Financial Adviser
01 APRIL 2010

In Depth

Into uncharted territory

key points

- Compared to a traditional bond portfolio, longevity as an asset class is less sensitive to credit risk and short-term interest rate movement
- Trading in micro-longevity also brings with it another risk that is particular to this asset class: origination risk
- Until the advent of government longevity bonds linked to the population, which in the mind of the author is not so far away

Longevity is an evolving asset class which is similar to fixed income yet bears little correlation to market behaviour

David Rawson-Mackenzie

Longevity as an asset class bears many resemblances to fixed income in that both have a fixed maturity value and anticipated maturity and return. However, compared to a traditional bond portfolio, it is less sensitive to credit risk and short-term interest rate movement but as its name suggests, longevity risk lies with the reference lives living longer than expected.

With its low correlation to markets, longevity can bring a new dimension to complement any fixed income portfolio. Micro-longevity has been around for years and includes reverse mortgages, life tenancies and in recent times, life settlements.

Both are defined as micro as the longevity of the instrument is determined by the duration of individual lives that are medically underwritten to provide as accurate an estimate as possible. As there is limited actual-to-expected data available on a subset of a population, it is difficult to ascertain the accuracy of such estimates. At its core micro-longevity is more volatile compared to macro-longevity and thus commands a higher risk premium.

Macro-longevity deals with large numbers, generally an entire population or at least a large subset thereof. Until recently, little was known of this asset class except in specialist circles such as the pension industry. On average the deal sizes are considerably larger than a typical micro-longevity trade. In a typical macro-trade, an annuity provider, be it a company pension fund or insurance carrier, will aggregate tens of thousands of elderly annuitants and transfer the risk of their extended longevity (that is, paying more annuities than anticipated) to the capital market. This is done primarily due to regulatory requirements as it is more economical to transfer this risk to investors rather than bolstering the company's balance sheet. With macro-longevity, the law of large numbers dictates a certain degree of predictability and therefore lower risk. However, as a new asset class, investors demand returns superior to similar fixed income portfolios.

By virtue of the type of asset - an insurance policy or a house with a life tenancy - investors will generally find it easier in the first instance to assimilate micro-longevity products into their fixed income portfolio.

Maturity

The indicative return in a micro-longevity instrument such as a life settlement is determined based on the anticipated maturity date, the fixed maturity value and the premiums due for this period, although the realised return may vary depending on the actual longevity of the reference life.

As an investment, its characteristics are similar to those of a callable zero-coupon corporate bond where there is an implied term and return, a defined maturity value and the issuer has a credit rating.

The difference is mainly in the nature of the risk. In a bond, the holder's repayment is linked directly to the credit worthiness of the issuer at the time of maturity while in a life settlement, the risk is mostly in the maturity date. And this depends largely on the accuracy of the initial assessment and medical improvements in the ensuing years. Life expectancy estimate is determined actuarially, based on the medical history of the person and as with credit rating is not an exact science.

Credit rating comes into play when trading a bond as a lower credit rating will result in a lower overall return on investment. The concerns for a life settlement investor are different; in order to trade a life settlement, the investor needs to obtain updated medical records in order to re-evaluate the anticipated longevity. Contrary to conventional logic, the duration remaining in a longevity estimate is not linear to the passing of time and any extension in longevity will result in a lower return on the investment, which in a diversified longevity portfolio will be offset by early maturities.

Trading in micro-longevity also brings with it another risk that is particular to this asset class - origination risk. For life policies, this means ensuring that insurable interest existed since the origination of the policy. For a life tenancy, this means ensuring that conveyancing and the transfer of titles were done correctly from the outset. Often the use of derivative products such as longevity swaps or notes mitigate these risks.

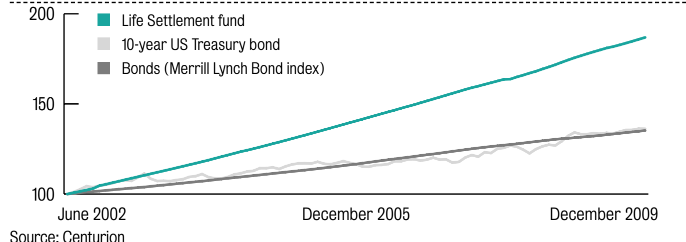
As an alternative asset class, longevity can be analysed in a similar fashion as fixed income products since it has very similar features to those offered by bonds in the fixed income element of a portfolio, but replaces credit risk with longevity risk. By virtue of the fact that it is a new asset class, investment in longevity commands a premium of between 200 and 400 basis points above comparable corporate bond issues.

Compared to the corporate bond market, longevity is a thinly traded and therefore relatively illiquid asset. For most asset managers, this is uncharted territory and quantifying the strength of a third party manager in a relatively new asset class is not easy. Unlike most asset classes, in longevity, past performance is in no way an indicator of future performance. Longevity trades typically have a long term horizon, so measuring performance based over a relative short period of time without understanding the risks involved in the asset class is fraught with danger.

Bonds as an asset class have been around for quite some time and so there is a myriad of good managers out there to choose. Conversely, longevity is a new and evolving asset class so there are fewer managers to choose from, especially those who have an eight to 10-year track record.

> "As an alternative asset class, longevity can be analysed in a similar fashion as fixed income products since it has very similar features to those offered by bonds in the fixed income element of a portfolio

Comparison of life settlement fund, bonds and cash



Source: Centurion

Trades

With the advent of macro-longevity, access to these derivative trades can be gained through investment funds in order to achieve proper diversification. Investment managers will find it easier to slot longevity into their fixed income asset allocation with reduced counterparty risks thereby adding value to their clients' fixed income portfolio.

Until the advent of government longevity bonds linked to the population, which in the mind of the author is not so far away, finding a retail product will be difficult for investors, simply because, as Peter Smith, head of investments policy with the conduct policy division for the FSA, said recently, longevity is a complex asset class. However, investing in longevity does have its rewards; there is little correlation to markets, and while semi-illiquid, the asset class is similar in nature to fixed income instruments and yet provides superior returns.

David Rawson-Mackenzie is director of Centurion Fund Managers Limited

© THE FINANCIAL TIMES LIMITED 2010