

Dear MIG Members, welcome to the April newsletter for the VA MIG. The only format change for this month has been the inclusion of an Editorial space at the start of the newsletter.

- **Chairman's Comments**, *editorial freedom to the Chairman to provide commentary and views on the market and the MIG*
- **Recent Activity**, *an update on the activities undertaken within the MIG over the last month*
- **Recent Market Activity**, *an update on what has been making the news in the prior month*
- **Resource Centre**, *an update on website tools and content*
- **Vacancies**, *requests for assistance from the membership*
- **Upcoming Events**, *outline of relevant events*
- **Recent Publications**, *outline of recent publications not included in the Resource Centre*
- **Practice Area Bulletin, - Variable Annuities Under US GAAP**

Chairman's Comments

At the time of going to press The Hartford has announced a significant restructuring plan for their international VA operation in conjunction with their Q1 earnings release. It is neither possible nor appropriate to make comment on the reasons or merit of the change however we can note the contribution and leadership which the team at Hartford have taken in the European VA space and we look forward to the phoenix that will undoubtedly arise from these ashes, in whatever form it takes.

With the conclusion of the 2009 Life Convention planning process, we are delighted to advise that we have secured two places at the Convention to present our wares, (see Recent Activity for more details). The Management Committee would like to extend our thanks to the teams who have submitted their topics, and to Graeme Bold and the convention committee for their support to our Members Interest Group.

Moving ahead with our event planning we are looking to arrange for a Networking Event for the MIG and look to feedback from the membership to get a feel for location/city preference for mix between formal and informal activity and timing. Please can you revert to Rachel with suggestions and feedback.

In preparation for the upcoming Risk and Investment Conference 2009, (see Upcoming Events), I outline a couple of issues that Mike Claffey and I will be mulling over as we conduct our research and prepare our presentation (under the Hedging and Investment practice area) for that event.

Where have all the sellers gone ?

Last month I noted the welcome evolution in pricing and structuring of VA guarantees that appear to be taking place. What does not appear to have softened up however is the supply of long term options and reinsurance based solutions. With long term index implied volatility of the order of 40% the implication is that key market indices are expected to move 2.5% day in day out for the next 10 to 20 years, (in a risk neutral world). As a pure volatility bet this seems to be a very attractive proposition for sellers; however given the dearth of capacity even at these levels it is clear that there are other factors at play in the cost and availability of long term options.

Q: Are high options prices the temporary result of a traditional hard market cycle (liquidity) or is there something more fundamental at work?

Pricing Long Term Options (and why it's like longevity projection)

Over the course of 2007 and 2008, Berkshire Hathaway assumed the role of position taker on a small number of large index based European puts with terms out to 20 years or so. The aggregate, (gross and net) exposure under these positions was US\$37bn at year end 2008, resulting in a mark to market loss of \$5.1bn, have proved to be a source of material market comment and more significantly have damaged the credit standing of BH. We will get a deeper sense of Warren Buffet's views on the topic this weekend at the annual shareholder meeting. What is already available in the public domain, not least through the 2008 shareholder's letter, is the somewhat 'back of the envelope' approach that Mr Buffet has taken to the pricing of these risks and his somewhat sceptical approach towards more refined market based pricing approaches. Taking a leap, but hopefully still on topic, there is possibly a parallel to be drawn in terms of the usefulness of overly complex stochastic approaches to longevity projection. Thus in applying our models to assess such distant liabilities are we grasping for comfort and justification via the models when the reality is we are just taking a big punt?

Q: How useful are models in pricing long term market risks ?

