Newsletter
May 2009
The Society of Actuaries in Ireland

New Qualifiers' Reception – February 2009

Left to right (front row) Louise Thomas, Sinead Ahearn, Jenny Fee, Emma Townley, Orla Walsh and Sarah Kearns
Left to right (back row) Peter Ryan, Thomas Synnott, Philip Shier (SAI President) and Michael O'Byrne

Contents:

Professionalism Course for New Qualifiers

The Society hosted its annual Professionalism Course for new qualifiers on the 5th and 6th of April at the Druids Glen Marriot Hotel in the Wicklow mountains. The course was well attended, with roughly 40 attendees from all areas of the profession and of various backgrounds, which made for interesting and lively discussions throughout the two days.

The main speakers throughout the course were Yvonne Lynch, the Society's Director of Professional Affairs and Maria Quinlan, Chairman of the Society's Education Committee, although a number of others from the profession also participated and the event was brought together by Mary Butler, the Society's Director of Member Services, who co-ordinated the course.

After arriving at the hotel, registration and introductions were quickly over and the first part of the morning was spent introducing and discussing the theory and practice of professionalism, in particular the Society's Professional Conduct Standards (PCS) and their applications. Anyone expecting to sit back and listen would have been disappointed that morning, and for the rest of the course, as discussion soon moved to individual tables and the group as a whole, giving everyone the opportunity to contribute.

Much of the rest of the day was used for the discussion of how the PCS applied to specific areas, with the help of experts from the various fields: Jimmy Doyle, Linda Kerrigan and Kathy Murphy, together with an outline of the

continued...

Professionalism Course for New Qualifiers, *continued.*

CPD scheme by Yvonne. The day was rounded off with a Q & A session with the Society's President, Philip Shier and the experts mentioned, who answered a number of questions from the floor, including several around the Society's future direction and influence.

Drinks and a good dinner followed, where discussion could be continued in an informal setting, which became even less formal as the evening progressed and, for some, morning began.

The second day began with a hearty breakfast and progressed with discussion of the ASPs in each practice area, with Mike Claffey taking over the Life practice group where Linda left off. At this point, some particularly thorny situations were described which got everyone thinking about their own professionalism and perhaps even their own moral philosophy!

Maria described the functioning of the Society's Disciplinary Scheme, a necessity that we all hope never to encounter. Following lunch and an address by Philip, Yvonne provided some detail on the Society itself and outlined ways in which fellows could become involved in the regular panels, discussions and other events.
A challenge workshop followed, culminating in a series of short presentations on some of the pertinent Society topics, such as the compulsory nature of CPD and the various routes to qualification, which all yielded a number of fresh and interesting perspectives.

The course finished with the presentation of certificates and left all attendees challenged and with plenty to talk about on the journey home and think about in the years ahead.

The author is sure that all the attendees would like to join him in thanking the organisers and speakers for all their effort and time in turning what could have been a formality into an inspirational and thought-provoking course.

Simeon Rimmer

3 presenters at the Course; Maria Quinlan, Yvonne Lynch and Mike Claffey.

Update on Free Market Pricing

On Monday, March 23rd 2009, at the Alexander Hotel, there was a Society of Actuaries evening meeting entitled 'Free Market Pricing'. This presentation, based on work done for GIRO 2008 by the Free Market Pricing Working Party, was an extension of earlier work by the Gender Equality Working Party for GIRO 2007. Declan Lavelle and Dick Tulloch presented it jointly.

Declan began by setting out the scope of their work and defining a free market price. The study looked to cover all of the free market issues associated with personal lines general insurance without limiting itself purely to gender and age.

He then explained how the rating factors used in pricing personal lines insurance can be deemed either differentiation or discrimination. This split is determined by society with certain rating factors being deemed as discriminatory and against the 'common good'. Although certain factors may by good differentiators of the underlying risk, they may be ignored or prohibited if society deems them to be discriminatory.

In Ireland it is currently illegal to discriminate based on gender, marital status, family status, age, race, religion, disability, sexual orientation or membership of the traveller community. However, for insurance purposes, differences in treatment are still allowed where these can be based on either reliable actuarial or statistical data or where they are due to other relevant underwriting or commercial factors.

He outlined the requirement under the EU Gender Equality Directive 2004 for accurate data relevant to the use of sex as a rating factor to be compiled and published regularly. Where this is the case it is permitted for proportionate differences in the premiums charged. The Financial Regulator satisfies this requirement through the publication of the Private Motor Statistics. In July 2008, the EU issued a proposal to implement the principle of equal treatment of persons irrespective of religion or belief, disability, age or sexual orientation, which was the motivation behind this working party.

