Newsletter

May 2010

The Society of Actuaries in Ireland

New Qualifiers' Reception in Dublin Castle

***Back Row L to R:** Linda Travers, Niall Mulvey, Ciaran Belton, Emma Cathcart, Damian Smith, Cherith McClelland, Roger Ryan, Lorna Seery, Gregg Murphy, Aveen Gorry, Martin Whelan, Karen Egan, Johan Wiid, Olive Reid, Darragh Kirwan, Alison Nee and Thomas Moran*

***Front Row L to R:** Sarah Johnston, Paraic Shortall, Kevin Murphy (SAI President), Michelle Kelleher, Colin Fennell, Clare Cullen*

Contents

The Society's President, Kevin Murphy, welcomed new qualifiers and their guests at a reception in Dublin Castle on 15th April, prior to presenting FSAI parchments. Almost all of the new qualifiers had attended the Society's Professionalism Course the previous month.

Professionalism Course for New Qualifiers

The Society of Actuaries in Ireland hosted the annual Professionalism Course for Newly Qualified Actuaries in the Marriot Hotel Druids Glen on the 4th and 5th March 2010. The main presenters over the two days were Maria Quinlan, Chairperson of the Society's Education Committee and Mike Claffey, who jointly facilitated the course with Maria. The course was very well organised and co-ordinated by Mary Butler, the Society's Director of Member Services. Various other presenters took part over the two days. 49 newly qualified actuaries attended the course, split into 31 people from Life Insurance, 10 from General Insurance and 8 with a Pensions background.

On Day 1, following breakfast and registration, we all moved to the Oscar Wilde room in the Marriot, where Mike Claffey got the course underway. Mike introduced us to Professionalism and the importance of adhering to the Society's Professional Conduct Standards (PCS). The PCS was discussed in detail throughout the two days. Mike also opened our eyes to the Society's Disciplinary Scheme, how it works and the potential implications of going through this process. A number of Professionalism Case Studies were presented to us and this started a lively discussion among each of the tables and across the floor. Indeed, the

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Professionalism Course for New Qualifiers *...continued*

format of the two days was very interactive and many discussions were had on the various topics raised between us and the various speakers. One of the case studies related to what gifts would be considered acceptable for actuaries and other professionals to accept under various scenarios. The other case study related to the importance of peer review and the actions that should be taken if you were to discover an error in a colleague's piece of work.

Following the morning coffee break, we discussed the PCS in more detail and completed a 15 question multiple-choice quiz on the PCS. Having read the PCS prior to attending the course, I was amazed to see how relevant and applicable the material in the PCS is to my day-to-day work and I feel that more emphasis should be placed on the PCS by employers in the workplace. The PCS covers topics such as conflicts of interest, standards for actuarial advice, confidentiality, breach of professional standards and discipline.

Prior to lunch, Maria presented us with a DVD on *"The Auditor in Court"*. The key message gained from this DVD was the importance of peer review within work and the possible implications of not carrying out this process.

Following lunch, we split into 3 groups in different rooms depending on the area in which you worked. Declan Moore presented the General Insurance Module, Paul O'Brien presented the Pensions Module and Dave Roberts presented the Life Insurance Module, which is the one that I attended. Dave gave us an insight into his role in New Ireland as Appointed Actuary, the importance of PCS and the various Actuarial Standards of Practice (ASPs) in the work that he does.

For the last session of Day 1, we all congregated as one group where Paul O'Faherty, the Vice-President of the Society, discussed the current issues facing the Society and a question and answer session followed. This provided us newly qualified actuaries with an excellent opportunity to raise any issues or concerns. A number of questions were raised and these were addressed by Paul and the other presenters from the day.
The pre-dinner drinks reception commenced in the bar at 7pm.
Paul O'Faherty opened the dinner reception by congratulating everyone on qualifying. Dinner followed and this provided everyone with a great opportunity to meet and network with fellow colleagues as well as meeting the Society's committee members. After dinner, drinks continued in the bar until the early hours of the morning.