Bayesian Approach to measuring market uncertainty

A recent technical paper, “Are Stocks Really Less Volatile in the Long Run?,” challenges the accepted wisdom that long term volatility is lower than short term volatility. The paper is referenced below under recent publications and I would recommend as a minimum that members read chapter one of the paper if nothing else. The central thesis is that, notwithstanding the evidence of mean reversion in returns over the long term when we project outcomes into the future the impact of parameter uncertainty counterbalances this positive effect thus frustrating the ability to assert that long run returns in the future will be more stable than shorter periods. Taking the analysis a step further the report identifies the competing forces wrestle against each other for supremacy over differing horizons with the mean reversion effect dominating over the medium term, (out to 10 years or so), and parameter uncertainty manifesting itself more forcefully in the longer term. Using this predictive variance approach leads to a variance estimate some 50% higher than the more usual true variance estimation that is commonly in use when comparing 1 year variance to annualised 30 year variance. Taken at face value these findings have significant implications for all long term unhedged market based obligations which includes GMxB’s, Pension Funding and Retail Product design such as LifeStyling etc. Mike and I propose to delve into the details of the paper and view the analysis and findings through an actuarial lens to consider the merits and implications of the findings.

Q: Is long term volatility really lower than short term volatility ?

For those interested in the answers, we hope to open up the topics in the Discussion Forum in the coming weeks. A more comprehensive and considered set of responses will be discussed and presented the upcoming Risk and Investment Conference 2009 . After the conference we will post the presentation materials and supporting information into the Resource Centre.

Finally I would like to thank Jack Walton and Marylene Lanari-Boisclair of Deloitte and Brian Morrissey of KPMG for their bulletin on US GAAP which is included in this report.

James Maher

Chairman VA Members Interest Group

Recent Activity

Over the last month the Life Convention committee has been fine tuning its program of events and we are delighted to advise that we have been provided two avenues of presentation.

Paul Shallis and his team will seek to answer the question, **“A Bright Future for Variable Annuities?”**

The presentation will be based on research conducted into the question:

"Is the future for Variable Annuities in the UK as bright now as it once was. With a view on experiences to date both in the UK and overseas, and expectations for the future, is there a winning formula for the Variable Annuity product and how can it better meet the needs of customers, advisors and providers?"

We look forward with interest to this update from the Products, Pricing & Opportunities stream of the Variable Annuity Member Interest Group who's memberships is a veritable who's who of the leading writers and advisors in the UK VA product space.

Under the Current Topics program we will also have the opportunity to answer the question, **Why make when you can buy ?**

Team Members: Josh Corrigan, Matthew Hunt, Anthony Bentley, William Diffey.

The presentation will introduce the finding of a research paper into the pros and cons of looking to self manage the market risk in product guarantees, as compared to buying in the risk management from an Investment Bank or Reinsurer. The experience of 2008 will have caused many companies to reconsider the requirements and opportunities associated with manufacturing guarantees and the research aims to help individuals and companies tease through the issues so that there is clarity and transparency in the final decision

Those familiar with the Life Convention arrangements will know that the short list of Current Topics is pitched to the full Convention attendance as a 10 minute taster to attract the audience to the follow on sessions.

On a less positive note, unfortunately the Society of Actuaries event, "Equity-Based Insurance Guarantees," planned for 11 and 12 May 2009 has been cancelled by the organisers; and while we understand that all subscribed attendees and sponsors have been notified directly by the SoA, many of you may have been anticipating your own attendance at this event so would like to know about this change. It is hoped to bring this conference back to Europe during 2010, though not necessarily to London.

Recent Market Activity

- Hartford to cease accepting new business in UK and Japan and to shelve plans for entering German Market. Dublin operation to stay in place for the orderly servicing of existing customers.
- Canada Life Europe have entered the fray with their, 'Garantie Investmente Rente Product' for the German market place which provides for both a deferred and immediate drawdown product. The underlying funds are provided by Fidelity.
- Axa have broadly pulled back on the 'Twinstar Invest' product, thus reducing the availability of externally managed funds to be covered under the guarantee umbrella. Twinstar Klassik remains fully available
- FINRA has fined the US firm, 'Fifth Third' for "unsuitable" VA sales as part of a country wide review of VA sales practices

Resource Centre

Following approval last month, the online forum is expected to be up and running and available to our members soon. All thoughts and suggestions are to be returned to Rachel

Research Help Wanted

News Hound

We are still keen to find a willing volunteer candidate for our Newshound role however given the slow pace of response to our advertisement we are more than happy to appoint unwilling volunteers.

