

REPRINTED FROM

InsuranceRisk

SOLVENCY II ■ CAPITAL ■ RISK MANAGEMENT

www.risk.net
December 2014/January 2015

 **SOCIETE GENERALE**
Corporate & Investment Banking

BEST BANK – CREDIT

BEST BANK – LONGEVITY RISK

BEST BANK OVERALL

InsuranceRisk
AWARDS 2014

WINNER

Best bank – Credit

InsuranceRisk
AWARDS 2014

WINNER

Best bank – Longevity risk

InsuranceRisk
AWARDS 2014

WINNER

Best bank overall

Best bank for credit risk, longevity risk and best bank overall: Societe Generale

'IF YOU DON'T LIKE CHANGE, you will like irrelevance even less.' The harsh opinion of retired US army chief Eric Shinseki is similar to the view insurers have been forced to embrace in recent years. Firms have had no choice but to adapt, as they have found themselves in the impact zone of regulatory changes and facing historically low interest rates.

Of course, change also brings opportunity, which is why Societe Generale (SG) identified the insurance industry as a growth area for the firm several years ago. "The industry is going through significant changes due to the low-yield environment and the introduction of risk-based capital regulations and fair-value accounting," says Eric Viet, head of financial institution advisory at the bank. "As a result, insurance companies are engaged in significant changes of their asset allocation and risk management, but also in the development of new types of insurance contracts."

The firm's foresight is paying off. SG wins our award for best bank overall this year. In addition to its work in credit and longevity risk transfer, for which SG wins individual awards, the bank is also increasing activity in the inflation space and, across all asset classes, has transacted more large hedging transactions with insurance companies than in any year before.

Stand-out primary market deals from SG include subordinated European issuance for Axa, Poste Vita, Allianz, Aviva, Generali and CNP Assurances, across the whole spectrum of the asset class. Meanwhile, the acquisition of Newedge promises to help the firm attract more clients as insurers move to central clearing of over-the-counter derivatives with the attendant effects on their collateral and liquidity.

Credit

The bank has been working closely with clients to assess the impact of Solvency II on credit portfolios both to identify capital-efficient ways to invest and hedge, and to help



L-r: Jeff Mulholland, Eric Viet and Ludovic Antony of Societe Generale

clients gain access to yield. For example, SG has identified that it is more capital-efficient under the Solvency II standard formula to buy exposure to an underlying credit and add protection rather than buy a tranche of the credit, in the form of conventional asset-backed securities. The approach can be applied both for hedging and for yield enhancement, and SG has done both for clients during 2014.

In an example given by the bank, the client buys credit exposure on an underlying index, such as the iTraxx Main with protection on a junior tranche, so they end up with economic exposure to a tranche of 9–100% of the index. Based on SG's calculations, the capital charge would be in the region of 13% under the Solvency II standard formula credit derivatives sub-module compared with 66% for an equivalent exposure calculated under the repackaged loan products sub-module, which

is used to calculate capital requirements for conventional asset-backed products.

Insurers can employ the same idea but using leverage to enhance yield. Thus, in a second example, the client buys a note with an exposure leveraged 11 times on the index plus protection on the 9–100% tranche leveraged 10 times. Based on SG's calculations the capital charge would be in the region of 39% under the Solvency II standard formula credit derivatives sub-module compared with above 82% for an equivalent exposure calculated for conventional asset-backed products.

Elsewhere, SG has brought its SG issuer programme (SGIS) into play to assist mid-level insurers that wish to make forward bond purchases without the burden of trading derivatives. This enables clients to trade without needing to put in place Isda agreements and without the need to set up call

margin processes, derivatives reporting or work on hedge accounting.

The SGIS programme allows investors to buy SG-issued notes, but backed and collateralised by third-party bonds. Clients are able to meet their need to diversify counterparties and optimise yield. Some of the bank's clients have used the facility to execute forward purchases of bonds and so lock in current steep yield curves and reduce reinvestment risk.