Declan then described the three market models for pricing insurance lines and outlined the strengths and flaws of each method. Free Market Pricing is the system which was in place in Ireland and the UK prior to the Gender Equality Directive. This system encourages competition and innovation and can help discourage risky behaviour. It should also ensure that cover will be available to everyone provided they are willing to pay a suitable price. However, it can be perceived by some to be unfair or discriminatory and has the potential to exclude certain groups.

At the other extreme is the system where everyone pays the same regardless of their risk profile. In this scenario it shifts the focus from premium rating to innovative marketing and customer service. However, this pricing structure creates the risk of cherry picking and market wide anti-selection which then needs to be addressed by some form of risk equalisation. Insurers will also need to be required to operate an 'open enrolment' policy. This type of pricing structure will probably result in higher average premiums and may reduce incentives to avoid risky behaviour.

The third approach is where prices are set using the principles of free market pricing but where the data supporting the differentiation between the different risk groups is published to support the different rates being charged. This helps counter arguments about unfairness and the availability of data will encourage new entrants into the market. However, the requirement on companies to publish their proprietary data discourages innovation which may lead to higher premiums.

Dick Tulloch then took over and began by examining if there was any evidence of market failure in the UK that would indicate a need for a change in how business is priced. He considered three separate lines of business: motor insurance for young and old drivers, travel insurance for older travellers and household insurance for flood cover. He found that, although in some cases availability may be restricted, in each case there was cover available albeit that the prices in some cases may have been considered prohibitive. He also found that, in the cases where an insurer declines cover, it would improve perception if customers were directed to specialist insurers who would provide cover. He found no indication that legislation would improve the affordability of cover in the classes examined.

Dick looked at how the removal of rating factors would impact on motor insurance premiums. He examined both the UK and Irish markets. Removing age as a rating factor in the UK would lead to premium increases for those aged 46-75, while those under 25 and over 75 would be the biggest winners with savings of up to 17%. In Ireland this effect was even more pronounced with drivers aged 31-70 seeing increases of up to 47%, while under 30s could see their premiums fall by as much as 69%. This effect is also more pronounced for males than it is for females. The difference between the effect in the UK and Ireland is down to the different demographics of insured drivers in the two countries, with Ireland having a younger population with a higher percentage of women as the primary insured driver.

He then went on to consider the effect of removing gender as a rating factor in relation to the Irish motor market. It was found that over the age of 40 it would have a relatively small impact. However for under 30's it would lead to a sharp fall in premium for males and a sharp increase in premium for females.

He noted, however, that the work does not allow for any second order effects associated with these premium changes such as changes in the mix of business and an increase in the use of high performance vehicles by young drivers.

In the presentation, Dick outlined two case studies. Firstly, he looked at the New Jersey Auto market, which up until 2003 was highly regulated with insurers obliged to 'take all comers' and subjected to regulatory rate caps. These restrictions were removed in 2003. This led to increased competition, lower prices for many customers, and higher profits for the insurance companies.

Following this, he discussed the situation in the Irish health insurance market where insurers must apply open enrolment and community rating with risk equalisation payments made between the market participants. In this case, despite the concerns over VHI's dominance and the lack of incentive for innovation, society accepts community rating as meeting the common good.

In conclusion, he found that although free market pricing is generally the most efficient way of writing insurance in terms of price and capital, the common good may override fairness if society decides. However, this should be the exception rather than the rule.

The presentation was followed by a lively and wide-ranging discussion covering many related topics such as the international norms for insurance pricing, inertia pricing and the benefits of effective rating models for meeting Solvency II requirements.

Ambrose Carr

Crisis is Opportunity

This is an abridged and slightly altered version of Shane Whelan's essay, An Ideal Crisis, that appeared as a chapter (pp. 62-65) in Risk Management: The Current Financial Crisis, Lessons Learned and Future Implications, published in December 2008 jointly by the Society of Actuaries (US), the Casualty Actuarial Society (US), and the Canadian Institute of Actuaries.

Risk modelling is a risky business, but the burden of risk model failure is often borne by society in general rather than the firm in particular. This division of the ultimate cost ensures that risk models systemically underestimate the risk, as they are designed to capture only that part of the risk borne by the firm. In short, the risk models that underestimate risk will drive out the more reliable risk models that entail a lower return on the increased capital required.

