.

We hope that the following observations from our own first hand experience help in putting an appropriate regulatory framework in place for these long-term commitments.

The LRT market dynamics

Although the underlying risk of the transactions that we advise on originates from the UK, the potential buyers are increasingly international. This is already therefore a global market.

Currently the role of banks is largely limited to intermediation. The end holders of the risk are largely life (re)insurers with mortality exposures (because the mortality provides a pricing advantage), but we would expect a broader range of investors to enter the market once the price rises and the particular characteristics of longevity are better appreciated. We believe that the demand to buy pure longevity protection will grow, particularly from sponsors of defined benefit schemes who wish to de-risk but don't have the capital to buy a conventional annuity.

Because longevity contracts have longer duration than most banking products, and the uncertainty can be in a distant tail, it is particularly important that both sides of a transaction really understand what they are entering into.

Longevity risk trading has a social purpose

We are strong advocates of pension schemes looking to transfer longevity risk at the right price and in the right circumstances. We agree with the sentiment implicit in your paper that the current distribution of longevity risk across the global economy is suboptimal. For example, organisations that are able to net off longevity risk against other risks – notably insurers with mortality risk – should provide higher security than businesses that are effectively underwriting longevity risk on their own.

The ability for sponsors of pension schemes to remove this source of uncertainty also enables them to invest in the future with greater certainty, whilst providing scheme members with greater security (insurers' covenants are generally stronger than companies' covenants) and freeing up mortality insurers' capital so they can be put to other good uses. All these effects help to stimulate economic activity and aligns the market development with the public interest.

Connections between risks

The focus on risk transfer chain breakdowns is appropriate – given both lessons learnt from credit risk transfer and the particular nature of longevity risk. Specifically we believe that the risks associated with a sharp rise in longevity should not be underestimated (for example under a scenario such as breakthrough therapies for common cancers) – either by the current holders of risk or by potential market participants – and it is important that all market participants have sufficient knowledge of the risks involved.

Any assessment of longevity should bear in mind that the good news of breakthrough therapies would also put massive strains on government healthcare and social security expenditure with repercussions for financial markets. So any arguments for longevity being uncorrelated with other risk factors should be carefully examined.

Uncertainty leads to serial underestimation

History shows that longevity improvements have consistently exceeded planning assumptions. We believe this arises from a complex combination of factors including:

- psychological biases (the availability bias on being aware of information on deaths but information on survivorship is more difficult to assimilate),
- agency problems (the time horizons of decision-makers (finance directors and politicians) are often a lot shorter than the period over which the news will emerge); and
- the uncertainty of future trends meaning that there is a need for subjective judgement.

Better quality data on emerging patterns – on morbidity trends in the 'longevity pipeline' as well as the lagged longevity outcomes coming out of the pipeline – will improve the quality of decisions on reserving, pricing and whether to transfer.

The untapped opportunity

Whilst we appreciate that the purpose of the paper is to promote the orderly function of LRT markets as they grow, the paper talks very little about the challenges of extending the LRT market beyond the traditional holders of the risk. We thought it might be useful to provide our thoughts on this, as we do feel it does present a big challenge but also an exciting opportunity.

It should be borne in mind that the majority of a typical pension scheme's longevity risk relates to (a) non-pensioners and (b) trend risk. However, with a few exceptions, the longevity risk transfers to date (whether via annuity buy-out, buy-in or longevity swap) have only addressed the longevity risk associated with pensioners. Even if these traditional markets expanded rapidly, they would only cover (very approximately) a third of current total pension scheme longevity risk (i.e. that relating to pensioners). And as pointed out in the paper, there are in any case limits to the amount of longevity risk that insurers and reinsurers can and should take on, although our current impression is that there remains stiff competition amongst insurers for the deals that do come to the market.

We believe that the ability to reduce (if not eliminate) trend risk for non-pensioner populations would be extremely attractive to pension schemes – providing them with a more efficient way of managing longevity risk than simply focussing on the risk associated with pensioners. Given the majority of schemes (at least in the UK) are now closed to future accrual, this would enable schemes to stabilise their funding levels in anticipation of the point (still some decades away) when their population has sufficiently matured to pursue more traditional methods of longevity risk transfer.

By focussing on trend risk, standardised products built on population indices could be used to achieve this risk transfer (although we should be conscious of basis risk associated with using different looking populations). This standardisation should help make investing in this risk desirable to the wider capital markets.

On the other hand, there are a number of undesirable features of the type of protection that a pension scheme might ideally seek from the perspective of an investor. In particular, non-pensioner longevity risk is particularly long term in nature (40+ years) and potentially has substantial tail risk (for example a cancer breakthrough scenario). In contrast, investors prefer short term contracts and limits to their risk exposure. Finding a balance between these two parties' wants and needs is crucial before the market can develop. Nevertheless we are

optimistic that such a balance will be found and look forward to seeing how the market develops in the coming years.

More granular and up-to-date data

In respect of your eighth recommendation, we would bring the Committee's attention to the Club Vita Xpect indices – population indices based on UK pension scheme mortality data. We hope that these will provide a valuable tool in the onwards development of the LRT market. We are happy to share more information on the underlying data set to build confidence in using these instruments.

We are happy to discuss any of our experiences with the BIS.

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