The second day started at 9.15a.m. with Maria providing us with a summary of Day 1 and an overview of Day 2. This was followed by two one-hour sessions.
The first session was presented by Brian Morrissey on Enterprise Risk Management and the increased importance of the actuary's role in this area. The second session was presented by John Armstrong on the future of the Health Insurance industry.

Before lunch, Maria gave us a presentation on the work of the Society of Actuaries in Ireland. This included the structure of the Society in Ireland, the committee members, the various working parties in existence and also encouraged us to get involved from presenting at evening meetings to joining one of the various working parties. One of our fellow newly qualified actuaries, Benjamin Dean, a member of the Society's Communications Committee, updated us on the challenges facing the Society in getting in contact with students. A number of suggestions were put forward from the floor, such as using facebook more as a way of contacting students, an anonymous forum for the students and a student link on the Society's website.

After lunch, Mike Claffey introduced us to the CPD scheme and our obligations under this. For all newly qualified actuaries who attended this course, the good news is that you can claim 10 hours of CPD from attendance at the March Professionalism Course, of which 8 are *"Professional hours"* and 2 are *"Technical hours"*.

The day finished off with a very lively discussion on the challenges facing the Profession and the Society. The topics discussed included:

- communications by the Society and the difficulties of this,
- PCS and what people think of it and whether we should move to the Actuaries Code instead,
- CPD and a comparison with other countries' CPD scheme,
- the importance of peer review,
- the disciplinary scheme,
- conflicts of interest and how we can deal with them, and
- resourcing the Society going forward.

The course concluded with the presentation of the certificates.
Finally, on behalf of all those present, I would like to thank Mike, Maria and Mary together with all the other speakers throughout the 2 days for all the effort and time that they put in to make this a very enjoyable and worthwhile 2 days for all of us. As well as educating us, it has also provided us with an excellent opportunity to meet other newly qualified actuaries in the profession. I'm sure that everyone is already looking forward to attending the next Professionalism Course.

Geraldine Ahern

L to R: *Prof. Jurgen Burzlaff (DCU), Kevin Murphy, SAI President, Prof. Philip Boland (UCD) and Prof. Eugene O'Riordan (DCU) at the new qualifiers' reception.*

Practice Committee Updates

Following on from our recent communications survey of members, we have decided to include brief updates from the Practice Committees in our newsletters. We will also email members with these updates and include links to relevant documents. As always, we would welcome your views on these updates and indeed on any other communication suggestions.

The minutes of each of the Practice Committee meetings are readily available on the website and provide more details of discussions and actions arising.

Please note that the following is merely a brief summary of the activities of the committees:

Demography Committee:

- **Studies in Demography Experience (SIDE):** Developing the structure for the Irish SIDE initiative. This initiative seeks to ultimately develop Irish mortality and morbidity tables and involves the collection of data for life offices and pension consultancies.
- **Review of recent Irish Mortality Experience:** The Committee is working to review recent Irish population mortality experience. In this regard, a working group is being established with the intention of presenting to a Society meeting early in the 2010/2011 session.
- **Diary Date:** Shane Whelan will present a paper on his research on Irish demography, 'Irish Mortality: Past and Present', on 10th June 2010, following the Society's AGM.

Enterprise Risk Management (ERM) Committee:

- Monitoring international developments in relation to the Chartered Enterprise Risk Actuary (CERA) qualification.
- Liaison with other international organisations (UK Profession, Society of Actuaries, International Actuarial Association).
- Planning a series of evening meetings based on the ST9 syllabus.
- Further evening meetings include:
  - ST9 and CERA qualification (cancelled in April, but re-scheduled for 21st June).
  - "ERM: Concepts and Framework" in May.
  - "Concepts and Methods of Risk Mitigation" in June.
- Past evening meeting:
  - Economic Scenario Generators and Solvency II, presented by Elliot Varnell, held in February.

Finance & Investment Committee

- Focussed a considerable amount of time towards the end of 2009 on the financial and economic assumptions for 2010.
- Currently planning potential evening meetings for 2010.
- "Bond Markets & Yield Curves" scheduled for May.
- Considering guidance on assumptions for illustrations of future investment returns on alternative asset classes / funds.