The underlying dynamic is simple. Consider Firm X that puts all its capital, made up of 50% equity and 50% of borrowings, into a venture that has, say, a 50% chance of doubling the investment and a 50% chance of losing it all. The expected payoff of the investment is the sum of the probability of each outcome times its payoff. In this example the expected payoff is simply the return of the original investment (that is, 0.5 times twice the capital plus 0.5 times nil). However, that is not the expected outcome for the firm's equity holders: their expected payoff is one and a half times their original investment, (calculated as 0.5 times [four-times the equity holder's original investment less loan of once their investment] plus 0.5 times nil). The equity holders are clearly incentivised to invest in the venture as it amply rewards their portion of the risk, even though it is not rewarding the overall risk run.

The stylised example above is oversimplified in just one material aspect: the risk could be quantified precisely. In practice, payoffs of ventures in the real world cannot be determined, as Keynes famously remarked, by "strict mathematical expectation". This observation means that the odds must be regarded as guesses – at best educated guesses. And it is the firm and its risk models that are regarded as providing the most educated guesses as it is in their chosen specialism. Incentives to bias risk measurement for those most expert in measuring it can be expected to lead to reoccurring disasters as risk periodically leaks out from firms to be mopped up by the rest of society.

The simple model applies to the property developer, mainly funding his activities from bank loans; to the buy-to-let investor or owner-occupier almost entirely funded by banks; and, to the banks themselves whose liability is limited to its capital base. And so we have the systemic under-pricing of risk in the property market bursting the banks that were meant to hold it back in the fall of 2008.

Ever since debtor prisons were abolished in favour of lenient bankruptcy laws and limited liability allowed to firms, society created the incentive to misprice risk and, therefore, the inevitably of such episodes. According to this explanation, the world can point its finger at the US who, first amongst nations in modern times, allowed unrestricted limited liability to firms from 1811 (beginning in New York state) and, from 1833, began repealing harsh treatment of defaulting debtors. Even today the US remains to the fore with some of the most lenient bankruptcy laws in the world. This analysis is, however, only part of the explanation for the current system failure and the proposal to repeal the laws is, perhaps, not the least costly solution; such laws arguably enabled the emergence of modern innovative economies.

Modern economies are based on the premise that all the main players look after themselves. The bankruptcy and limited liability laws gave property speculators and banks a put option on society so they could walk away from losses above their capital base, yet enjoy all the gains of such speculation. They acted in what they believed were their own interests. It seems that society, well aware of what was happening, did not effectively look after its own interest and now must pay the price.

Society, of course, appoints a financial regulator to look after its interests in this regard. The aim of regulation is designed to keep the probability of insolvency sufficiently low so that the direct and indirect damage caused by insolvency is set equal to the broad social ills of an inefficient overcapitalisation of the industry. The expected payoff to the shareholder, when the financial regulator understates the real probability of default, is increased at the expense of society as our example showed, as the shareholder maintains greater exposure than is reasonable with the risk capital employed. The regulator must ensure the shareholder factors into their decision-making the risks that will ultimately be borne by society (so regulation is designed to "internalise the externalities"). This requires a reasonably accurate model of the behaviour of the extreme tail of outcome distributions and ensures, in the current case, that banks are suitably capitalised.

We do not have a model that adequately measures these extreme risks. What we discover is that the closer we analyse the risk – especially the risks associated with investment in property, equities and other capital assets – the larger the risk appears. This led those industries that were falling more behind the advancing frontiers of research to underestimate the risks more than those keeping in closer contact. This prompted the trading of these risks, in many different packages, so that both the buyer and the seller of risk were delighted with the bargains.

There were some tell-tale signs that the banking industry lagged behind others in the financial services in appreciating

for our Society

developments in modelling risk, and the regulator was even further behind. Within the sphere of an actuary's influence, investment guarantees on pension and life products were withdrawn or reduced, defined benefit schemes were wound up and risk was transferred to members via defined contribution arrangements, and even reinsurers began setting limits to their ultimate exposure (the development of so–called 'finite' reinsurance).

So, according to the assessment above, one might conclude that actuaries should get higher marks than bankers and regulators for their modelling. Yes, but society is not primarily concerned with who gets their sums right. Keynes knew, and the limited liability and bankruptcy laws enshrine the view, that getting the sums wrong is often better:

"…it is probable that the actual average results of investments…have disappointed the hopes that prompted them…. If human nature felt no temptation to take a chance, no satisfaction (profit apart) in constructing a railway, a mine, or a farm, there might not be much investment merely as a result of cold calculation."

The world banking crisis allows us to point the finger at the bank regulators who got it wrong by failing to enforce capital requirements commensurable with the risks run. No disapprobation applies to the pension and life assurance regulators who allowed actuaries get their sums right and quietly pass on the risks to individual savers. But which leads to the greater cost to society? To solve the banking crisis, each economy must now redistribute the losses to those that can bear them by some mechanism or other. However, it is difficult to envisage a solution to the greater misallocation of risk in society; there is unlikely to be an acknowledged crisis and certainly no bail-out of all of those individual pension savers who learn too late the true cost of investment risk.

