



# Milliman Issues in Brief

UK Life INSURANCE

## REFLECTING ON STRATEGY

With year-end behind us, attention turns to thoughts of the future as strategic planning rises up the agenda.

Strategy is normally seen as an exciting area to be involved in and there is usually no shortage of volunteers to join workshops and discussions.

This stands in stark contrast to the world of risk,

which is still seen as a negative force to be avoided. But the two are related.

*Continued on page 4*



## Welcome

to the Milliman UK life insurance newsletter, which discusses current industry issues and aims to bring clarity to an increasingly complex environment.

This is the time of year when many companies look to the future, so we have collected articles which look at a variety of strategic topics.

- Are SWOTs letting you down?
- Restructuring your portfolio?
- Want to release value?
- Is the German market worth a look?

We hope you enjoy reading the newsletter and look forward to your feedback.

## InSide

A New Dawn for the Baby Boomers	p 2
Strategic Restructuring	p 3
Reflecting on Strategy	p 4/5
Structured Insurance Solutions on the Rise	p 5/6
Signs of Life in Germany	p 6/7
Where is Longevity Heading?	p 6/7
QIS3	p 8

## A NEW DAWN FOR THE BABY BOOMERS

A new dawn is emerging in the UK and European insurance industries.

New products are being introduced that are changing the landscape in the traditional retirement and savings markets.

The new products - adaptations of the US Variable Annuities (VAs) that have also been enormously successful in Japan - offer a

combination of attractive managed funds and guaranteed investments, designed to meet specific customer needs.

The selling proposition is very strong, and they have an enviable track record of driving growth and sales for the companies that manufacture them.

*Continued on page 2*



## A New Dawn for the Baby Boomers

*Continued from page 1*

The living benefit guarantees, in particular, have been successfully designed to meet the needs for the very important aging baby boomer generation.

The most successful launches of these products in the UK and Europe have mainly focused on the pre-retirement, post-retirement, and estate planning market segments.

### New product launches

In the UK alone, five multinationals

likely to be attracted to the product proposition.

The table below highlights the recent product launches throughout Europe.

In addition, there have been a number of launches of products with similar guarantee features, although not strictly variable annuities.

### Guaranteed success

The common theme of the modern VA product is the availability of a guarantee as a choice on managed funds. The guarantees are often

benefits also makes the product very well suited to being customised to meeting different customer needs.

These products are positioned to provide efficient use of capital under Solvency II.

When the products are designed, priced, and hedged effectively, they can be very profitable for the insurance company. While there are fewer examples in Europe that are in the public domain, those products that have been launched have generated much praise and attention.

Company	Product Name	Guaranteed Minimum Benefit Type	Sold in	Launch Date
Hartford	SafetyNet	Withdrawal	UK	February 2005
AXA	Twinstar	Income	Germany	March 2006
AXA	Estate Planning Bond	Withdrawal, Death	UK	June 2006
Aegon Scottish Equitable	5 for Life	Withdrawal	UK	September 2006
MetLife	Trustee Investment Plan	Withdrawal, Accumulation	UK	December 2006
Hartford	Platinum	Withdrawal / Income hybrid with Death	UK	February 2007
ING	Generacion F Unico	Accumulation, Death	Spain	March 2007
AXA	Accumulator Seleccion, Futuro	Withdrawal / Accumulation, Death	Spain	March 2007
Lincoln	i2Live Retirement Plan	Withdrawal / Income hybrid	UK	May 2007
AXA	Accumulator	Withdrawal	Belgium	2007 expected*
AXA	Accumulator	Withdrawal	France	2007 expected*
AXA	Accumulator	TBC	UK	2007 expected*

\* according to www.axa.com

- AXA, Aegon, Hartford, Met Life, and Lincoln - have all launched new products.

Clearly, the strategy of the multinationals has been to build on their strengths in being able to manufacture attractive benefit guarantees on competitive terms and to target the market sectors most

offered as rider policies that provide specific risk protection for an explicit charge.

This unbundled structure gives the policyholders transparency and the ability to choose which features best suit their retirement needs.

The ability to add different guarantee

For example, this past December, AXA's Estate Planning Bond and Aegon's "5 for Life" products both took home prestigious Portfolio International Awards.

