

# Is there a future for Variable Annuities in Europe?

Many variable annuity writers have been hurt by the financial crisis, and some have even pulled out of selected markets. Should this be the end of variable annuities in Europe, before they have really taken off? Far from it. The value potential is significant, and insurers with the appropriate position and capabilities will be able to exploit a unique opportunity.

Hartford's withdrawal from variable annuity business has shaken perceptions, and the foundations of what had been regarded as the industry's most visible innovative growth story over the last 10 years. Although that was the most dramatic example, many European-based players have also reacted, exiting markets, deferring or stopping planned product launches, and re-designing existing variable annuities.

As the financial world goes through a period of turbulence unprecedented in living memory, insurers with variable-annuity books have realized that their hedging programmes did not provide them with the level of protection that many had expected of them. Typical hedges rely on immunizing financial exposures by taking opposite positions in simple financial instruments that need to be constantly realigned as market conditions change. As prices and interest rates started to jump, and markets dried up, this foundational assumption of managing a variable-annuities book was shattered.

#### **Exhibit 1: Recent market action in Europe (illustrative examples)**

- Hartford pulls out of VAs in the UK, and abandons plans to launch VAs in Germany
- AXA withdraws some of its market-leading "TwinStar" products in Germany
- AEGON to replace its high-profile 'Five for Life' product with a lower guarantee-level structure in the UK
- Standard Life delays the launch of VAs in the UK, referring to current turbulent financial markets

Source: Oliver Wyman research

## **Variable annuities, however, are far from finished**

We see bold action from a number of insurers. Several companies – including AEGON, Allianz, AXA, Generali, MetLife and Swiss Life – are talking about expanding further their European product offerings next year. In the wake of losses and strained balance sheets in the US – still the stronghold of variable annuities – many insurers are keeping their faith in the VA product, in particular for European markets. Oliver Wyman believes that those who can build a solid foundation for their variable-annuities business can aim for a large prize.

## Cracked but not crumbling

As more and more people are feeling the need to provide for the financial security of their own retirement, demand for savings and pensions products will remain strong. Long-term guarantees, combined with the opportunity to participate in rising stock markets as well as in any increase in interest rates – in particular to compensate for higher inflation – are at the heart of how insurers have been helping their customers prepare for a safe and comfortable retirement, in particular in Europe. Variable annuities allow customers and insurers on both sides of the table to arrange guarantees and options on more individual, flexible and transparent terms than through collective constructions such as traditional with-profits funds.

Also, under Solvency II, writing guarantees against an insurer's own balance sheet will lead to higher capital requirements, and hedging such exposures to reduce those requirements will become a necessity for many insurers. This will favour variable annuity writers, for whom hedging is straightforward and part of the business model, in contrast to their competitors with traditional with-profits businesses.

Insurers have a unique opportunity to use their balance sheets and risk-management capabilities to offer attractive long-term guarantees that mutual funds and capital markets cannot provide. This advantage will continue to allow insurers to achieve the significant margins that used to be available on variable annuity products. However, they will be able to do so only if they combine their traditional strengths – in particular, in risk management and the ability to “take the long view” – with developing new capabilities, such as hedging with complex financial instruments and trading strategies.

## Reinforcing for the future: Hedge by design

With the concept of variable annuities being sound and attractive to consumers and insurers alike, what then went wrong? Looking at typical company examples during the most turbulent months of the financial crisis, the large losses came from a range of product, capability and management shortcomings. In particular:

- Some deliberately took on excessive risk as a consequence of misplaced confidence in the strength of their balance sheet, hedging strategies too narrowly focused on accounting rather than economic results, or the belief that risk was overstated. Often they did so without the right information, that might have led them to a different decision

- Some offered product features that exposed them to risks impossible to hedge. For instance, many offered free choice of a wide range of underlying mutual funds with such distinct investment profiles that there were no hedging instruments which could immunize drops in fund values
- Some followed rigid “dynamic-rebalancing” strategies for hedging which locked in losses with every market move. While normally such losses would be small, in turbulent markets their frequency and size increase, and can add up to mounting deficits
- Some had ambitious hedging strategies but not the infrastructure to deliver the required information to the required standards of quality and reliability. When markets move aggressively and software fails to run, hedgers have been stuck with large positions in financial markets with no information on how to neutralize them

A key differentiator for a successful and sustainable variable annuity business has been the comprehensive understanding of how product design interacts with hedging – what hedging can achieve and where it will fail for any particular product feature. This forms the basis of the crucial risk-reward trade off management needs to make, telling them which risks are actually hedged and which are held on the balance sheet. Often an afterthought, we believe these considerations must permeate each element of the product life cycle.