The economic system that has developed over the last couple of centuries comes with embedded periodic crises due to its inevitable mispricing of risk. That is our system and it is the best yet devised. What we can do is choose the type of crisis we get. The current loud global banking crisis, insisting on the simple if unpleasant corrective measures, is altogether more preferable than the future silent problem of individual pensioners, isolated and ignored in their increasing poverty.

Individual actuaries are giving good advice to their clients. However, the sum of all that good advice is bad for society. In Ireland, we have a unique opportunity to ensure risk is not sold to those who cannot afford it. It is currently sold here to future pensioners in the private sector, through poorly regulated defined benefit schemes and over-optimistic defined contribution schemes. Our grouping in a profession allows us act in concert in the public interest and the White Paper on Pensions, currently being drafted, gives us the best opportunity since our society – both profession and state – came into being.

Shane Whelan

UCD School of Mathematical Science

President's Biennial Dinner

The President's Biennial Dinner of the Society of Actuaries in Ireland took place on the evening of 19 February 2009 in The Royal College of Physicians of Ireland. This was the first year that the dinner was open to all Fellows and Associates. Guests included An Tánaiste, Mary Coughlan (who was the guest of honour); Olwyn Enright, Fine Gael spokesperson on Social and Family Affairs and Pat Rabbitte, spokesperson on Justice for the Labour Party and the Officers and Secretary of the Groupe Consultatif Actuariel.

The President's full address is available on the Society's website: *http://www.actuaries.ie/About_the_Society/Society%20Publications/BiennialDinner.htm*

L to R: Ad Kok, Ron Hersmis, Malcolm Campbell, David Kingston and Alf Guldberg

L to R: Eamonn Heffernan, Brian Duncan, Anne Maher, Paddy Maher and Chris Daykin

L to R: Micheal O'Briain, Michael Madden, Olwyn Enright, TD., and Eddie Shaw

L to R: Seamus Creedon, Evelyn Ryder and Pat Ryan

February 2009.

L to R: Colm Fagan, Olwyn Enright, TD., Pat Rabbitte, TD., An Tanaiste, Mary Coughlan TD. and Philip Shier

L to R: David Kingston, Peter Prieler, Philip Shier, Ron Hersmis, Michael Lucas, Richard Muckart, Malcolm Campbell and Alf Guldberg

L to R: Philip Shier and Prof. Niamh Brennan

L to R: Jim Kehoe and Prof. Brendan Walsh

MCEV and IFRS Phase

All of those who braved the inclement weather conditions to make it to the Alexander Hotel on Tuesday, February 3rd, were rewarded with an interesting and informative presentation on MCEV and IFRS Phase II Developments.

This presentation was put together by the members of the Life Assurance Accounting Sub-committee, which was established during 2008.
The presentation itself was jointly done by David Roberts, Steven Hardy and Brian Morrissey.

The focus on the night was on Life Assurance Accounting developments and MCEV, mainly due to a lack of progress by the IFRS Board on their planned developments, and the immediateness of MCEV implementation.

Introduction to EV Methods

The first speaker was David Roberts, who is the Financial Reporting Actuary for Bank of Ireland Life. He gave us an introduction to Embedded Value (EV) methods.

As we know, life assurance companies have historically been hard to value as the business is complex and the final profits are not clear until a number of years after contracts are sold. David quoted a 1959 paper by Anderson which stated that "an aim of embedded values is to value the cashflows consistent with the theoretical value that shareholders would place on them", and noted that this is still the aim today; nothing has changed.
As embedded values are both complex and subjective, the market places a discount on them.

The traditional EV was first developed in the UK as a valuation tool in the mid-80s. It became widely accepted by equity analysts in the 1990s, as they only had statutory information available prior to then. It was regarded as a useful measure of profit and an aid to putting a value on a company. It was particularly useful for new entrants entering the life assurance market, such as banks.

The traditional EV is calculated as:

- the value of, in-force business (any business already sold) plus
- net assets, on a regulatory basis minus
- the cost of capital (as 'locked-in' solvency capital produces a lower return).

The value of the in-force business is calculated as the present value of projected shareholder cashflows.
The projection is a single deterministic projection which uses estimates of future economic and non-economic experience. The economic experience includes risk premiums in the return on equities and the return on corporate bonds. The projection is discounted at a risk discount rate to incorporate the risk of the cashflows not emerging as expected.