*For further information on annuity products, please contact [gary.finkelstein@milliman.com](mailto:gary.finkelstein@milliman.com) or [ryan.hinchey@milliman.com](mailto:ryan.hinchey@milliman.com)*

# Newsletter

## Strategic Restructuring

So called Part VII Transfers, which imaginatively take their name from Part VII of the Financial Services and Markets Act 2000 (FSMA), are being increasingly used by insurers as an efficient way to meet their corporate strategic and operational objectives.

Under a Part VII Transfer, a group of policies can be transferred from a UK insurance company to another in the European Economic Area (EEA).

To enable the transfer either the High Court or the Court of Session (in Scotland) must give a court order.

One of the key requirements of a Part VII Transfer is the completion of a report on the scheme by a person suitably skilled and experienced for the writing of such a report - the Independent Expert.

Approval is required from the Financial Services Authority for the appointment of the Independent Expert and for the form of his/her report.

### Why undertake a Part VII Transfer?

Restructuring a group of companies or long-term business funds can achieve administrative cost, capital, and tax efficiencies.

Restructuring can also be a way of simplifying the group structure.

This can be useful in a number of areas:

- Preparation for, or as part of, a demutualisation process;
- Tidying up after a series of acquisitions or mergers;

- Mergers and acquisitions - companies can use Part VII Transfers as a way of disposing of different parts of their portfolios or of acquiring different parts of the business of other insurance companies without being required to purchase the entire company; and

- In-force securitisation - insurance companies are increasingly considering securitisations as a means of managing risk. Part VII Transfers can be used to reorganise portfolios of insurance business in preparation for a securitisation.

A side benefit of Schemes of Transfer under Part VII is that one can include clauses that change the terms of certain groups of policies or product classes.

It is, however, unlikely that a Scheme with this as its sole purpose would achieve court sanction.

In particular, there have been clauses included in insurance schemes that facilitate the winding up of closed with-profits funds and the conversion of the with-profits policies to non-profit policies when they fall below a certain size.

Such clauses help to reduce the likelihood of expense inefficiencies and inequitable distributions of surplus occurring.

### Milliman's role

Our consultants at Milliman have been involved in the majority of the significant restructurings that have taken place over the last 15 years in the UK life market and have built up a large amount of experience, knowledge, and expertise in this area.

This collective skill is spread over a wide range of our consultants, not just the names at the end of this article.

We are currently working with our clients on a number of such



projects, ranging from advising clients on the viability and efficiency of various proposed restructurings to fulfilling the statutory role as the Independent Expert.

*If you would like to discuss the impact of Part VII Transfers further, please contact [oliver.gillespie@milliman.com](mailto:oliver.gillespie@milliman.com) or [john.mckenzie@milliman.com](mailto:john.mckenzie@milliman.com)*



## Reflecting on Strategy

*Continued from page 1*

Risk management may not be the first thing you reach for when you think of strategic planning, but some new approaches to analysing strategic risk can yield significant improvements in the understanding of the complex interactions within our sector.

The modern financial services sector is largely a service industry and much of its activity relies upon human beings doing the right thing at the right time. The sector also tries to maintain order through a series of complex rules and regulations, which have evolved dynamically over a long period of time and are now largely operated through interpretation.

The sector is therefore inherently linked to both the individual and collective behaviour of lots of people. As these individuals interact and adapt to new developments, the emerging results can be highly unpredictable. Traditional methods to analyse risk are based upon techniques that apply to more linear processes, and they perform quite badly when behaviour is non-linear.

The approach we outlined in the spring newsletter (“Embedded Risk Management – A Case Of Perspective?”) is specifically designed to capture non-linear behaviour.

The financial services sector is still subject to a huge amount of uncertainty and change, which makes planning for any reasonable future time frame quite challenging. Even where the nature of change can be determined, its timing is often highly unpredictable. This environment is anything but

stable, and traditional planning processes will not adequately capture the detail about what is going on.

Although the strategy process is arguably continuous, many companies still like to make a big effort to take stock of their position once a year so that targets can be set for the next financial year and any big changes to the business plan can be put in place.

Each firm does strategic planning slightly differently, but broadly speaking, the process probably looks something like Figure 1.

Information is gathered about the

opportunities, and threats (SWOT) analysis, which summarises the strengths and weaknesses of the organisation against the opportunities and threats perceived to exist in the marketplace.