General Insurance Committee

- Co-ordination of the amendments and issuing revised ASP's GI-2 and GI-3 for the 31st December 2009 year end.
- Questions relating to SAO's and post balance sheet events.
- Current events in the Irish market.
- Solvency II and the impact on the actuary's role and the Society.

International Committee

- **Groupe Consultatif issues:**
  - Proposed strategic development of Groupe.
  - Solvency II.
  - Standard setting.
  - Spring meetings of Committees.
- **International Actuarial Association issues:**
  - Report back from meeting in Cape Town
  - Development of CERA global qualification
- **Evening meeting:** covering international topics, on 21 September 2010, presented by Bruce Maxwell, Chairman, Groupe Consultatif and Paul Thornton, President, IAA.

Life Committee

- **Sovereign Annuities:** The Society of Actuaries in Ireland and the Irish Association of Pensions Funds have been working on a concept which could alleviate a number of current pension issues while at the same time opening a new source of funding for the Exchequer. The Life Committee is considering life regulatory aspects.
- **The Valuation Regulations Working Party:** The working party made a presentation to members on their findings on possible changes to life reserving methods ahead of Solvency II.
- **Solvency II:** Ongoing work is being performed by the Solvency II committee, with input from the Life Committee, around technical issues arising from the latest wave of consultation papers.
- **The Cross Border Committee:** This Committee will provide feedback to the Financial Regulator (FR) on the Variable Annuity consultation paper that is due to be issued by the FR in April.

Pensions Committee

- **Conflicts of Interests:** Recently, the Committee worked to finalise the new Conflicts of Interests ASP (ASP PEN-13). This principles-based ASP is particularly relevant given the current funding positions of schemes and the resulting discussions taking place with Companies/Trustees with regard to restoring funding levels and/or possible restructuring of schemes.
- **Pensions Board meetings:** Members of the Pensions Committee have met recently with the Pensions Board to discuss key current issues faced by scheme actuaries/trustees.
- **Review of Pensions ASPs:** The Committee is currently undertaking a review of ASP PEN-3 (Actuarial Funding Certificates and Actuarial Statements under the Pensions Act 1990) and ASP PEN-4 (Funding Proposals under the Pensions Act).
- **ERM (Enterprise Risk Management) and Pension Risk:** Following on from a paper presented to members in November, an ERM risk register document highlighting and quantifying the various risks faced by pensions schemes and identifying possible risk mitigation options has been prepared and discussed at Pensions Committee.

Note: Minutes of the Practice Committees are available on the the Society's website: https://web.actuaries.ie/committees

Guidelines for Presentations

Presentation Basics:

You give the presentation – You communicate – You are your best communication tool.

- Check out the room before your presentation
- Ensure that your presentation works on the screen and is visible at the back of the room
- Check the PA system and that you are comfortable with the microphones

General Guiding Principles:

- Make it simple
- Make it clear
- Don't let the technology dominate the presentation

PowerPoint:

Power point is a visual aid only

- Slides should not include the full text / script of your presentation
- Slides should not include a full paper
- Slides should not be so comprehensive as to be an entire resource for later

Planning your Presentation:

- Decide what you want to communicate - What is the purpose of the presentation?
- Profile your audience
- Decide on the key points
- Summarise these
- Then, and only then, prepare your presentation slides

The Audience:

- Profile your audience - age; experience; years since qualification; depth of knowledge of your topic; level of interest; what they want to get out of the presentation
- What level of knowledge do you expect them to have coming to your presentation – general, sector specific, technical, etc.?
- For Technical Presentations - Has a paper / briefing document been made available; will the audience have read it?! What are you trying to communicate to your audience?
- Summarise the key points or the main message

Putting Together an Effective Presentation:

Be aware of 'The Rule of Three' – People tend to remember things in groups of three... so, focus on 3 key messages.

Use a basic structure:
Introduction - Body – Conclusion ...which in Presentation Speak is:

- Tell them what you are going to tell them
- Then tell them it
- Then tell them what you have told them

Do not indulge in Death by PowerPoint

- For each slide, ask yourself: Do I really need this slide?