## Product design – Understand how you will manage the embedded risk

Product design, the start of the cycle, is no exception. In some cases, product design conducted in actuarial silos has paid little attention to hedging strategy. Before the product is offered to consumers, it must be known whether the risks in a particular variable annuity portfolio can be hedged, and a decision must be made about which risks are to be retained on the balance sheet. This depends on the product features, the hedging strategies employed, and on the customer segments and distribution channels, since these will affect portfolio characteristics such as policyholder behaviour and durations.

## Exhibit 2: Re-design and re-pricing examples

Example changes	Rationale and impact
<b>Higher fees</b> <ul style="list-style-type: none"> <li>■ Higher fees for more generous benefits</li> <li>■ Fees that vary by fund selection</li> <li>■ Fees that vary by market conditions</li> </ul>	<ul style="list-style-type: none"> <li>■ Rate increases expected in short term</li> <li>■ However, likely to be of limited value                             <ul style="list-style-type: none"> <li>– Can impair investment potential</li> <li>– May drive customers towards non-guarantee products</li> </ul> </li> </ul>
<b>Reduced/restructured guarantees</b> <ul style="list-style-type: none"> <li>■ Fewer step-up opportunities</li> <li>■ Reduced bonus credits</li> <li>■ Lower guarantee amounts or variable rates</li> <li>■ Age limits</li> </ul>	<ul style="list-style-type: none"> <li>■ Value of guarantees higher in current market environment</li> <li>■ More in line with re-priced substitute products (certificate and annuities)</li> <li>■ Allows for continuity in current designs while other products are being developed</li> </ul>
<b>Reduced core product costs</b> <ul style="list-style-type: none"> <li>■ Simplified, lower cost products, e.g. using passively managed index funds</li> <li>■ Bundled designs</li> </ul>	<ul style="list-style-type: none"> <li>■ Facilitates risk management and reduces admin or commission</li> <li>■ Simplifies sales process</li> <li>■ Facilitates matching of products to customers</li> </ul>
<b>More “carrots and sticks”</b> <ul style="list-style-type: none"> <li>■ Incentives and penalties to reward or discourage certain customer behaviour (e.g. surrender fees)</li> </ul>	<ul style="list-style-type: none"> <li>■ Customer behaviour more predictable which facilitates risk management</li> </ul>

Source: Oliver Wyman

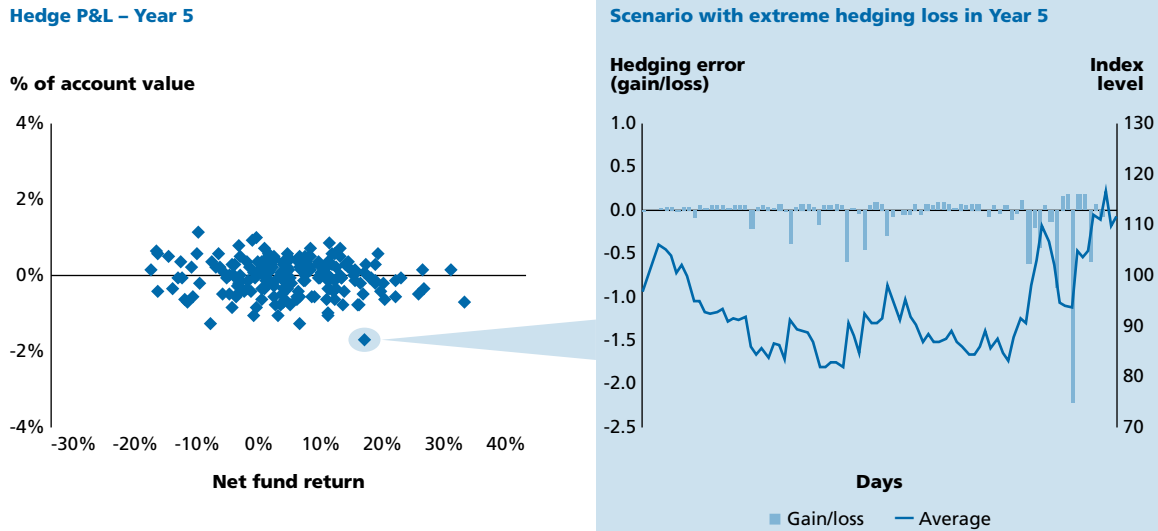
While there is a wide range of product-design options to build from, companies currently consider only a narrow selection of hedging strategies. Most often VA providers build a hedge portfolio that compensates for the exposures of the variable annuity portfolio to stock-market movements (‘Delta hedging’), and interest rates (‘Rho hedging’). While there is some flexibility around how closely hedgers want to keep the Delta and Rho sensitivities of the two portfolios in line, the typical choice is to match them closely, which leads to frequent – sometimes daily – rebalancing of the hedge portfolio.