A series of potential strategic responses are prepared and then may be subject to some kind of risk assessment before an optimisation process is carried out to select the option that achieves the strategic objectives in most eventualities.

Strategic Risk Analysis starts by identifying and assessing the key things that can prevent you from achieving your strategic goals.

By analysing this information using techniques specifically designed for complex systems, you can quickly understand which interactions are most important and hence create the right scenarios to help test your strategies.

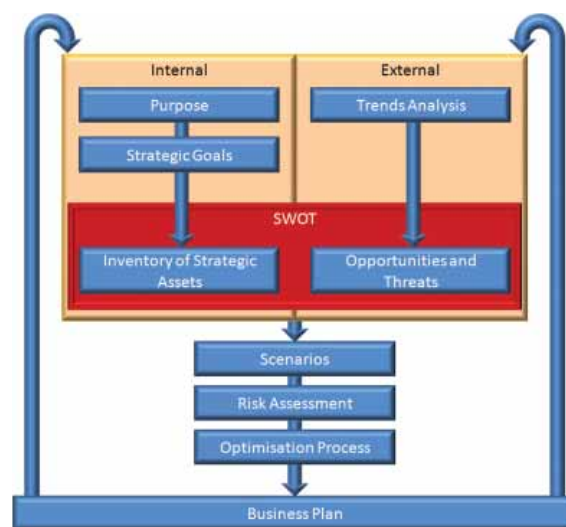
Planning processes evolved during periods of fairly steady trading and economic conditions, at a time when organisations tended to be simpler than they are now.

Some features of the traditional approach may be unhelpful in

the current environment.

■ Firstly, the analyses tend to be quite linear and the complex connections between the various pieces of information are not captured.

■ Secondly, the information about



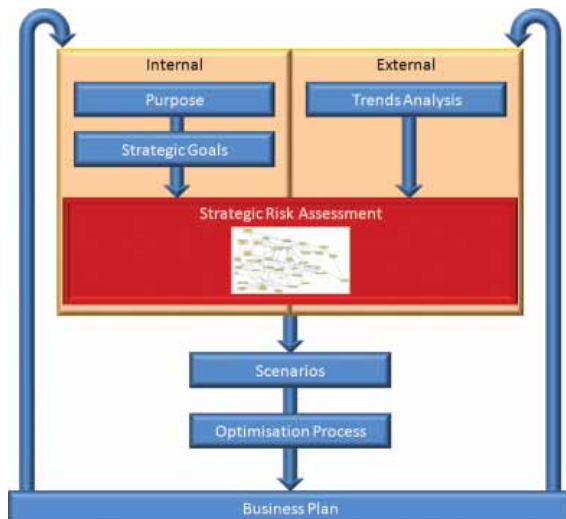
**Figure 1. Traditional Strategic Planning Process**

market, normally covering areas such as competitor activity, and consumer economic and regulatory trends.

This information is generally combined with some assessment of internal capabilities to form some kind of strengths, weaknesses,

# Newsletter

## Reflecting on Strategy



**Figure 2. Strategic Risk Assessment**

the organisation's strengths and weaknesses is often captured through discussion, and the "mood" and personal objectives of the participants can heavily influence the categorisation.

By analysing your strategic landscape in terms of connections between events, you achieve a rich understanding of the true position, largely untainted by the emotional state of contributors. This enables you to track the evolution of your strategy much more consistently over time.

You can also gain insights into the progress of peers and competitors by using similar techniques to analyse their positions.

Because the environment you are attempting to analyse is in constant flux, using an approach that links ideas and behaviours rather than static pieces of data is extremely powerful. Instead of seeing a single moment in time, you begin to see the dynamics of the environment. Even if you already use scenarios

within your planning activity, they normally only look at a possible future state and do not necessarily capture evolution over time.

Using the analysis outlined above, you can enhance your understanding of the scenarios by seeing how these future states might play out.

The next advantage comes at the stage of deciding which scenarios to pursue.

Traditional project or strategic impact analyses normally simplify the risk impact in terms of some hard financial measures (such as profit, internal rate of return, etc.) plus some additional qualitative assessments to describe the level of uncertainty.

Inevitably, there is a disconnect between the hard and soft factors that consumers of the analysis must combine in their minds to form an overall opinion. This can often lead to differences of perspective that are difficult to communicate and therefore hard to reconcile.