General Format Guidelines

- If you are presenting on behalf of the Society, you should use the Society's PowerPoint template, which is available from the Society.
- If you are not presenting on behalf of the Society, then you can use your own style.
- Pick a style and stick to it
- Backgrounds – should be neutral
- Limit the use of colour
- Font size – minimum size should be... Ariel 26
- Use simple short sentences / points
- Use the Rule of Six. No more than six words per line, and six lines per slide
- Use Spell Check
- The average number of slides considered appropriate for a one hour presentation is 12!

The Presentation:

- Be prepared
- Rehearse! Rehearse! Rehearse!
- Time your presentation
- Have personal notes in front of you as back-up to your slides. Don't have your personal notes AS your slides
- As PowerPoint has a notes facility, consider forwarding a copy of your presentation including notes for posting to the Society's website
  This format may be very helpful to members listening to the presentation as a podcast
- Ideally, create your own slides so that you know what's on them

A Special Word on Graphs & Tables:

PowerPoint is a wonderful tool. You can do lots of different things with it. But just because you can, it doesn't mean that you should.

- If you must use graphs, charts etc. – try to limit to only one per slide, and make it clearly visible
- Use distinctly different colours / shading – remember your audience
- If you are comparing graphs – use identical layouts for each, the only difference should be the key content you are highlighting
- If you have a particularly complex or detailed table you wish to discuss – then consider handing out copies beforehand, and refer to them when needed
- Don't forget to summarise the key point the visual is making

Remember:

Your audience can read or listen, not both at the same time. In particular, give your audience a moment to digest any visuals, and then, talk about the slide.

Multiple Authors / Presenters:

- Co-ordinate your presentations
- Ensure that the overall presentation hangs together sensibly
- Have a minimal number of switches/changes in presenter as these are distracting

Note: These guidelines are intended to improve everyone's experience of evening meetings, and facilitate greater learning opportunities, not to suppress personality or require conformity to any particular style. So, please read these in the spirit intended and feel free to provide any feedback.

CPD Committee

Presenting your Paper

The Society would like to encourage all of its members to consider presenting a paper at a Society meeting. You might find this thought quite daunting but if so, consider doing something with a colleague. We certainly do not have a long list of those awaiting their chance to be involved. There's also a wide range of areas which you might consider. Whilst the majority of presentations are technical in nature, we are increasingly aware of the need to develop other "softer skills". Also, introductions to other related subjects are certainly of interest. You can see from the website what papers have been presented in the recent past which might be helpful.

We particularly value written papers which can be read in advance and thus provoke a more informed discussion afterwards. However, if this is not possible for you, many meetings are based on PowerPoint presentations. You will not be expected to be an expert presenter but the CPD Committee has produced some guidelines which are on page 4 of this issue. We'd love to hear from you to discuss any thoughts you might have; please contact Yvonne Lynch, Director of Professional Affairs or me.

Jonathan Goold Chairman,
CPD Committe

ESGs and Solvency II

On 1 February 2010 as part of the Society's ongoing series of presentations on matters related to Solvency II, Elliot Varnell gave a presentation on the important topic of Economic Scenario Generator (ESG) models and Solvency II. ESG models are widely used across the UK and European insurance industry to stochastically model future economic conditions. They will be a key element for companies looking to use either full or partial internal models for Solvency II purposes.

Despite the fact that ESG models have been around for some time there are a number of challenges to be faced. In particular, the models and the assumptions behind the ESG output need to be driven by the wider company view and understanding of risk. The ESG models can no longer operate separately but must be fully embedded in the running and governance of (re)insurance companies.

Broadly there are two types of ESG model. The first, a model based on risk neutral assumptions, is used for market consistent valuations. However, the financial crisis of 2008 has led to some criticisms where markets did not behave in the rational manner assumed. For example, ESG models tend to be based on orthodox financial theory and therefore would not include liquidity premiums explicitly. Allowance for liquidity therefore needs to be added back into the model which is a challenging area. Generally, the field of financial economics does not yet have models to cover this type of market risk. Nevertheless ESG models are very powerful when formulae based solutions are too simplistic to capture the nature of the risk being modelled. This is why ESG models tend to be used for the valuation of guaranteed products such as with profits but used less for simpler products such as unit linked.