A graph was used to compare the emergence of profit using the traditional EV method and using cash flow methods. The cash flow method shows a large loss up front when a life contract is sold, and then regular profits throughout the life of the contract. EV recognises a profit up front and then has lower profits for the remaining term.

The shortcomings of the traditional EV method are as follows:

- Allowance for risk is subjective and unclear.
- Guarantees can be ignored if not currently in the money.
- Asset risks – values are driven by the assets held, the balancing cost of associated risk is not always held.
- Consistency between companies is difficult to achieve.

It was rejected by the International Accounting Standards Board (IASB) for Insurance Phase I as a way to value life contracts.

The CFO Forum was created in 2002. It is a high-level discussion group made up of the CFOs of twenty European-based insurance groups.
It aims to improve transparency and value for shareholders. It also aims to avoid the downsides of other reporting methods. It developed the twelve European Embedded Value (EEV) principles in 2004.

The main aim was to formalise EV practice and thereby improve consistency of reporting. It also took steps forward in terms of disclosure, consistency of economic assumptions, and the valuation of options and guarantees. For example, under Principle 7 on Options and Guarantees, companies must:

- Allow for the potential impact of financial options and guarantees.
- Use stochastic techniques.
- Explicitly deduct the cost from the present value of in-force business.

However there is still some scope for differences, as the result is not necessarily market consistent and there is no guidance on asset models. There is also no allowance for policyholder behaviour, although management discretion can be allowed for.

Under EEV, the risk discount rate should be set equal to the risk-free rate plus a margin to reflect any risk not already allowed for elsewhere. There is formalised guidance on what the risk-free rate should be, and also on what the margin should and should not cover. However there is still scope for different approaches to risk (top down versus bottom up), and the suitability of the risk discount rate is unclear.

Market Consistency Theory

The underlying belief with the MCEV approach is that the market correctly values market and credit risk. Taking credit in advance for the equity risk premium or credit spread is inconsistent with the markets' valuation of equities or bonds. Put more simply, €1 of equity should equal €1 of gilts.

Some simple examples were used to highlight the distinction between traditional EV and MCEV. In the first simple example, there is €100 due in 25 years' time. The reserve will be calculated as the present value of €100. With the traditional EV method, the calculation begins with the assets used to back the liability, in this case corporate bonds with a yield of 7%. This leads to a realistic reserve calculated using a rate of (7% - 1%) for default risk, and a prudent reserve calculated using (7% - 2.5%), to include an additional margin for prudence.

Under MCEV, the market consistent reserve is equal to the market value of the replicating portfolio, where the liability is replicated with assets that will always match it. So the rate used to discount the €100 will be the yield on a 25-year zero coupon bond. It no longer

ll Developments

matters whether this is considered realistic or prudent. Credit and market risk are benchmarked to the market. So if, for example, €1 will buy either zero coupon bonds with a yield of 3%, or corporate bonds yielding 7%, then the difference here indicates the market's value of the additional risk inherent in the corporate bond.

In the second example, there is €100 in equities with a guaranteed maturity value. The traditional method allows you to assume a growth rate based on the expected future return on equities. Any positive equity return assumption will lead to the guarantee having a value of zero. This doesn't make sense, as every guarantee has some value.

Under MCEV, the market-consistent reserve is equal to the market value of the equities plus the value of a put option. This picks up the cost of the guarantee, even when it is out of the money.

MCEV attempts to value shareholder cashflows on a risk-adjusted basis, which is consistent with how the market would value them. Its advantages include:

- Objectivity – as it is calibrated to the market.
- The value of the liability is not affected by the assets backing it.
- It is good at picking up the time value of options and guarantees.
- It is consistent with other possible market investments, which allows comparison.

Its gaps include:

- Not being too good at mismatch risk, since the link between the assets and liabilities has been broken.
- Not being suitable for risks where markets do not exist, e.g. persistency. In theory these risks can be diversified away by investors, so only the frictional cost should be allowed for.

MCEV Principles & Guidance

David then handed over to Steven Hardy, the Valuation Actuary at Hannover Life Re, who gave us an update on MCEV Principles and Guidance. These have been built on the previous EEV initiative and arose out of a desire to have a de facto industry standard. They aim to allow analysts to compare two MCEVs and know they are consistent. The 17 principles are laid out in the CFO Forum's "Principles and Guidance".

The market consistent approach is used because it improves consistency, shows up trends in EV reporting, accounting and solvency, and does not allow asset arbitrage.

