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An Island Paradise: The Country with the Most Actuaries per Capita

By Graydon Bennett

It is a statistic of which we naturally make much fuss. It has often been repeated, even by a former editor in the vaunted pages of *The Actuary*, and may well be true. Its truth will depend on your personal definitions of “actuary” (to include students?) and “country” (self-governing Crown Dependencies?). Nevertheless, by any measure Guernsey is quite definitely an island and, I will argue, a paradise—especially for actuaries—however you choose to define the term.

HISTORY

Guernsey is a twenty-five square mile rock off the coast of France and together with its neighbours Jersey and Alderney (and others) comprise the Channel Islands. The islands are legally distinct from the United Kingdom as the Bailiwicks of Guernsey and Jersey are dependencies of the British Crown.



Guernsey enjoys a moderate maritime climate (we still talk about the “Big Snow of 2013”), an abundance of sandy beaches, fine dining and local produce. My own commute to the office is a 10-minute walk and I can be on the beach in five minutes more.

Guernsey also enjoys a rather efficient income tax regime, but I won’t say anymore on that subject here.

STRUCTURAL INNOVATION

Guernsey is not only a paradise for the everyman, despite its obvious charms. It is, in particular, a paradise for actuaries. Guernsey has a long history of financial innovation and indeed the first captive insurance company was incorporated here in 1922.

More recently in 1997, Guernsey pioneered the concept of a Protected Cell Company (PCC), comprising a core and appendant cells. The assets and liabilities of each cell are ring-fenced from each other and from the core itself, making the PCC an efficient structure from which to transact certain types of insurance and reinsurance deals. It is worth noting that the cells of a PCC cannot enter into contracts in their own name.

The innovation of the PCC was followed in 2006 with the Incorporated Cell Company (ICC) which is similar in many respects to its ancestor, with the exception that each cell of the ICC is a separate corporate entity with its own board of directors and articles of incorporation. Unlike PCCs, the cells of an ICC can contract in their own name. This reinforces the segregation of assets and liabilities between the cells and improves the protection afforded to creditors by preventing cross-contamination. The assets of one cell are not available to settle the liabilities of another. The ICC also appears to be the preferred vehicle for transacting longevity swaps, of which more will be said later.

Once restricted to insurance and reinsurance entities, these structures are now commonly used around the world for a variety of industries to segregate assets—notably by marine and aviation companies who might allocate each ship or aircraft to a particular cell. These innovative structures provide the framework by which intellectually stimulating and economically efficient insurance and reinsurance solutions can be implemented, and they provide the local actuary with the opportunity to cut his teeth on more esoteric transactions.

Insurance-Linked Securities

Guernsey has also seen the blossoming of the insurance-linked securities (ILS) market. These vehicles allow insurers and reinsurers to access capital markets by issuing securities where the payoff is linked to a contingent event. The classic example is the catastrophe bond, but other variants have been issued such as the longevity swap and the securitisation of embedded value or reserve funding.

In August 2017, it was announced that a Guernsey-domiciled ILS reinsurance transformer (itself the cell of an ICC) had issued what it believes to be the first ILS security to make use of private blockchain technology. Unfortunately, a description

of blockchain technology is not within the scope of this article but the launch of an “ILSBlockchain” illustrates very well the type of ground-breaking firsts being executed in Guernsey.

While the use of ILS is not unique to Guernsey, it is certainly an active sector of the local finance industry.

LONGEVITY SWAPS

I have mentioned longevity risk twice so far, and with good reason. Guernsey has been the jurisdiction of choice for a number of large longevity transactions. In 2014 the British Telecom (BT) pension scheme executed a £16bn longevity swap with a U.S.-based life insurer through a Guernsey captive. This was followed by a £1.5bn transaction for the MNOFP (Merchant Navy Officers Pension Fund).

