Hedging longevity risk

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Longevity risk
Pension funds that operate defined benefit schemes are exposed to longevity risk; the risk that their pensioners live longer than predicted.

Their exposure has been growing rapidly in recent years as life expectancy has increased - just one extra year of additional life expectancy can add 5% to a pension fund’s total liabilities. In today’s low-interest rate environment, pension trustees are finding it difficult to earn sufficient returns to compensate.

One solution to this issue is for pension funds to transfer longevity risk to the reinsurance market. Such a transfer can be attractive for both parties.

From the pension fund’s perspective, a life reinsurer is often an attractive counterparty, both because of its deep understanding of the nature of the risk being transferred, and because it can provide a balance sheet big enough to assume a meaningful amount of risk from the fund. The reinsurer is therefore able to provide a reliable hedging solution for the fund.

From the reinsurer’s perspective, a longevity risk transfer can provide a useful hedge to the mortality risk to which the reinsurer is exposed. This is the risk that the reinsurers’ underlying policyholders die early, prompting sooner-than-expected payments on death.

The difficulty is that reinsurers are not licensed to directly insure a pension fund’s risks.

A solution is to interpose a captive insurance company between the pension trustees and the reinsurer.

Guernsey is seeing an increasing number of transactions which use special purpose insurance companies, in the form of incorporated cells, for this purpose.

How it works
The incorporated cell of an incorporated cell company insures the liability of the pension fund and then reinsures its liabilities with the reinsurer. The incorporated cell does not retain any net risk. The pension fund pays premium to the incorporated cell in return for certainty as to the level of payments it must make to its members. The incorporated cell will pay the premium on to the reinsurer (less its frictional costs) in return for reinsurance of the risk it has assumed.

Each of the counterparties in the transaction is exposed to the credit risk of each of the others. For example, if the reinsurer becomes insolvent, the incorporated cell will not be paid and in turn will be unable to pay the pension fund. This risk is particularly important because of the long duration of the transaction. It can be decades before the pension liabilities are finally run off and the insurance and reinsurance can be terminated.
For this reason, an important element of a risk transfer transaction is to put in place security arrangements and collateral to ensure that the transaction can be unwound in the event of the failure of one of the counterparties.

**Incorporated cells**

An incorporated cell is a registered legal entity with its own memorandum and articles of incorporation, its own company registration number and its own board of directors. Each incorporated cell is associated with a specific incorporated cell company. An incorporated cell company can establish multiple incorporated cells.

The principle is that an incorporated cell company uses incorporated cells to segregate assets in order to limit the recourse of its creditors to a specified pool of capital.

An incorporated cell is linked to its incorporated cell company by its board of directors (which must be identical to the board of directors of the incorporated cell company), its registered office (which must be at the same address as the incorporated cell company), and by the responsibility the incorporated cell company has for various administrative acts of its incorporated cells. Further information about incorporated cells and incorporated cell companies can be found [here](#).

Incorporated cells are proving attractive in the context of longevity risk transfer for several reasons.

Firstly, forming an incorporated cell company is a cost-effective way of establishing a group of special purpose insurers under common ownership (similar to a corporate group comprising non-cellular companies). Once a pension fund establishes an incorporated cell company and an incorporated cell in order to complete a longevity risk transaction, it can easily add additional incorporated cells at a later date in order to enter into further transactions.

Secondly, incorporated cells are flexible at the structural level. Incorporated cells can be transferred between incorporated cell companies, converted into standalone non-cellular companies or migrated to other jurisdictions. This means that the structure can be changed in the future if needed. This is important since, as noted above, a transaction can subsist for a very long time, perhaps in excess of 60 years.

**The regulatory regime**

Insurers in Guernsey are regulated under the Insurance Business (Bailiwick of Guernsey) Law, 2002, which requires all insurers, including those structured as special purpose incorporated cells, to obtain and maintain a licence from the Guernsey Financial Services Commission. Licensed insurers are subject to statutory capital and solvency requirements. These include a formula-based Minimum Capital Requirement and a risk-based Prescribed Capital Requirement, which incorporated cells must meet on an individual basis.

However, an incorporated cell used in a longevity risk transfer transaction can qualify as a special purpose entity (known as a “category 6 insurer”). This is because its underwriting risk and counterparty credit risk are both effectively eliminated by (in the case of its underwriting risk) the back-to-back reinsurance with the life reinsurer and (in the case of its counterparty credit risk) the collateral and security arrangements mentioned above.

Classification as a special purpose entity means that the incorporated cell does not need to meet either the Minimum Capital Requirement or the Prescribed Capital Requirement. It also does not need to produce an Own Capital Solvency Calculation (or “OSCA”). The OSCA is similar in concept to the UK’s Individual Capital Assessment for insurers.

The Guernsey Financial Services Commission will also waive certain other requirements which would otherwise apply to the incorporated cell: - in particular, the requirement to appoint an actuary to prepare an annual report; and the requirement that life insurers hold assets representing 90% of policyholder liabilities in trust in Guernsey.

Further details about insurance regulation in Guernsey can be found [here](#).

**Management**

Instead of employing staff to manage the incorporated cell, the shareholder (the pension trustees) will usually appoint a non-executive board of directors (who will also direct the incorporated cell company) supported by a locally licensed insurance manager. The insurance manager provides administrative services and technical insurance support. It also provides a registered office address and acts as the incorporated cell’s general representative.

Board meetings are held in Guernsey and a majority of the directors are Guernsey residents in order to ensure that the mind, management and control of the incorporated cell remains at all times in Guernsey.

**ICC Facilities**

Several insurance managers have established their own incorporated cell companies to facilitate longevity risk transfer transactions for their clients.

These managers can offer pension funds an incorporated cell in a ready-made incorporated cell company. These incorporated cell companies may have incorporated cells owned by different pension funds, each of which is established to operate a single longevity risk transfer transaction. This structure can be cost-effective for pension trustees who are contemplating one-off or smaller transactions; and who therefore do not wish to establish their own incorporated cell company.
Recent transactions

Carey Olsen has an extensive track record in advising on longevity risk transfer transactions. The firm advised on the first transaction to use a Guernsey incorporated cell in 2014. Carey Olsen acted as Guernsey counsel to the trustees of the BT Pension Scheme on this transaction, which had a value of £16 billion. Recently, Carey Olsen has acted for the trustees of the Merchant Navy Officers Pension Fund on a £1.5 billion transaction, the trustees of the British Airways pension scheme in a £1.6 billion transaction, and for Mercer ICC Limited in relation to a £3.4 billion transaction with the trustee of the Marsh & McLennan Companies pension scheme. The firm is currently advising on other transactions which have not yet been announced.