In these transactions, the investor pays 15% of the notional at the start of the trade then an additional percentage on each year of the investment. The client receives a fixed coupon in return. If the client stops reinvesting, the repackaging unwinds and the client receives the proceeds of the bond sales less the cost to SG of unwinding the transaction.

Alongside forward purchases of bonds, forward sales also continue to be a trend among clients, says the bank. In 2013, SG worked extensively on structuring forward sales programmes with insurers so they could continue to benefit from high yields on bond holdings but knowing any sudden rate rise would not wipe out their mark-to-market gains. Because rates have not risen as might have been expected, the trend has gained further momentum.

Meanwhile, in origination, SG continues to lead the development of the private placement market, an area the firm has targeted as part of its strategic shift to an originate-to-distribute model. Two transactions stand out. For TAQA, the Abu Dhabi government holding company for investment in the energy sector, SG secured a €180 million (£142 million) 10-year private placement, acting as sole adviser. This came ahead of a public \$750 million 10-year senior unsecured offering on which the firm acted as joint bookrunner. The private placement, which was sold to a single European insurance company, was the result of reverse enquiry and allowed TAQA to meet its euro funding needs and diversify its investor base at an attractive price.

“SG has proven itself to be a valued partner, assisting us in developing an innovative structure that is instrumental to the growth of the market”

Chris Madsen, Aegon

SG also arranged an innovative private placement for the L2 Marseille Bypass Project with a total deal value of €590 million, underlining the firm's strong reputation in infrastructure project finance. Using a securitisation vehicle, the bank was able to structure notes so that the issuer could draw down a funding facility in increments, but investors (funds controlled by Allianz Global Investors Europe) bought bonds in a single trade.

Longevity risk transfer

Meanwhile in longevity risk transfer SG continues to pursue its vision of a global value chain in which the bank serves as a link between insurers and reinsurers on one side and capital markets investors on the other. SG's aim is not to transact directly with pension schemes. Rather the bank sees an opportunity to help reinsurers and insurers as the natural buyers of longevity risk to gain capital relief by hedging parts of their exposure through tailored index swaps.

A barrier to longevity risk trades over the past several years has been the information asymmetry between investors and risk holders. Investors prefer to work with a public index where the information held by all parties is equal. But insurers or pension schemes face basis risk if they hedge using an index, making the more traditional route of reinsurance indemnity deals more attractive. A second difficulty is that the liabilities for pensions are typically too long-dated to match the appetite of capital markets investors, who require deals up to a maximum of about 15

years. Pension liabilities, by contrast, can last up to 50 or 60 years.

To get around these difficulties SG has constructed a tailored index that the bank says can be adjusted to match a specific portfolio of pensions. This removes basis risk for the insurer but remains a public index. The idea was brought to fruition in SG's €1.4 billion longevity swap trade for Aegon in December 2013.

The tailored index allows the hedger to select cohorts of combinations of age or gender, and to weight them to match the liability portfolio. The insurer then adds a further weighting based on its actual experience compared with the public index. This reflects, for example, the possibility that the insurer's underlying lives are healthier than those of the general population.

A second key innovation in the Aegon transaction was a mechanism to reconcile the hedging of long-dated liabilities with the appetite of investors for maturities only up to 15 years. The payoff of SG's swaptions is based partly on the longevity experience at the end of the risk period and partly on the present value at that point of the remaining exposure. This is calculated using a re-parameterised longevity model that takes into account the mortality experience over the life of the transaction.

This means agreeing at the outset of the deal an objective process for updating the parameters of the model based on the mortality experience over the life of the transaction.

Says Chris Madsen, head of risk structuring and transfer, Aegon, in The Hague: “SG shares our vision for the development of the longevity risk transfer market and structured this unique transaction with us to meet the increasing interest and capacity from reinsurers and capital market investors to take on longevity risk. SG has proven itself to be a valued partner, assisting us in developing an innovative structure that is instrumental to the growth of the market.” 