In calculating the Solvency Capital Requirement (SCR) under Solvency II the other main type of ESG models will be used. These are the real world models which aim to capture the true dynamics of market prices in order to understand the risks to the (re)insurer.

An internal model has to pass a number of tests under Solvency II. The most difficult test will be the use test because the models can be so complex. To pass the test it must be demonstrated that the results of the model are actively used in the management of the company at the highest level. The senior management may not currently be familiar with the use of these models. There may need to be a trade-off between accuracy versus complexity, where some accuracy may be sacrificed to reduce the complexity. Complexity hampers the confidence in models when used for decision making. It is also important to consider how the use of ESG models fits into the overall governance. Close relationships will be required between the areas which produce the output and analysis from the models and the functions that use the reports. Feedback from senior management on assumptions will be important to ensure a consistent approach across organisations. This is true of financial and risk reporting as well as product and pricing functions. Also there should be an awareness of the limitations of models and appropriate account taken for any significant weaknesses.

In summary, ESG models will play an important part in the risk management of (re)insurers going forward and their use and understanding need to be fully embedded into the management of the companies. The complexity of the models should be appropriate to achieve the effective management of the businesses.

Liam Dempsey

Current Topics 2009

Introduction

The Current Topics 2009 paper was presented at an evening meeting on the 18th February in the Alexander Hotel. This paper was prepared and delivered by a group of recently qualified actuaries, who were assisted by Mary Hall as the editor. The event was well attended by senior actuaries, recently qualified actuaries and students of the Society.

The Current Topics 2009 paper discusses the main issues that are currently facing actuaries in Ireland. The paper addresses issues under the four main practice areas - Investments, Life Insurance, General Insurance and Pensions. A selection of topics from each practice area was presented at the meeting, and those in attendance were encouraged to read the paper itself for a more detailed examination of each topic.

Both this event and the paper itself are opportunities for students new to the Society to get a general overview of the current issues in the Profession. It is also a chance for actuaries to get an update on the key developments outside of their specialist practice area.

Investment

The Investment section of the paper was prepared by Fiona O'Mahony and Stuart Redmond. Stuart presented on the evening and began by providing a general update on investment markets, summarising the performance of the main asset classes in 2009. Global equity markets rallied in 2009 and ended up in positive territory for the year, bond markets also had positive returns over 2009, but the average Irish property fund returned a miserable -19%. The next topic covered was the impact of the global financial crisis, and this was considered from a number of perspectives. In terms of credit risk for insurers, Stuart noted that the importance of the assessment and mitigation of credit risk had been thrown into sharp focus as a result of the crisis. Measures being taken to mitigate credit risk include limits on exposure to single counterparties, the use of credit derivatives and limiting derivative trades to those transacted through a clearinghouse. Another issue facing insurers in our current climate is the task of assessing reinsurer financial security. Financial Regulator guidelines say that this assessment should be based on the size of the reinsurer, rating agency reports and the nature of the business to be reinsured.

Stuart also discussed the noticeable shift of focus of many pension scheme sponsors and trustees towards de-risking of pension schemes. In an attempt to avoid a repeat of the volatility experienced by many schemes during the financial crisis, schemes are looking to an investment strategy of phased de-risking over time. The final topic presented dealt with the management of risk when providing investment guarantees, which can be dealt with by either passing the risk to a third party or managing the risk in-house. While managing the risk in-house may be straightforward for simple products, a dynamic hedging programme will be needed for complex guarantees. Consideration then needs to be given to which risks to hedge and the effectiveness of the hedging programme. Other issues that are covered in the paper are Consumers' Understanding of Investment Risk, Alternative Asset Classes and DC Lifestyle Strategies.

Life Insurance

Naomi Cooney and Niamh Crowley prepared the current Life Insurance topics. Niamh Crowley delivered the presentation and opened this section with an overview of Solvency II. The main objectives of Solvency II include improving competition across the EU market, enhancing policyholder protection, greater transparency and increased risk-sensitivity of capital. Niamh then outlined the 3 Pillars of Solvency II – The Quantitative Requirements, The Supervisor Review and The Disclosure Requirements. The planned timetable for the implementation of Solvency II started back in 2008 when the High Level Principles were passed, and continues right up to 2013 when, if all goes to plan, Solvency II will be enforced.