MCEV can be defined as FS + RC + VIF. The free surplus (FS) is the market value of the assets not required to support inforce business. The required capital (RC) is at the greater of the regulatory requirement or company target level. The regulatory requirements include amounts 'encumbered' by local supervisory restrictions, e.g. 150%. The company target level could be a targeted rating agency level of capital, which is money that is not available to be distributed to shareholders. The value of future new business is excluded.

The VIF is the value of inforce business and equals PVFP – FOGs – FcoRC – CoRNHR. PVFP is the present value of future profits, where the profits are the post-tax transfers to shareholders. There is no credit in the present value for future returns in excess of the swap rate. The CFO Forum states that the swap rate used should be the risk-free rate for MCEV. FOGs is the time value of financial options and guarantees. Stochastic techniques must be used for this part. The PVFP + FOGs reflects the current cost of hedging financial risks.

FcoRC is the frictional cost of required capital. It reflects the taxation and investment costs of assets needed to back required capital. CoRNHR is the cost of residual non-hedgeable risks. This is an allowance for non-hedgeable (and non-financial) risks not already allowed for in the PFVP or FOGs cost, for example operational, persistency and mortality risks. It is presented as an average cost of capital charge (2% to 6% may be common). It will be based on a risk-based internal economic capital model. The capital determined should be consistent with a 99.5% confidence level over a one-year time horizon (consistent with Solvency II). There is still some scope in the CoRNHR for the company's discretion, while still being more transparent than EEV risk deductions.

Under MCEV, the non-economic assumptions (e.g. lapse, mortality) must reflect the true current best estimate of the worth of the business, and must be actively reviewed. They must be supported by appropriate experience analysis. The economic assumptions must be observable in the market and updated at every MCEV reporting date. The investment returns must be market consistent, with the VIF discounted at swap rates, as per the CFO Forum.

Any non-compliance to the principles must be disclosed, as must the assumptions, methodology, sensitivities and analysis of MCEV earnings. MCEV is mandatory for all CFO Forum members from year-end 2009, though it can be adopted earlier. It must be subject to an independent external review, to add credibility.

Product Impact of MCEV

The impact of the MCEV method on products will depend on the product type. It will have a potentially significant impact on annuities in payment. Generally these are backed by assets which are exposed to credit risk, like corporate and government bonds. Companies may allow for credit risk and liquidity risk premia in new business pricing. This assumes the company will earn above the risk-free rate, as otherwise the product would be expensive to policyholders. Under MCEV, credit cannot be taken for credit and liquidity risk premia as only the risk-free rate can be used. The graph of profit emergence shows a large loss in the first year under MCEV, with higher profits emerging in later years as the credit and liquidity premia are earned in the underlying asset portfolio. For in-force business, an increase in credit or liquidity spreads causes a reduction in asset prices but no corresponding increase in returns in MCEV projections.

In theory, term assurance cashflows are fully diversifiable from other risks in investors' portfolios. Shareholder cashflows can be discounted at the risk-free (swap) rate. Frictional costs will be equal to tax and investment charges on the backing capital, which will be less than 1%. The overall result will be heavily influenced by the approach taken to allow for the residual cost of non-hedgeable risk. The graph of profit emergence shows a large profit in the

MCEV and IFRS Phase II Developments, *continued.*

first year, followed by lower profits in the later years. This is due to the unwinding of the lower risk discount rate as compared to the traditional EV method.

For a regular premium unit linked product, the investment charges will be projected assuming unit growth at swap rates, and then discounted using the same rate. Capital costs should be low under both the MCEV and EV approaches, though an allowance for operational risk must be allowed for under MCEV. Using the risk-free rate to project and discount leads to offsetting impacts which results in a higher MCEV initially. The unwinding of a lower risk discount rate leads to lower MCEV profits in subsequent years. Finally, the realisation of higher investment management fees than included in the MCEV basis results in higher MCEV profits in later years.

Current Issues

The impetus for market consistency has hit a bump. The "dislocation" of markets has meant a pull back from pure market consistent methodology. Even when (or if) markets return to stability, a shadow will have been cast over market consistent methods. The MCEV Principles were designed during stable market conditions. They produce misleading results in a turbulent market, which has led to the CFO Forum agreeing to review items such as implied volatility, non-hedgeable risks, swap rates and liquidity premia. There are also questions over the objectivity of the CFO Forum, and doubts about the use of MCEV in transactions.

IFRS Phase II Update

Steve then handed over to Brian Morrissey, of KPMG, who gave an overview of IFRS Phase II.

