

### Summary

- Longevity swaps work as part of a wider package of hedging measures.
- Bulk annuities will continue to outpace longevity hedging as a de-risking solution.
- North American pension schemes could pose a threat to reinsurance capacity.

# The lifespan of longevity swaps

## Gill Wadsworth explores trends within the longevity hedging market, currently in the shadows of record buyout and buy-in transactions

Longevity swaps; the unloved relation in the de-risking world. While buyout and buy-in risk transfer deals enjoy record-breaking transactions almost every year, longevity swaps, when carried out in isolation, trail behind.

Mercer's 2019 *Pension Risk Transfer Market* survey shows that – with the exception of 2014 when BT and Aviva completed £16 billion and £5 billion respectively in longevity risk transfer deals, and 2011 when three multi-billion pound deals completed in the last two months of the year – schemes have consistently chosen buyouts and buy-ins over managing just their life expectancy risk [see chart].

This year there was even a rare deal, which saw the £750 million Scottish Hydro-Electric Power Scheme (SHEPS) convert from longevity swaps to a buy-in, with industry commentators predicting such conversions will become more common place.

So, what is wrong with longevity swaps that they feature so infrequently as a de-risking option alone? The answer is in the name; they protect against one risk and one risk only: longevity. For trustees grappling with all manner of threats to their scheme funding, going through the rigmarole of putting a swap contract in

place that merely deals with an ageing membership, seems inefficient.

Aviva's investment strategist in the global investment solutions team, Niren Patel, says: "While there is a lot of interest in longevity swaps, the work, complexity and cost involved means relatively few schemes take this route. Buy-ins and buyouts manage other risks as well as longevity yet involve equivalent amounts of work."

### A complex solution

A longevity swap is, in theory, straightforward. An insurer – or more likely a US-based reinsurer – with huge amounts of morality risk on its balance sheet via life and other insurance contracts – needs something to manage its capital requirements. UK pension longevity risk acts as a neat, if imperfect, hedge. Reinsurers are keen to do business in the UK since there is an abundance of longevity risk dragging down UK pension scheme funding levels, which means happy hedging partnerships are easily formed.

However, what is easy in theory is both complex and expensive to do in practice.

Hymans Robertson consulting actuary, Iain Pierce, says: "[Longevity swaps] are normally more complex to

administer than a buy-in, while buyouts don't require the collateral arrangements needed with a swap. The complexities are manageable, as are the costs, but they must be considered."

This means schemes with a shrinking deficit that have hedged their inflation and interest rate risk via liability-driven investment (LDI), and have moved out of risk assets, longevity hedging probably is not the best way to go. Trustees in that fortunate position are better off moving to buy-in or buyout.

As noted, SHEPS converted from longevity-only hedging to buy-in as its funding position improved, while Aviva completed a £1.7 billion buy-in following its earlier longevity swap.

Of course, not all pension schemes fit this mould, with plenty still being desperately underfunded. In those situations, investment strategies likely remain weighted towards growth assets with little in the way of available cash to pay for bulk annuities.

Since the longevity hedge requires no lump sum up front, it makes it a more accessible risk transfer option for the cash-strapped scheme.

Aon head of settlement risk, Martin Bird, says: "The swap might be attractive if you haven't got sufficient low-risk assets and instead have a growth bias in the portfolio to address the deficit."

At the other end of the spectrum, healthy schemes may find it is more cost-effective to implement longevity swaps as part of a wider package of hedging measures, rather than fork out for bulk annuities.

Independent trustee firm PTL's managing director, Richard Butcher, says: "A longevity swap costs less than a buyout so it can be a more efficient way to cover off that risk. If a well-run and well-funded scheme has a strong covenant it may be less cost effective to go to buyout than to pin down longevity alongside other measures such as LDI and cashflow driven investment (CDI)."

Longevity swaps – as evidenced

this year by the £7 billion deal between the HSBC pension scheme and The Prudential Insurance Company of America (PICA) – can also prove a sensible option for the largest pension schemes.

Patel says: “If you are a really big scheme then maybe the longevity swap is an easier route because trying to do a buy-in or buyout at a huge size can be harder.”

### Going offshore

The HSBC deal was interesting for more reasons than just the size of the deal, which was the second biggest in UK history. It also used a captive insurance structure.

Under the guidance of consultant Towers Willis Watson and lawyers Sackers, the scheme set up an HSBC-owned captive insurer in Bermuda and onwards reinsurance to PICA. These structures – known as self-intermediated – are a means of reducing costs for the scheme by effectively cutting out the middleman.