The next topic discussed was Enterprise Risk Management (ERM), which is a risk-based approach to managing a business. It is the strategic vision of the Institute of Actuaries that actuaries will be "recognised as leading professionals in the field of ERM". From April 2010, the Institute has introduced a new exam in ERM at the Specialist Technical stage. A new ERM Committee has also been established by the Society to develop awareness of the concept in Ireland. Niamh then moved on to talk about the impact of the current economic conditions on the market for Variable Annuities. The 2008 stock market falls caused a rise in the cost of the guarantees underlying variable annuities, and as a consequence re-pricing and new product designs are being used to manage the risk in this area. Finally, an overview of the impact of the financial crisis on Life Insurers was presented, telling us of the capital difficulties due to poor investment market performance, the poor persistency and tighter regulatory supervision facing Life Insurers. Other Life Insurance topics prepared in the paper are Policyholder Tax Changes, Changes to Actuarial Standards of Practice, and Recent Corporate Activity.

General Insurance

Conor Gaffney prepared and delivered the General Insurance current topics. The first topic covered was the impact of climate change on general insurers. Conor discussed how the increased demand for electricity generation has been causing the climate to change, and that this is set to continue into the 21st century. As a result, we are likely to see a significant increase in the frequency of natural disasters, which will impact the business model of general insurers. Insurers' liabilities will increase due to higher property, motor, and employer liability claims. Asset values will also be impacted, with property values being the most likely to be adversely affected. Ireland in particular is exposed to the effects of rising sea levels and weather related perils. The profitability of general insurers may be hit if remedial action isn't taken by the government to improve infrastructure, so that Ireland can better cope with changing weather conditions.

The next topic presented was the impact of the Irish Corporate Taxation System on the non-life sector. As we know, Ireland has a relatively low corporate tax rate in comparison with other countries in the world, which makes it an attractive location to base operations. This is evidenced by the 236 insurance undertakings carrying out business in Ireland as of 31st December 2008. In future, Ireland may come under pressure from the EU to increase their corporate tax rate in line with other member states, or from the US in their clamp down on tax havens. If this happens, the profit of insurers would be hit and Ireland would no longer be such a cost-effective location, which may lead to a relocation of

Current Topics 2009 *...continued*

company headquarters out of Ireland causing a loss in employment. More details on these topics and on the impact of the financial crisis on General Insurers can be found in the full Current Topics paper.

Pensions

The Pensions section of the paper was prepared by Kevin Begley and Emma Townley. The Pensions current topics were split into the 2 main areas – trends in Defined Benefit schemes and trends in Defined Contribution schemes – and were presented by Kevin Begley.

The evidence of the decline in Defined Benefit (DB) schemes was discussed, including the finding of the Pensions Board Survey in November 2009 that just over 60% of DB schemes are now closed to new members. Many DB plan sponsors are considering other more drastic measures such as removing future accrual of benefits (and in some cases, reducing benefits that have already accrued) or winding-up the scheme. The Pensions Board has implemented a number of measures in response to the funding problems in DB schemes. There have been several extensions to the deadline for submission of Funding Proposals originally falling due in 2008/2009. Funding Proposals are required when a scheme fails the Minimum Funding Standard, a statutory test of whether a scheme's assets would be greater than its liabilities if it wound up on the date of calculation.
In addition, Section 49(3) of the Pensions Act was changed to permit Funding Proposals with a term of greater than 10 years, which was previously only allowed in exceptional circumstances. Another important development was the extension of Section 50/50A beyond the accrued benefits of active members, so that accrued benefits of deferred members and post-retirement pension increases can now also be reduced.

The trends in Defined Contribution (DC) schemes were considered next. DC is the predominant approach for pension provision for new hires and the average employer contribution rate in 2009 was 7%. In response to investment market falls, the Annuity Purchase Deferral Option is open from December 2008 to December 2010, so that members retiring now have some time to allow markets to recover before they have to purchase their annuity.