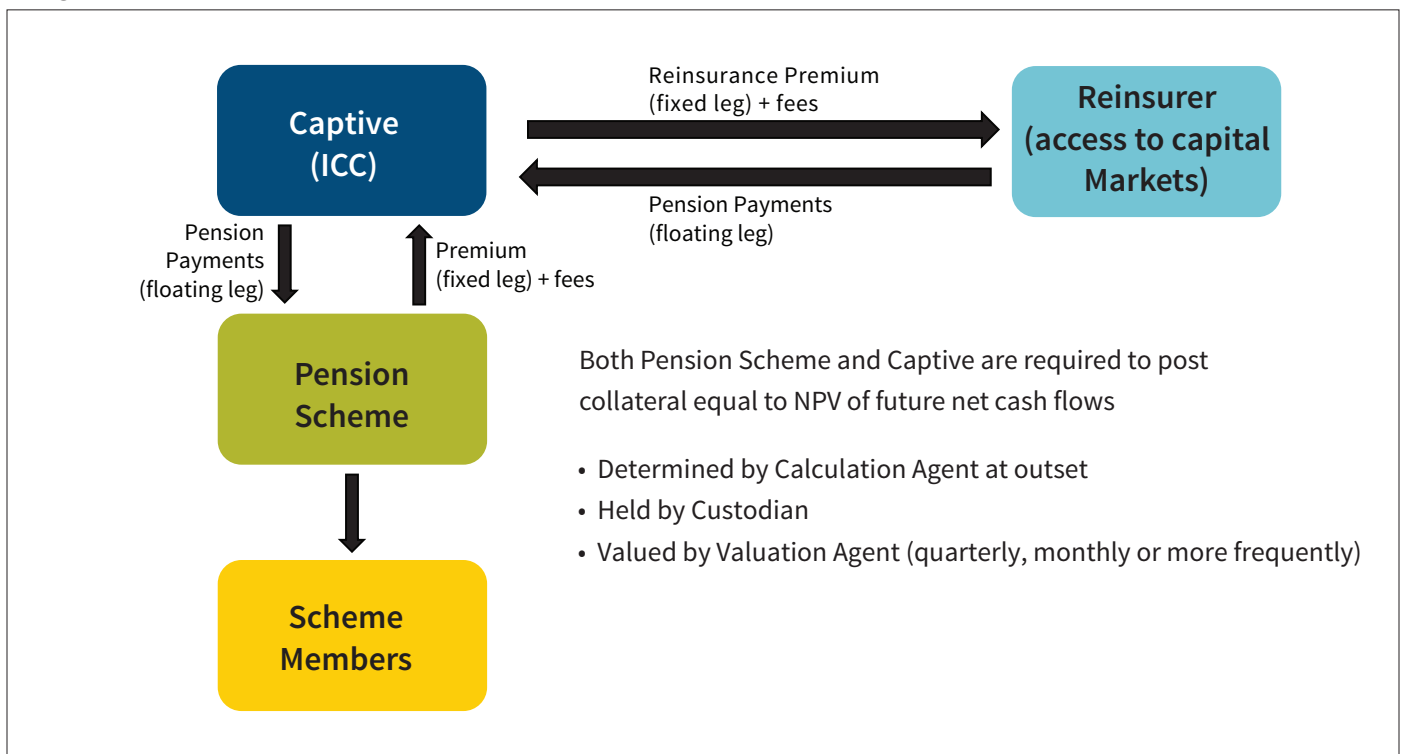
After a brief lull, two more large longevity risk transfers have recently been transacted in Guernsey and were announced in September 2017. The pension scheme for Marsh & McLennan Companies executed a longevity swap via an ICC to hedge the longevity exposure in £3.4bn of pension liabilities and separately, one of British Airways’ pension schemes agreed to a deal to hedge the longevity risk inherent in £1.6bn of its defined benefit pension liabilities.

Longevity swaps have become the “hot topic” among the trustees of defined benefit pension schemes who are concerned



about the scheme’s exposure to longevity risk. In a longevity swap, the pension scheme exchanges a stream of fixed payments for floating payments equal to the pension payments it is obliged to make. The ultimate counterparty in such a transaction is usually a reinsurer who has access to deep capital markets, extensive mortality data, and possibly whole life mortality risk which can act as a natural hedge! However, as reinsurers are not permitted to transact directly with pension schemes, an intermediary insurance company is often used. In

Figure 1
Longevity Swap – Schematic



many cases the intermediary will be a captive of the pension scheme's sponsor or an ICC used for that express purpose.

The schematic in Figure 1 illustrates a simplified longevity swap structure. The role of the actuary is typically to act as calculation agent and/or as valuation agent for the swap. The calculation agent is an independent third party who determines the value of collateral to be posted at the inception of the swap. Naturally, there will also be separate teams of actuaries advising the trustees of the pension scheme and working for the accepting reinsurer.

In my opinion, the beauty of the longevity swap derives from the opportunity for actuaries, lawyers, trustees, and insurance managers to all work together on a complicated and multi-faceted problem. It's a great example of the cross practice nature of actuarial work being performed in Guernsey.

PENSION REFORM

And while we're on the subject of occupational pensions, it is worth noting that Guernsey's government has approved in principle the creation of a secondary pension scheme, with a target launch date of 2020. The aim of the secondary pension scheme is to provide a retirement savings vehicle for those who do not have access to an occupational scheme. Contributions will be paid by both employers and employees into an individual's account to supplement the state pension and any private savings in retirement.

The local government has also introduced new pension legislation which took effect in June 2017, with additional reporting and disclosure requirements. It is without a doubt an interesting time to be an actuary in Guernsey and there is no

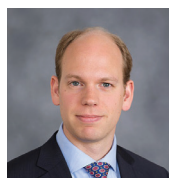
shortage of challenging work at the forefront of international finance—so keep your pencils sharp!

PROFESSIONAL DEVELOPMENT

It would be remiss of me not to say a few words about the local actuarial profession itself. We are fortunate to have a local professional body, the Channel Islands Actuarial Association (CIAA) which hosts meetings almost every month. Guest speakers are invited from across the U.K. and Europe to address topics relevant to actuaries practicing in insurance (both life and general), pensions, investment, and risk management. The CIAA is itself a regional society of the Institute and Faculty of Actuaries in the U.K., and a full member of the Actuarial Association of Europe.

CONCLUSION

Guernsey is an island of rich history but also of cutting-edge innovation. We have long sandy beaches, warm summer evenings, and a plethora of esoteric insurance structures to keep almost any actuary interested and engaged. I trust that I have adequately demonstrated just how idyllic my little island is, but if you require further proof, consider that almost everyone on Guernsey not only knows what an actuary is, but probably knows one personally. A la perchoine! ■



Graydon Bennett, FSA, is a senior manager with BWCI Group. He is based in Guernsey in the Channel Islands and can be contacted at gbennett@bwcigroup.com.