IFRS Phase I was only ever intended to be an interim standard for insurance accounting. The IASB issued a Discussion Paper in May 2007 setting out its preliminary views on the Phase II standard. This garnered 162 responses, which the IASB reviewed, and then subsequently held education sessions for the Board at its autumn 2008 meetings. The current timetable has Board meetings running up to September 2009, with an exposure draft due in Q4 2009, which is considered both optimistic and challenging. The final standard is due in Q2 2011, with implementation scheduled for 2012 or 2013, which is in line with current Solvency II deadlines.

The concept of Current Exit Value applies to both life and non-life entities. It is a prospective measure of all insurance assets and liabilities. It is the amount an insurer would pay to another party on immediate transfer of rights, liabilities and obligations. The three building blocks for it are:

- Explicit, unbiased, market consistent, probability-weighted and current estimates of contractual cashflows.
- Current market discount rates that adjust the estimated future cashflows for the time value of money.
- An explicit unbiased estimate of the margin that market participants require for bearing risk and providing other services.

The Current Exit Value is a hypothetical concept, as companies don't have the flexibility and are not legally allowed to transfer business at the moment. It is consistent with MCEV, as it is based on market consistent principles, the measure of liabilities reflects the company's own credit risk, and the servicing costs reflect market rates instead of internal rates.

The respondents' views show support for the three building blocks, but are critical about the Current Exit Value. The view is that it is hypothetical and the cashflows of the insurer are more relevant. Also, the company's own credit risk is not felt to be relevant to the measurement of insurance liabilities.

Another contentious area has been which cashflows to include. The initial view was that only contractual rights and obligations should be measured, which means that future premiums would only be taken into account where there is guaranteed insurability. There is no contractual obligation on policyholders to continue paying premiums, but they would usually be included in valuations anyway. Current Exit Value says that these should not be included, which would affect many regular premium products.

The view of the CFO Forum is that a single measurement model consistent with Solvency II should be used. The Solvency II measurement is current exit value, which is best estimate plus a risk margin. It says that if liability cashflows can be replicated by traded instruments with similar cashflows, then the market value of those instruments should be used. For non-hedgeable cashflows, the risk margin is the cost of providing capital to support the non-hedgeable obligations over the lifetime of the contract.

The differences between the IASB and Solvency II models include the use of contractual cashflows versus all cashflows, the use of market participant expenses versus entity-specific expenses, the inclusion, or not, of own credit risk in the measurement, and the recognition of day one profit.

The view of the GNAIE (Group of North American Insurance Enterprises) in the US is that there should be separate models for life and non-life entities. For life business, the discount rate should be based on asset returns. For non-life, the Current Exit Value model would be costly to implement without providing a significant improvement.

The Current Fulfilment Value uses entity-specific estimates and cashflows and does not reflect a liability's own credit characteristics. There are three versions of fulfilment value, which treat the risk margin differently. They use one of:

- the cost of capital as per Solvency II,
- the cost of capital with an additional margin to remove day one profit, or
- a single margin calibrated to premiums less acquisition costs.

As of yet, there have been no decisions from the Board.

The way forward for IFRS Phase II is currently filled with uncertainty. There are conflicting demands on IASB resources. It is unclear whether all expected cashflows can be incorporated into the IASB model. The conflicting views of the CFO Forum and GNAIE will need to be accommodated. There may be some field testing required, akin to QIS tests for Solvency II. There will also need to be interaction with the Financial Accounting Standards Board (FASB) in the US.

The presentation was followed by a lively Q&A session, with many participants contributing their opinions and queries.

Elaine Walsh

Exploring the Preservation, Survival & Resurrection of DB in the Current Crisis

A large crowd gathered on the evening of the 3rd of March in the Alexander Hotel for Gerry O'Carroll's presentation of his paper "Exploring the Preservation, Survival and Resurrection of Defined Benefit in the Current Crisis".

The Current Minimum Funding Standard

Gerry began by providing us with the background to the birth of the funding standard in 1990. Before 1990, many former employees on pension were paid directly from company revenue, with little or no prior funding having taken place.

Following the H Williams pension scheme debacle in the late 1980's, where the supermarket chain ceased trading and the pension schemes were insolvent, the Irish government introduced legislation to regulate pension schemes and protect members. As part of this legislation, the funding standard was introduced.

Since its introduction in 1990, the standard has been amended very little, and only added to in reaction to changing circumstances.