Finally, updates on professional issues and pensions legislation were given. Under ASP-PEN12, from July 2009 DC schemes are required to include a Statement of Reasonable Projection (SORP) in their annual benefit statements. In the Social Welfare and Pensions Act 2008, compulsory Trustee training was introduced, as well as a requirement that core administration functions have to be performed by Registered Administrators. Under the Social Welfare and Pensions Act 2009, a Pensions Insolvency Payment Scheme was established to supply lower-cost State-backed annuities for pensioners, in the case of a scheme wind up where both the scheme and the company are insolvent. All these topics can be read about in more detail in the full Current Topics paper.

Comparison with the Previous Current Topics Paper

Mary Hall compared the current topics presented in this paper with the current topics presented in the last paper in 2007. The current topics 2007 paper was prepared just before the financial crisis hit. It was noted in the previous paper how well the global equity markets had recovered since 2003 – the Irish equity market had outperformed its counterparts, achieving 20% growth that year. The Irish property market had achieved growth of 21% per annum to June 2007, whereas the current paper mentions that 2008 growth was -38.7% and 2009 growth was -18.6%.

Solvency II was covered in both this paper and the earlier paper, and it is likely that it will appear again in the next current topics paper, given its importance. Variable annuities were introduced in the 2007 paper, and mentioned again in 2009, but this time in relation to the large losses incurred on these products and regulations to be introduced in this area. In both 2007 and 2009, the impact of climate change was discussed in the General Insurance section. The continued closure of Defined Benefit pension schemes was also discussed in both papers. Regulation of pension schemes was another common theme to both papers – with the National Pensions Strategy and Green Paper coming up in 2007 and issues relating to Sections 49 and 50 this year. One telling difference was that the earlier paper referred to aims to increase coverage in Defined Benefit schemes, whereas this year's paper sees greater focus on just maintaining coverage. New topics to the 2009 paper are the increased demand for regulation and scrutiny of the Irish corporate taxation system.

Mary rounded up her section by encouraging attendees to bring the paper to the attention of new students in their companies, as it is a good Irish-specific introduction to the major topics in their area.

Q&A

Mike Claffey thanked Mary Hall and her team, and then asked the presenters to comment on which of the four areas was the hottest for debate and activity, and how hard they found it to agree on the final topics to include. Stuart noted that the main difficulty in choosing the Investments topics was in deciding what to leave out of the paper, given that so many significant events have occurred in that area since 2007. Niamh said that, in the area of Life Insurance, the clear main topic for her was ERM, and noted that it is a topic others outside the Life Insurance area may not be so familiar with. The closure of Defined Benefit schemes was the main Pensions topic.

Conclusion

Kevin Murphy, President of the Society concluded the evening. He thanked each person for the work they put into the preparation of the current topics paper since last November. He also thanked Mary Hall on behalf of the Society for organising the paper and talk, pulling it together and managing the process. Reinforcing what Mary Hall had mentioned earlier in the evening, Kevin urged attendees to bring the paper back to their companies, and make both managers and students aware of it.
The paper is available for download on the Society's website.

Jenny Fee

Report of the Life Assurance

On Monday 29th of March 2010 the Society was presented with the results of the Life Assurance Valuation Regulations Working Party. Peter Gough chaired the working party that included Adrian Cooper, Michael Culligan, Steve Gardner, Angela McNally and Eoin Murphy.

Peter kicked off the presentation. He confirmed that the working party had taken a pragmatic approach, focusing their attention on areas where a proposal would only require an update to guidance, rather than possible amendments to regulation. Any proposed change to regulations would be unlikely to be implemented due to the focus on Solvency II.

Survey

Steve Gardner discussed the survey issued by the working party, where Appointed Actuaries were asked to consider the impact of specific changes to current valuation regulations, for example, allowing prudent lapses in statutory reserve calculations. The items in the survey items mirrored changes to UK Peak 1 reserving in 2006.

Survey item 4, a proposal to allow contracts to be valued as assets, received varied responses, with some Appointed Actuaries expressing concern about policyholder protection and liquidity. Other feedback from the survey suggested that a "soft" move to Solvency II would be beneficial.

