

Managing Longevity Risk – One solution

Historically the only way to manage the longevity risk in a defined benefit pension scheme was by purchasing an annuity policy. However, in June 2009, the first longevity swap for a UK scheme was written and several more have been completed since then.

A longevity swap allows a scheme to reduce or remove the risk of increased costs if future improvements in life expectancy are greater than anticipated, whilst still retaining control of the investment strategy of the assets notionally backing the liabilities.

There are two types of longevity swap. A “scheme experience” swap (although they can have other names) is generally targeted at pensioner members whereas for deferred members, a “population index” swap may be more suitable.

Scheme experience swaps

The early swap deals with UK pension schemes have all involved scheme experience swaps. So far, transactions have covered liabilities of several £100m and many providers will not currently provide swaps for smaller schemes. However, some are beginning to consider smaller deals.

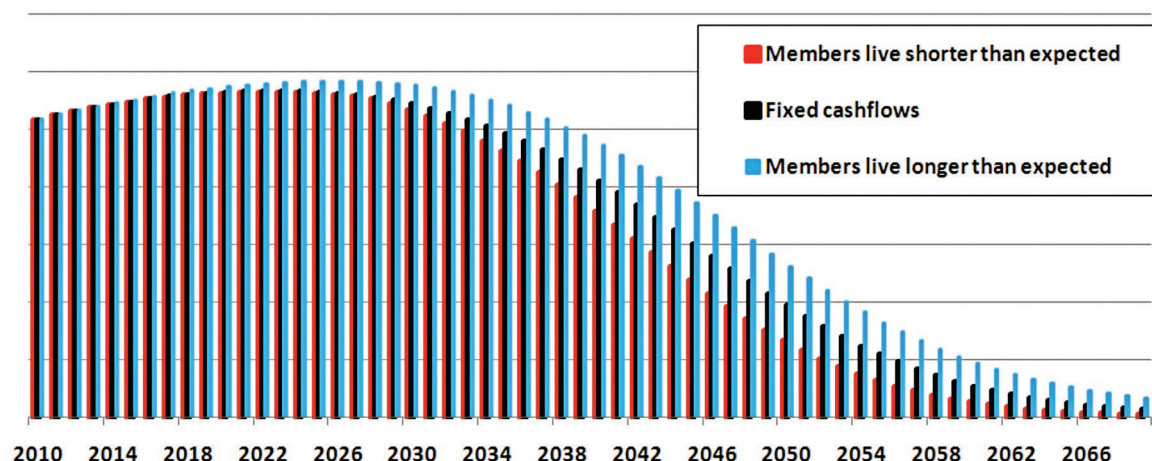
To effect a scheme experience swap, an expected set of cashflows is derived based on the scheme’s actual pensioner population and the swap provider’s longevity assumption.

These cashflows will include an allowance for the insurer’s expenses and expected profit margin.

Over the lifetime of the swap the scheme pays the fixed cashflows based on this projection to the swap provider. In return, the swap provider pays cashflows to the scheme based on the actual longevity experience of the scheme’s membership. In practice, a net payment is made one way or the other each period - for example, monthly, quarterly or annually. If members live longer than assumed (blue bars below), the provider would make a net payment to the scheme. However, if members die more quickly than assumed (red bars below), the net payment would be paid by the scheme to the provider.

The fixed cashflows can include an allowance for spouses’ pensions if required and some providers can also include an allowance for inflation-linked pension increases.

This type of swap is more suitable for pensioners because the cashflows for deferred members are much more uncertain. For example, the members’ retirement age and whether they will commute any pension for a lump sum are both unknown and can make the projected cashflows for deferred pensioners very inaccurate.



Scheme experience swaps continued

A considerable amount of legal documentation is required to accompany a scheme experience longevity swap. This is perhaps understandable given the length of time that such a swap is expected to last, its bespoke nature and the possibility of unforeseen events occurring in the future.

Population Index swaps

Some providers offer a swap based on a population longevity index. These swaps will generally only last for a limited period e.g. 10 years. The index will be based on published national statistics of longevity of the general population.

Current index swaps will protect the scheme against observed improvements in general life expectancy over the period of the swap. However, they will not protect the scheme against changing expectations for future improvements in life expectancy beyond the period of the swap and this is a major disadvantage of these swaps at the moment.

The other disadvantage is that the population's longevity experience will not necessarily match the scheme's own experience. For smaller schemes this can be a significant risk that is retained by the scheme. This type of swap is therefore probably more suitable for deferred members who are less likely to die during the period of the swap but where a major risk for a scheme is changing longevity expectations over the period.

At the time of writing no such deals have been completed by a UK pension scheme.

Who provides these swaps?

Longevity swaps are offered by either investment banks or insurers. As a result, the backing behind the swap can vary.

Investment banks find other parties to take on longevity risk and are merely acting as an agent between the scheme and these counterparties. However, the bank would probably act as guarantor in the event of the counterparties defaulting.

An insurer writing a longevity swap would be required to satisfy the Financial Services Authority's capital requirements to transact this type of business and they may also "re-insure" some of the risk.

Collateral

One issue that schemes will want to consider is any collateral that may be included as part of the agreement. Collateral is used to protect the parties entering into a swap so that if one party defaults on its obligations due under the swap contract, the other party is in some way protected. An investment bank is more likely than an insurer to include collateral in its product.

Terminating the swap

At some point in the future the scheme may want to purchase an annuity policy so it can wind up. It is therefore important to consider the swap termination terms, whether the swap can be converted into an annuity policy with the same swap provider or whether it can be novated to a bulk annuity insurer.

Mortality – Scheme experience analysis

When pricing a longevity swap the provider may want to analyse the scheme's historic mortality experience. The scheme should ensure it receives specialist advice in this area so that it can negotiate robustly with the insurer on the terms and pricing of the longevity swap.

Summary

A longevity swap will undoubtedly be a useful product in helping some larger pension schemes manage their longevity risk. However, those entering into such arrangements should consider issues such as long-term objectives for their scheme, collateral arrangements and terminating the policy.

As the market for longevity swaps develops and there is greater standardisation, these may become available to smaller pension schemes. However, at the moment, for schemes with liabilities less than £100m, a partial buy-in contract remains the primary way of managing the longevity risk.

For further information

Please contact your usual Barnett Waddingham consultant if you would like to discuss this issue in more detail.

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