Please can any candidates make themselves known to Rachel.

Upcoming Events

The annual Risk and Investment Conference will take place from 21 June at The Grand Hotel, Brighton . The conference title "Managing liquidity" should be of interest to all members but especially those involved in the risk management of Variable Annuities. The conference details can be accessed from the following link:

http://www.actuaries.org.uk/media_centre/events_folder/ap_events/risk_invest_conference

Notwithstanding the cancellation of the SoA conference, we are pleased to confirm that the, "Developments and Challenges in the Variable Annuity Market" conference is still going ahead on Friday 15 May 2009 as per the following note from the conference organiser:

Developments and Challenges in the Variable Annuity Market

The seminar will be held over the course of a full day on Friday 15 May 2009, at the Law Society, Chancery Lane in London. The full agenda and registration details can be found on the Institute's website at http://www.actuaries.org.uk/media_centre/events_folder/ap_events/developments_variable_annuity_market

The agenda encompasses a wide range of topics including: latest market developments; product design and pricing challenges in today's market conditions; a panel session with the major VA writers and potential new entrants; risk management; reinsurance and hedging solutions; distributor perspectives; managing operational risks, and; cross border business models

The seminar also provides you an opportunity to gain up to 7 hours of verifiable CPD. Please pass on this message to any of your colleagues who might also be interested in attending.

Joshua Corrigan, Life CPD Committee

On behalf of the VA MIG management committee I would certainly encourage you to attend this conference if you can.

Recent Publications

“Are Stocks Really Less Volatile in the Long Run?” Its authors are Lubos Pastor, a finance professor at the [University of Chicago](#) Booth School of Business, and Robert F. Stambaugh, a finance professor at the Wharton School of the University of Pennsylvania. A copy is at <http://ssrn.com/abstract=1136847>.

Practice Area Bulletin

This month's contribution comes from the Financial and Reporting Practice area led by Tamsin Abbey.

Variable Annuities under US GAAP:

In the following note the Financial and Regulatory Reporting practice area provide a summary of US GAAP treatment of VA guarantees. The US treatment of VA's is relevant to many of our companies whether through their ownership of local companies or the significant US interests of our major European Life Companies. For good measure we look to translate this treatment through the IFRS lens to see what if any issues arise. We complete the note with a summary of the progress being made to harmonise US GAAP with IFRS for Insurance Accounting purposes.

Overall Structure & Classification:

Like other account value focused insurance products in North America, variable annuities are classified as FAS 97 "*Accounting and Reporting by Insurance Enterprises for certain Long Duration Contracts*" under US GAAP (see <http://www.fasb.org/st/index.shtml> for more details) under which the basic reserve held is simply account value. However, given the various guarantees available within these contracts, the regulators realised such a simple reserving methodology was inadequate and constructed some guidance to strengthen requirements. The additional reserves required for the guarantees inherent in these contracts are determined under either an Insurance framework (SOP03-1 "*Accounting and Reporting by Insurance Enterprises for certain Non Traditional Long Duration Contracts and for Separate Accounts*") or a Fair Value framework (FAS133 "*Accounting for Derivative Instruments and Hedging Activities*"), or a combination of both depending on the nature of the guarantee being offered. The attached links will direct you to source for the complete texts under discussion however we look to provide a high level summary in the ensuing paragraphs:

Text on SOP03-1 can be found at :

http://www.cpa2biz.com/AST/Main/CPA2BIZ_Primary/Accounting/IndustryspecificGuidance/PRDOVR~PC-005142/PC-005142.jsp