Using an approach that provides a common holistic basis for discussing all aspects of the initiative helps to position each element in context.

At the end of the planning cycle, this approach gives a solid basis for the ongoing analysis and monitoring of the environment.

By design, it provides the link for regular risk management, which ensures that strategic decisions and risk management are fully aligned

and integrated. By using modern techniques to understand how your organisation interacts with its environment, you can plan more effectively and confidently.

Time to swat the SWOT!

*If you would like to discuss the impact of risk or strategy further, please contact [neil.cantle@milliman.com](mailto:neil.cantle@milliman.com) or [farzana.ismail@milliman.com](mailto:farzana.ismail@milliman.com)*

## Structured Insurance Solutions on the Rise

Since 2001, more than \$US13 billion has been raised by life insurance companies from capital market investors via securitisations involving life insurance risks. Aside from the public transactions, between \$US5 billion and \$US7 billion of additional funds has been raised by life insurance companies in private transactions with banks.

While much of this activity has been happening in the United States, there has been a lot of interest on the part of European companies, with Aegon, Axa, and Legal & General all completing transactions within the past several months. We expect interest in these transactions will continue to grow, especially if Solvency II ultimately views securitisation as a risk mitigant.

These "structured insurance solutions" (the combination of securitisations and private bank-



## Structured Insurance Solutions on the Rise (continued)

funded transactions) can be grouped into three categories: value-in-force or embedded-value transactions; redundant-reserve transactions; and mortality-catastrophe transactions.

### Value-In-Force and redundant-reserve transactions

The objective of a Value-In-Force (VIF) transaction is to extract the value contained within an in-force block of business so as to be able to reallocate that capital to a higher return venture.

In effect, a company can “recycle” the capital invested in closed books of business to support growth in new business.

The objective of the redundant-reserve securitisations in the US has been to replace equity funding of excessive (or redundant) statutory reserves with debt funding.

Because of very conservative statutory valuation mortality rates, reserves on level-premium term life insurance have been viewed as extremely conservative, creating the need for companies to find a less expensive way than the use of equity to fund such reserves.

Companies have turned to the capital markets to help fund these excessive reserves. These transactions are known as XXX and AXXX securitisations.

Broadly speaking, under both the embedded-value transactions and the redundant-reserve transactions, the company is able to “securitise” projected cash flows from its insurance operations in order to raise money from the capital markets or private investors. What essentially happens is that life insurance cash flows are aggregated into an underlying pool and then sold as an investment

package to the investors.

### Mortality-catastrophe transactions

The objective of the mortality-catastrophe transactions is to reimburse the issuer (the insurance company arranging the transaction) should an extreme mortality event occur.

Structurally, these transactions are very similar to natural catastrophe bonds, which have been issued for many years now, and, in effect, are collateralised stop-loss arrangements.

Two reasons to issue such a bond, as opposed to purchasing such coverage in the reinsurance marketplace, include 1) such coverage is not readily available, and 2) the counterparty risk (the ability of the reinsurer to pay claims) increases at the same time that the benefit is most needed.

### On the horizon

The evolution in the packaging of life insurance cash flows to help insurance companies meet various objectives is still in its early stages. We expect to see more VIF transactions, especially if Solvency II recognises securitisation as a risk mitigant, together with more XXX and AXXX transactions.

Interest in mortality-catastrophe bonds continues to be high in Europe. We are also seeing more creative uses of embedded-value transactions. Bank transactions will continue to grow, but at some point, we expect the banks to look to move the transactions off their balance sheets to the capital markets.

*If you would like to discuss the impact of securitisations further, please contact [steven.schreiber@milliman.com](mailto:steven.schreiber@milliman.com) or [philip.overy@milliman.com](mailto:philip.overy@milliman.com)*

## Signs of Life in Germany?

The traditional German life insurance market is starting to change and may justify a closer look at its business potential.

Looking at the penetration and density of insurance over the last 25 years, Germany has almost stagnated, recording the lowest increases of all countries in both measures.

How is it that the one of the largest countries in Europe, with the biggest economy, appears to be doing so badly in life insurance?

### State pensions

The extremely generous benefits provided by the German state pension system have limited the demand for life insurance as a retirement savings vehicle, with incentives for private pensions introduced only recently.

