

The Actuary™

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Luca Tres and **Paul Whiting** discuss
the redefining of the life insurance
capital management landscape

Almost 10 years ago, a World Economic Forum paper described life insurance-linked securities (ILS) mainly as a financing tool – rightly so in 2008. The landscape is now dramatically different and life ILS funds are becoming a key partner for European life insurers.

There are some events that make history, and Solvency II coming into force on 1 January was one of them. A preparatory journey that officially started 15 years ago has now reached the finish line. The chequered flag however is also the starting line for a change that insurance companies have started to embrace and that will reset the concept of insurance capital management.

This redefinition will bring insurance capital management closer to the banking capital management mindset of a market-value driven active capital management approach.

This should translate into a proactive approach to capital optimisation as well as a strong need for new solutions providers and risk takers (capital market investors – the ILS industry in particular). The ILS industry has increasingly played a key role as a final risk taker. It is expected to do so even more going forward, especially for life risks. The ILS market is now considered to be around \$65bn (almost 10 times the 2006 number), and various insurance experts estimate that it can become \$150bn+ by 2020. The lion's share will still involve natural catastrophe risk transfer,

but very high growth is expected in other areas such as life ILS.

The lack of standardisation, the perceived higher complexity and the longer-dated nature have historically made life ILS a niche area if compared to the more established catastrophe bond and general non-life market. The story is different now.

In 2014, the EIOPA insurance stress test gave a clear message: a significant proportion of insurers need to strengthen their capital position. If EIOPA could point fingers politically, it would mainly be at the life insurance/reinsurance industry. Today's ultra-low rates context combined with severe Solvency II capital charges heavily impacts life insurers.

In this context, life ILS investors can be a key ally for the life insurers. Their nimble and flexible nature makes them able to offer tailored capital management solutions.

More and more insurers are now looking at the Tier 2 market to support their capital ratios. Although the hybrid market offers a potentially attractive area for sourcing of capital with a standardised and well-known structure all regulators are familiar with, a Tier 2 issuance is often not the best strategy to pick. Because of the Solvency II cap on Tier 2 capital recognition, as well as the relatively quick issuance process (market conditions permitting), hybrid issuance could be an important

component of a flexible war-chest that insurers should keep for potential sudden future capital needs. Additionally, when targeting a Solvency II ratio substantially higher than 100%, de-risking can be used as an alternative to Tier 2 issuance.

There is a leveraging effect, which means that where the denominator is reduced by 1 (say, by entering into a risk hedge), under a target solvency ratio of 150%, this would equate to issuing 1.5 of hybrid capital. Therefore, *ceteris paribus*, supporting the solvency ratio by entering into a de-risking (reinsurance or derivative) transaction should normally give a lower break-even cost of capital than a Tier 2 issuance.

There seem to be many risk areas where life ILS funds can work together – lapse risk, longevity risk, risk margin relief and capital fungibility/transferability, just to mention a few. Lapse and longevity risk are clearly a priority for the European life insurance industry. Traditional reinsurers have historically shown a limited interest for behavioural risks such as lapse. Most of them are now revisiting their stance, however, ILS funds, with their insurance and capital markets DNA, are still set to play a key role.

Longevity risk is a hot topic across Europe and one of the key themes of the wider society and its pension landscape. Numbers tell a clear story: £1.1 trillion of estimated longevity reserves (in the UK only) versus £40bn-60bn of estimated annual traditional reinsurance capacity – the imbalance looks even worse at global level. There is clearly a gap – a gap that is expected to widen over time because of the punitive capital charge reinsurers themselves incur on longevity risk; a gap that can be filled



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Securis life and health team – head of analytics



by new risk takers that offer a mix of risk-taking and actuarial capabilities.

The ILS industry was born exactly for this reason: bridging insurers, reinsurers and pension funds' needs with capital market investors' risk appetite for uncorrelated risks, adding the missing gear – that is the ability to understand, structure and price life and health insurance risks.

Life ILS risk transfers have already been successfully implemented, with various transactions having been executed on a much wider scale compared to the more well-known extreme mortality and embedded value bonds. While most of them are privately negotiated, the AEGON longevity swap executed in February 2012 represents one of the successful examples of public capital markets investor-targeted transactions:

- A 20-year derivative hedging the insurance company against a longevity increase between an out-of-the-money attachment point and 1-in-200 years solvency stress level detachment point
- A successful example of implementation of a commutation mechanism: an effective way to provide longevity protection for liability cashflows occurring beyond the 20-year maturity point through a payment at maturity
- A transaction structured not only having in mind the usual risk hedging purpose but also targeting an optimised regulatory capital impact, that is providing a structure aimed at reducing the break-even cost of capital

below traditional full transfer reinsurance transaction.

The advent of new avenues for optimised risk hedging and capital management is clearly natural and positive for an evolving insurance and reinsurance industry. At the same time, it challenges a status quo and urges the insurance industry to get fully comfortable with alternative risk management tools (in addition to the traditional reinsurance techniques) and fine-tune the (already existing) tools to manage potential counterparty risk concern.

Life ILS funds indeed might not necessarily offer a rated counterparty profile in the same way that most long-established reinsurers do. At the same time though, they tend to offer a collateralisation profile, which, if appropriately structured, can give full comfort and provide a very attractive regulatory counterparty risk profile; in a general context where Solvency II itself supports the reduction of the overreliance on external ratings as well as where insurance supervisors are raising more concerns on concentration risk to few traditional counterparties.

Someone could think of ILS funds purely as risk-taker investors, waiting for intermediaries to bring them pre-packed transactions. This is clearly not the case anymore. Life ILS players have the technical knowledge and a unique mix of capital markets and actuarial skills that make them a 'solution provider' for life insurers; a partner able to structure tailor-made capital management solutions that address life insurers' specific needs. Risk margin relief and capital fungibility/transferability are just some examples of the areas of mutual interest. Private solutions can be offered at smaller scale and lower cost than public security offerings, putting ILS solutions within reach of a wider range of insurance companies.

This trend is not new. The market has already witnessed a similar evolution on the banking side: capital market investors have been effectively supporting banks in their deleveraging process over the past decade. With Solvency II fully in force now, insurance experts expect a similar trend to happen in the insurance space.



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