Since a quirk of law prevents schemes doing business directly with reinsurers, they are obliged to have an insurance company act as go-between. This model

– known as fully intermediated – means that if the reinsurer goes bust the insurer is on the hook, but it also means higher fees for the scheme.

To bypass the cost, pension schemes can set up an insurer of their own to act as the intermediary. The problem is setting up this vehicle in the UK means holding huge amounts of capital on the books to meet the EU Solvency II Directive rules.

Bird says: “Pension schemes setting up insurance companies [*in the UK*] is not something we see because the huge capital requirements under EU laws undermine the whole value of doing [the swap] in the first place. Instead they set up captive structures which are offshore special purpose vehicles in capital light regimes that are there purely to work with the reinsurance.”

However, taking this route presents its own challenges.

“[*Captive insurers*] are a complicated model to set up and not without risk from introducing overseas legal and regulatory risks. There is definitely a cost/benefit analysis to be done,” Bird says.

To illustrate the complexities involved, there have been just five recorded instances of a captive

reinsurance model between 2009 and 2019 and all have been in the past two years, each for a deal worth more than £1.5 billion.

A halfway house between fully and self-intermediated is the pass-through. This sees the insurer retain its place as middleman, but it does not take on the risk of a reinsurer default; this cost is borne by the scheme.

### A North American threat

Irrespective of the kind of model trustees favour, the capital constraints of insurers and reinsurers is always relevant. Clearly the attractive pricing points for buy-in and buyouts in the past two years demonstrates a deluge of insurers – with willing reinsurers right behind them – keen to offer de-risking solutions to the nation’s DB plans.

Yet an interest in risk transfer from schemes in North America could challenge the UK’s position as the recipient of affordable swap deals.

Pierce says: “Most reinsurers are based in the States and would rather write US business if they could, but the demand isn’t there now. A material increase in US demand could have an impact on the UK market.”

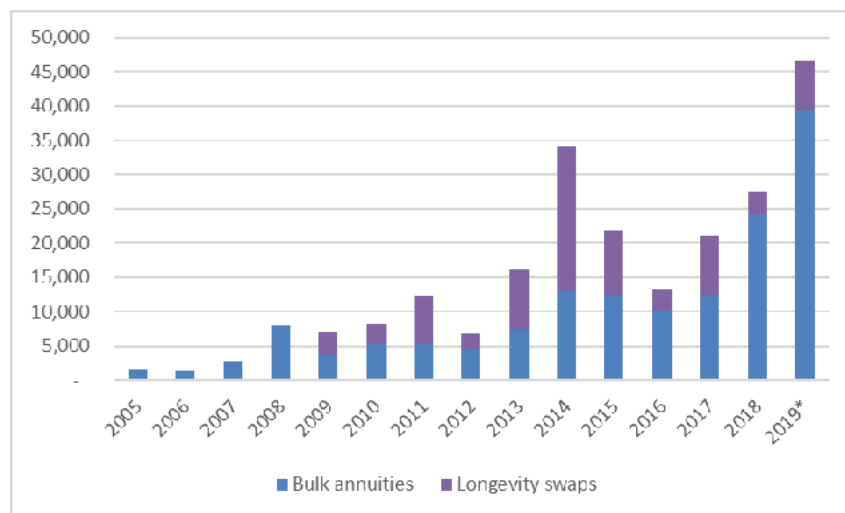
However, Bird argues that it is the Canadian pension universe that poses a real capacity threat.

“Looking at capacity, never mind the US, Canada is a market where they do have cost of living adjustment [*inflation increases*] and their pensions look a lot like the UK. That market is huge and is moving towards de-risking,” Bird says.

Longevity hedging is a useful part of the de-risking toolkit. It is crucial to buy-ins and sits neatly alongside LDI and CDI investment strategies. However, when used in isolation, it will likely trundle along in the shadow of its more popular buyout and buy-in counterparts as a long-term solution to the UK’s pension risk problem.

**Written by Gill Wadsworth, a freelance journalist**

Chart: Bulk Annuity and Longevity Swap Market Volumes 2005- Nov 2019)



Source: [www.uk.mercer.com/content/dam/mercer/attachments/private/uk-2019-mercer-pension-risk-transfer-market-watch-v4.pdf](http://www.uk.mercer.com/content/dam/mercer/attachments/private/uk-2019-mercer-pension-risk-transfer-market-watch-v4.pdf)

\* Note: 2019 figures reflect deals announced so far this year (to end Nov 2019) but do not include details of transactions not yet disclosed by insurers (except where advised by Mercer); hence the total bulk annuity volume to date will be higher than illustrated.