### Regulations

The high level of regulation in the German life market has restricted growth and competition, largely in the interests of consumer protection.

There is less scope for actuarial discretion in product design, pricing, and investments, and there has been little product innovation.

### Taxation

Until 2005, benefits under regular premium policies were tax-free, provided a number of conditions were met.

This meant there were no real incentives for single-premium business and resulted in a limited product range.

*Continued on page 7*

# Newsletter

## Where is Longevity Heading?

How longevity will improve in the future remains uncertain.

In 2005, the industry body responsible for producing standard mortality tables, the Continuous Mortality Investigation Bureau (CMIB), produced a new set of standard annuity tables, the "00" Series.

Unlike previous annuity tables, these did not have any allowance for future longevity improvements built into them and the CMIB did not recommend any basis for future improvements.

For their 2006 valuations, this left insurance companies with a dilemma.

They had a new standard set of tables to reserve on, but no standard basis for how to allow for improvements in their reserve calculations.

In April 2007, the Financial Services Authority wrote to the CEOs of all life insurance companies, stating it was concerned that firms may not be giving sufficient weight to the possibility that their policyholders may live longer than expected.

Milliman analysis of a sample of leading insurers shows that all the largest insurers have adopted the "00" tables for their reserving bases, with the exception of a few minor

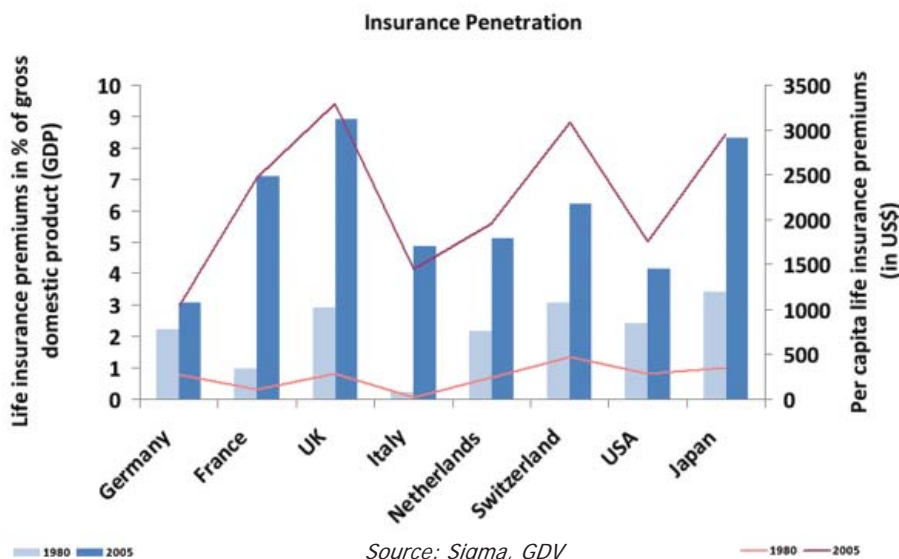
lines that are still based on the "92" tables.

For male annuitants in payment, the percentage of the base table used rose approximately 3% to 94% and for females it remained unaltered at 90%. There is a considerable range around the mean between companies and different types of annuities.

Generally, companies based their mortality improvements around the cohort approach, which groups people by their year of birth.

The various approaches used led to *Continued on page 8*

## Signs of Life in Germany? (continued)



As a result of the changes, products will need to be more transparent and provide better value for consumers.

Insurers will be under pressure to reduce costs and will need to rethink their business models, particularly expensive distribution structures. Increasing competition is also likely to lead to further consolidation in the market.

The prospects for Germany's life market are good. More foreign entrants are likely, attracted by the growth potential and the changing market dynamics.

Milliman has worked with a number of companies to support their development in Germany, since the opening of our Munich office at the end of 2004.

*For further information on the market please contact [paul.ernest@milliman.com](mailto:paul.ernest@milliman.com) or [emma.mcwilliam@milliman.com](mailto:emma.mcwilliam@milliman.com)*

### Distribution

Bancassurance has had limited impact in Germany compared to other countries, where it has driven much of the life market growth.

On the other hand, bancassurance in these countries is largely based on high-volume sales of simple, low-margin savings products.