Text on FAS133 can be found at <http://www.fasb.org/st/index.shtml>

SOP03-1 - Insurance Accounting

In terms of VA benefits, SOP03-1 provides guidance for GMDBs and GMIBs where benefits are not net settled, i.e. the guaranteed minimum annuitization benefit results in a monthly payment being paid by the insurance company as opposed to being commuted to a lump sum payment. Under SOP03-1, the liability is calculated as the cumulative assessments multiplied by a benefit ratio less cumulative benefits paid in excess of account value released plus interest. The benefit ratio is calculated as the present value of benefits at inception divided by the present value of assessments at inception. This benefit ratio is calculated as the average of a set of stochastic scenarios developed under best estimate real world assumptions. The benefit ratio is unlocked at each valuation date to reflect current best estimates. The assessments, which differ from the EGPs [<http://www.fasb.org/st/index.shtml>] over which most FAS97 balances are amortised, only include revenue items and not expenses.

FAS 133 - Fair Value Accounting

Of the common VA benefits, FAS 133 provides guidance for GMABs, GMWBs, and the GMIBs where benefits are net settled.

Under FAS 133, which covers the valuation of derivatives, the GMxBs are classified as embedded derivatives and need to be bifurcated from the host insurance contract and reported at fair value. While very impressive sounding, in practice, the liability is simply the present value of future outflows minus allocated future inflows. Future outflows are simply net benefits paid, while inflows are typically calculated under either a benefit ratio method or interest spread method. The benefit ratio assumes inflows are determined as a portion of the appropriate GMxB rider fees. The interest spread method assumes inflows are premiums based on asset cash flows which represent one leg of a total return swap. Both of these methods should be market consistent and thus reflect current risk free market returns and market volatility and would require changes to the inflows as current market risk costs changed.

IFRS Treatment

Interestingly enough, if US GAAP is your local GAAP for IFRS purposes, the above remains unchanged. The first phase of the IASB insurance contract project produced the current version of IFRS 4. Under current IFRS, contracts classified as insurance – most variable annuities contracts would fall in that category – have to be accounted for using IFRS 4: Insurance Contracts. IFRS 4 effectively exempts an insurer from some requirements of other IFRSs allowing it to continue accounting for its insurance contracts using local GAAP, with some other requirements such as testing for liability adequacy.

Irish GAAP

Recognizing the preponderance of companies manufacturing their VA's out of Ireland it is important to consider the Irish context. Companies in Ireland are free to adopt either IFRS or Irish GAAP. In the case of Irish GAAP, the guidance is silent on the treatment of Insurance accounting and as such companies are free to have regard to other established guidance. Recognizing that the US has developed the most comprehensive guidance on the topic and the significant US ownership it is fair to say that the requirements and guidance of US GAAP find their way into the reporting of the Irish VA manufacturers.

Convergence between IFRS and FAS for Insurance Accounting

Last October, FASB decided to join in with the IASB on their insurance accounting project and now, the second phase of the project is well underway with both boards meeting on a regular basis throughout 2009 to discuss insurance accounting. An exposure draft for the new "global GAAP" is expected in December 2009 and current timeline suggests a publication of the final IFRS / USGAAP standard for insurance in May 2011. The earliest implementation date of the new requirements is likely to be 1 January 2013. The proposed measurement approach for insurance liability under the new standard is likely to be similar to a "fair value" concept, requiring:

- estimates of financial variables as consistent as possible with observable market prices,
- the use of explicit current estimate of expected cash flows,
- the use of discounting in all cases and
- the inclusion of an explicit margin.

Exit Values V Fulfillment Values

The boards have not yet decided on whether the measurement should follow the Current Exit Price notion (CEP - price to be paid by market participant) or Current Fulfillment Value notion (CFV - cost to fulfill obligations to end of the contract) although FASB has expressed a preference for the Fulfillment value notion.