What are Life Insurance Linked Securities?

Life Insurance Linked Securities (Life ILS) are structured life reinsurance solutions packaged in investible form for capital markets investors. In this article we argue that Life ILS are a bona fide alternative fixed income asset class, given features such as long-dated cashflows and low correlation with other asset classes. These characteristics differ substantially from more common forms of ILS, such as cat bonds, which cover natural catastrophe risks and other non-Life ILS. Furthermore, due to increasing demand in the life insurance industry, we expect Life ILS will develop into a more mature asset class over the coming years.

The Life ILS universe

The main types of Life ILS are:

- Value of in-force (VIF) business transactions are primarily financing solutions based on the economic value (profit) embedded within a portfolio of life insurance policies. Risk-transfer can also play a prominent role in these transactions, depending on the structure adopted. Reserves financing is a specific form of VIF transaction, widely used in the life insurance market in the US in relation to term assurance (typically referred to as “XXX” transactions) and secondary guarantees (“AXXX” transactions)

- Mortality transactions involve transferring the risk of policyholders living shorter lives than expected. Transactions can target extreme mortality exposure (e.g. pandemic), longer-term mortality trend risk, or shorter-term volatility in the number of death claims

- Secondary annuities, a subset of the mortality risk sub-class, are an emerging area in the UK that will involve annuitants trading their policies on a secondary market which is expected to launch in April 2017. Investors in these transactions will be exposed to mortality risk, as their principal is at risk in the event of the early death of the original policyholder

- Morbidity transactions involve transferring the risk of claims for illness, disability or medical costs. Transactions might target extreme events or claims volatility

- Lapse transactions involve transferring the financial risk that an insurer faces if higher than expected numbers of policyholders cancel their policies and/or discontinue their premium payments. Lapse trades are motivated by a need to transfer risk and/or raise capital

- Longevity transactions involve transferring the longevity risk within a pension fund or annuity contract that pensioners or annuitants live longer than expected

- Life settlements, a subset of the longevity risk sub-class, is a secondary market in the US that involves buying life insurance contracts that have been sold by the original policyholders.
The below chart illustrates the relationships between the various types of life ILS.

The focus of our Life ILS strategy at present is VIF transactions, cost-efficient alternative capital solutions (e.g. for lapse risk) and transfer of mortality or morbidity risk. While some Life ILS managers have focused on life settlements or longevity, these risks do not currently form a part of our strategy.

In the following sections we describe the value of a Life ILS strategy in absolute terms, as well as underlining the fundamental contrasts with non-life ILS.

"Life ILS transactions can be a good match for long-term fixed liabilities"

**What does Life ILS bring to an investor?**

As most Life ILS are fixed income-type transactions with medium to long durations, this asset class can be a good match for long-term fixed liabilities such as defined benefit pension liabilities or annuities. In particular, amortising assets such as VIF generate substantial cash-flows over a medium to long period which are fairly predictable. Life ILS also offer compelling risk-adjusted returns, in part due to their long-dated, illiquid, cash flows. While the illiquid nature of such assets requires a long-term commitment from investors, attractive liquidity premiums should offer more than adequate compensation at current yields. Given these characteristics, pension funds and other long horizon “buy and hold” investors might consider this more of an opportunity than a problem.

Most life ILS trades are highly structured and bespoke as a result of being designed to meet a sponsor’s specific objectives, which might relate to liquidity management, risk transfer and/or capital management. The risk profile of each trade depends on the combination of the underlying block of life insurance policies and the transaction structure. An understanding of the risk profile therefore requires intimate familiarity with life insurance products, biometric risk and structured life solutions. These attributes mean that a Life ILS investor will need to have access to a specialised set of skills and infrastructure to enable and support a robust investment process. Ultimately, the need for product, actuarial and origination/structuring expertise forms a barrier to entry into Life ILS for many managers and is a principal reason why there are relatively few Life ILS managers.

A minority of Life ILS transactions, such as extreme mortality/pandemic bonds, are tradable and therefore more standardised. These are simpler to understand and tend to be issued with an independent risk analysis. Such standardised transactions can bring several benefits to the issuer, such as scale and competitive pricing, which might be difficult to achieve on a private trade. Although these transactions are more accessible to investors than private deals, and might appeal to a more active ILS investor, they represent but a small and rather low-yielding segment of the Life ILS market.

Investing in Life ILS is better suited to a longer term investment strategy. Any investor who has dedicated the time and effort necessary for understanding the asset class will have done so in order to benefit from its performance over the long term.

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1 Structured settlements – personal injury claims that are settled via ongoing annuity payments rather than a lump sum – might also be considered here, although these remain outside our focus area.
Comparison with more common forms of ILS

With the exception of mortality and morbidity cat bonds, Life ILS transactions are typically driven by portfolio-specific risk drivers. This contrasts with the event-driven nature of non-life ILS. So, where ILS investors will have a good sense of how the occurrence of a catastrophic earthquake or hurricane can act as a switch in the performance of a cat bond, Life ILS investors must have a thorough understanding of the underlying performance drivers of a portfolio of life insurance policies. The primary drivers are typically lapse risk, with policyholder behaviour potentially playing a role, and mortality risk, but can also include the other risks in the Life ILS universe discussed on page one. The portfolio-driven nature of life ILS leads to differences in the evaluation of risk in a transaction. Risk modelling for Life ILS transactions is usually undertaken through stress and scenario analysis, rather than distribution-based modelling.

Will Life ILS become a standalone asset class?

Life ILS can bring genuine and unique value to pension funds and other institutional, long-term investors seeking longer-dated, regular cash-flows. So what is the likelihood of Life ILS maturing into an asset class sizeable enough to catch and hold the attention of sophisticated alternatives investors? As long as there is substantial insurer and reinsurer demand for structured solutions, Life ILS investors will see a steady – and probably growing – deal flow. Risk-based regulatory regimes, such as Solvency II, are a true game-changer for the industry and force an economic view of risk, value and capital on the part of potential Life ILS sponsors. This in turn increases the focus on risk and capital solutions that can help to manage risk and/or enhance capital management. As insurer and reinsurer demand for structured solutions increases over the coming years, we believe the prospects for Life ILS investors are bright. Investors who have access to the necessary skills and infrastructure are well positioned to capitalise on opportunities that will arise.