Gerry outlined some of the problems with the current funding standard, including:

- Priority rules
- Increased buy-out cost
- Transfer value inadequacy
- Investment disconnect between assets and benefits

The Current Crisis

Gerry then went through the main options available to an underfunded scheme, namely:

- Increase contributions
- Cut benefits
- Wind-up
- Find contingent assets

He also outlined some other possible solutions to the current crisis that could be worth considering:

- Suspend/defer funding
- Swapping of government bonds for distressed assets
- State guarantee (annuity or insolvency fund)
- Two tiered benefit structure
- Static funding for a period

Gerry then took the meeting through some of the options for altering benefit terms that could be considered as part of a restructuring which would alleviate some of the financial strain.
These include:

- Pension increases could be ceased or made discretionary, or alternatively they could be paid ex-gratia through the company payroll which would reduce the immediate funding requirements
- Allowing salary increases to be capped or frozen during the term of a funding proposal
- Increasing the normal retirement age
- Suspension or reduction of accrual for a period during the term of a funding proposal

The "Hold" Strategy

The aim of the "hold" strategy is to avoid wind-up, limit the impact on the employer's cashflow, deliver benefits as they arise and restore the scheme to full health when conditions improve.

One possible "hold" strategy discussed was in relation to pension increases whereby these are paid from payroll, thereby avoiding the requirement for a capital injection.

Another "hold" strategy involves maintaining the coverage level for actives and deferreds (based on service completed) at their current level while ensuring that current and new pensioners are 100% covered. Protection on wind-up and the investment policy would need to be considered as part of this strategy.
Gerry then took the meeting through an alternative "hold" and evolution strategy. Under this, a reduced level of benefits would become core benefits with the balance of benefits becoming discretionary. A stronger funding standard would apply to the core benefits. Tighter controls on the investment policy in respect of these core benefits may also apply.

The discretionary benefits could be on a pay as you go basis or funded via an aggressive funding/investment strategy. Contingent assets or government protection could provide a cushion on wind-up.

The State's Role

Gerry finished up by looking at the State's role in pension provision, i.e. as a provider of basic benefits and as a regulator. He believes that there should be a healthy interaction between private and public sector benefits and that public sector pensions should be subject to the same criteria as the private sector, namely affordability, pre-funding and accounting principles.

Discussion

The many comments from the floor showed just how difficult the current times are not just for pension schemes but also for advisors. The audience were aware that there is no one solution to the defined benefit problem. However, from the discussion, it would appear that what one person considers a solution another sees as causing further issues, the introduction of a state annuity being the perfect example!

The presentation slides and Gerry's paper are available on the Society's website.

Enda Walsh

CPD Returns and Declaration

Continuing Professional Development (CPD) – Reporting Year 1st July 2008 to 30th June 2009

We are approaching the end of the third year of the current CPD scheme (30th June 2009). The requirements of the scheme are set out in ASP PA-1, Continuing Professional Development, which applies to Fellows and Associates as a Mandatory ASP. Full details are available on the Society's website, at http://www.actuaries.ie/Careers_Education/CPD%20Scheme/cpd_new_page.htm.

The online forms for submitting your Category, Declaration and Returns are available in the Members' section - https://www.actuaries.ie/web/cpd

Submitting your CPD records

Some things to remember when you submit details of your CPD events / activities:

- "External" means external to your own firm. So, any CPD event that is attended by a mix of people from several firms – rather than being attended mainly by people from your own firm – is an "external" event. Thus, the Society's CPD events, for example, are "external" events.
- "Outside specialism" means CPD that is relevant to your work but is outside your actuarial specialism. It may include non-actuarial technical skills. It may also include "soft" skills, such as communication and people management skills. It should include professionalism skills from time to time, though not necessarily every year. Under the CPD scheme, most working actuaries are required to complete some CPD on skills that are outside their specialism.
- If you have questions about the CPD scheme, you might find the Guide and Frequently Asked Questions on the website useful: http://www.actuaries.ie/Careers_Education/CPD%20Scheme/cpd_main.htm.
- If you can't find the answer to your questions there, please contact the Society at info@actuaries.ie.

CPD events during this CPD year

The CPD events organised by the Society during the current CPD year are listed on our website under Events & Papers / Past Calendar. Some members also gained CPD through participation in Society Working Parties and Committees during the year as well as attendance at relevant events organised by other bodies.

On the Move

Fellows

Thomas O'Brien has joined **Norwich Union International Ltd**.

Niamh Gaudin has joined **the Financial Regulator.**

Gerry Jordan has joined **Canada Life** from AZ Life.

Fearghal O'Donnchu has joined **Allianz Re Dublin Limited** from Friends First.

Kevin O'Regan has joined **PartnerRe Global Life Operations** from XL Life RE.

Olive Gaughan has moved from Hibernian Aviva to **Prudential International Assurance.**

Society of Actuaries in Ireland
102 Pembroke Road, Dublin 4. Telephone: +353 1 660 3064 Fax: +353 1 660 3074 E-mail: info@actuaries.ie Web site: www.actuaries.ie