As the experience from the crisis has shown, insurers should widen the range of possible hedging strategies, including the possibility of leaving certain exposures unhedged in the expectation that they can ‘ride out’ short-term market volatility. This can be combined with the use of options to protect against extreme market movements and structures that help reduce the impact of changing market volatilities.

Building a sustainable variable annuity business relies on making conscious decisions about the risk appetite, and comparing the risk profile of the hedged variable annuity book to this risk appetite – not only in the first years of the book, but also over time as the book matures and the risk profile changes. This, in turn, requires analytical capabilities for evaluating different hedging strategies and product designs at the development stage (see illustration). The development of a variable annuity product should be an iterative process of product

and hedging strategy refinement, and management needs to make sure that product developers and hedgers work together throughout, to create products which are both marketable and manageable from a risk perspective.

**Exhibit 3: Risk analysis of a hedging strategy using stochastic simulations of future profits and losses**



Source: Oliver Wyman project example (using ATLAS<sup>1</sup>)

**Active risk management – Ensure you effectively manage the risk in the products**

Once a product has been sold, hedging is fundamental to the risk management process, ensuring risk exposure remains within acceptable levels. This requires a modelling infrastructure that allows the hedging teams to regularly, often on daily basis, understand the financial market sensitivities of the variable annuity portfolio and the associated hedging instruments.

The hedging team must also be able to test different hedging strategies over time as the portfolio changes and as the financial market changes. This provides the company with the tools to change risk management practices to better serve the changing business profile in the prevailing economic conditions. The risk-return trade-off between hedging and holding risk on the balance sheet can be actively managed over time to optimise the balance sheet structure.

<sup>1</sup> ATLAS is Oliver Wyman’s proprietary Variable Annuity risk analysis and hedging suite, expressly engineered for speed, flexibility and stability. ATLAS is more than just a hedging platform, it is a complete analytical tool box. Users have the assurance of complete integration across pricing, in-force management, ALM strategy formulation and hedge execution.

## Conclusion

Insurers with the ability and the willingness to develop these capabilities are right to stick with variable annuities. These products satisfy important and growing customer needs, ultimately one that is at the core of a life insurer's proposition. The cost of building such capabilities will lead to competitive advantage for those insurers who can build scale through a pan-European variable annuity platform, such as those AXA, AEGON and Allianz have begun to grow out of their Dublin subsidiaries.

Insurers' decision to review and refine their product range to better manage embedded risks is also an appropriate next step. The extent to which this succeeds will ultimately depend on whether the hedging strategy and the risk-reward trade-off have been fully understood by management. Only time will tell whether the lessons of the past have been learnt.

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For more information please speak to your usual Oliver Wyman contact or contact Jan-Hendrik Erasmus via email, [janhendrik.erasmus@oliverwyman.com](mailto:janhendrik.erasmus@oliverwyman.com) or phone, +44 207 852 7258

## EMEA

+44 20 7333 8333

## North America

+1 212 541 8100

## Asia Pacific

+65 6510 9700

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