The profitability of German products by comparison, therefore, tends to be higher.

### Market changes

Significant changes are now underway in Germany's life insurance market, including pension reforms, consumer protection regulations, and increasing competition.



## Where is Longevity Heading? (continued)

a wide variation in the expectation of life for a 65-year-old on the reserving basis.

On average, for male annuitants in payment this increased by 0.7% from 22.5 to 22.7 years and for females it increased marginally by 0.2% to 24.8 years.

There remains a considerable variation

in the expectation of life between companies and between different annuity types. For immediate male annuitants, the range is approximately 4.5 years and for females approximately 6.5 years.

As can be seen from the above, there remains considerable uncertainty in how longevity will develop in future, and companies are using a variety

of techniques to estimate future longevity improvements. Reserving bases have yet again strengthened, suggesting that insurers continue to underestimate the future levels of longevity improvements.

*If you would like to discuss the impact of longevity further, please contact [philip.simpson@milliman.com](mailto:philip.simpson@milliman.com) or [phillip.sturgess@milliman.com](mailto:phillip.sturgess@milliman.com)*

## QIS 3

As the submission date for the third Quantitative Impact Study (QIS 3) into Solvency II comes and goes, and the Commission for European Insurance and Occupational Pension Supervisors ("CEIOPS") begins to consider the responses from Insurers.

Participants and those directly affected by the proposals therefore need to ensure that as strong a message as possible is given to the committee about the merits and short-comings of the proposed system.

As we touched upon in 'The Long and Winding Road' in our previous newsletter, a number of the specific calculations of the current methodology are of concern for the industry and extra development and consultation is required. In particular, the calculation of the Minimum Capital Requirement (MCR) relative to the Solvency Capital Requirement (SCR) is inconsistent and leads to unhelpful and misleading results under certain scenarios. The SCR is calculated as the combined requirement of the underlying risk modules whilst the MCR is based on simplified risk modules which are calibrated separately from the SCR.

This results in two disconnected risk measures which were intended to provide a single, layered structure to the new capital requirements for Solvency II. Without further work to connect these measures the effectiveness of the regime may be impaired. The calculation of the Risk Margin and Operational Risk module appear to need more work to better align the process and calibrate the calculations to the underlying risks.

The purpose of the study is to get feedback from insurers on the latest draft of the proposed regulations and to assess the impact of the new solvency requirements on the balance sheets and, perhaps more importantly, the strategic direction of those subject to the regulations. The practical considerations that will affect insurers as the new regulations are implemented may affect many areas of a company's future direction. By delivering a response which is drawn from a large and diverse group of insurers with a focused message on the positive and negative aspects of the proposals, the industry is likely to receive a better designed and calibrated model for measuring solvency and

capital adequacy. Failing to speak up now could have serious consequences that insurers will be left to manage for some time.

*If you would like to discuss the impact of QIS3 further, please contact [tom.wicling@milliman.com](mailto:tom.wicling@milliman.com) or [lindsay.unwin@milliman.com](mailto:lindsay.unwin@milliman.com)*

### Contact Information

Milliman  
Finsbury Tower  
103-105 Bunhill Row  
London EC1Y 8LZ  
Tel: +44 207 847 1500  
Fax: +44 207 847 1501  
[www.milliman.com](http://www.milliman.com)

### Offices Worldwide

UK - Germany - Italy - Poland  
Netherlands - Spain - Switzerland  
United States - Bermuda - Latin  
America - India - Japan - Hong Kong  
China - Korea - Australia

*For additional copies of the newsletter and to provide feedback, please contact your usual Milliman consultant or [lyndsay.wrobel@milliman.com](mailto:lyndsay.wrobel@milliman.com)*

Milliman is a firm of actuaries and consultants serving the full spectrum of business, governmental and financial organisations. Founded in 1947 and incorporated in 1957, Milliman is located in 44 cities throughout the world and is a founding member of Milliman Global, an international network of actuaries and consultants. Milliman has over 1,850 employees including a consulting staff of over 850 qualified actuaries and consultants. Milliman Global has approximately 3,000 employees worldwide.

This leaflet is designed to keep readers abreast of current developments, but it is not intended to be a comprehensive statement of the law and no liability for errors of fact or opinions contained herein is accepted. Please take professional advice before applying this to your particular circumstances.