Expense Reserving

The working party felt that expense reserving was an area where changes could be made without amending regulations. The 1994 regulations are no more prescriptive than requiring *"prudent assumptions"* for meeting likely future expenses. General practice among Irish Actuaries, however, is to use a per policy maintenance expense assumption. Michael Culligan explained that this practice appears to have evolved from 1980s UK papers which advocated this approach for unit linked contracts. Further, ASP LA3 requires an Actuary to justify the use of a liability method that is not in general use. The 2006 UK changes (i.e. the FSA CP) have introduced the concept of *"non-attributable"* expenses being modelled at a higher aggregate level rather than a policy by policy level. The working party, therefore, decided to set out a proposal on expense reserving based on the UK approach.

Methodology

The proposal put forward by the working party involves the following steps:

1. Segment the portfolio into homogeneous risk groups (HRGs). The policies within one HRG should have the same expense drivers, with persistency risk being a particularly important driver.
2. Identify expenses attributable to each HRG. Separately identify the remaining non-attributable expenses. Attributable expenses would include commission for example, while an example of non-attributable expenses would be a share of company-level overheads.
3. For each HRG, derive a suitable allowance for non-attributable expenses – i.e. quantify the projected level of those expenses in each future projection year.
4. Calculate individual policy reserves. This will only include expenses attributable.
5. Produce a series of *"unused margins"* for each HRG for each future projection year. This will be a schedule of positive cash flows left over after step 4.
6. Calculate the HRG level reserve for non-attributed expenses. Model the HRG as if it was one big policy with the reserve floored at zero. Take the projected "unused margins" (from step 5) and subtract the project expenses (given in step 3). The resulting net cash flows will determine the expense reserve.
7. Calculate the total expense reserve. This will be the sum of per policy reserves from step 4 and HRG-level reserves from step 6.

Reinsurance Offsets to Reserves

Next, Adrian Cooper discussed some areas of difficulty with current guidance. The Appointed Actuary is required to *"take account of the likelihood of payment"* when valuing benefits from reinsurance, including a prudent allowance for the risk of reinsurer default. As the guidance does not elaborate on the factors to consider, the working party recommends that actuarial guidance be strengthened to take account of factors such as:

- Probability & severity of reinsurer default. Consideration should be given to the historic default experience of institutions with a similar financial strength rating as the current reinsurers. Note: bond ratings are not as applicable as they fall further down the list of priorities in the event of default.
- Concentration risk & credit support arrangements. For example, an Appointed Actuary should consider whether collateral can be seized if the reinsurer defaults.
- Whether restrictions currently apply on the amount of reinsurance that can be recognised when determining the Required Solvency Margin (RSM). If the insurer's RSM would be lower without the 85% restriction on net reserves or the 50% restriction on net amounts-at-risk, then it seems reasonable to take this into account when assessing the prudence of the reinsurance offsets to the reserve valuation.

Valuation Interest Rate

The working party identified a number of issues in relation to setting the maximum valuation rate of interest, such as:

- Risk free rates: the yield on assets must have regard to risk free rates; however risk free rates are not defined.
- Reinvestment rate: the regulations require the maximum rate of interest to take into account the yield on existing assets and the reinvestment rate (if applicable). However the regulations explicitly restrict the valuation interest rate to not exceed the adjusted yield on existing assets.
- Options: the impact of investing in options can be to increase reserves while improving risk management. For example, an at-the-money swaption may have a significant time value, but will not give rise to any income under the basic valuation assumption of stable investment returns and can have a valuation yield of zero.
- Zero coupon deposits: it is not clear whether these meet the definition of fixed interest securities (or deposits) in the regulations. It would seem reasonable to treat zero coupon deposits as being equivalent to zero coupon bonds and use the gross redemption yield.

Peter tied up the presentation by looking back at the recommendations of the 2000 Valuation Regulations Working Party report. He also explained that the process from here is to submit the proposals from the current report to the Life Committee and to translate in to actuarial guidance following this.

Valuation Regulations Working Party

Q & A

The presentation was followed by a number of questions and comments from various attendees, with a noted focus on expense reserving and the definition of the risk free rate. Differing views were expressed on the risk free rate, with some feeling we were being a bit soft on ourselves to say there is no risk of default with Irish gilts when the market prices the gilts 150bps above other euro countries. When written, the letter of the regulations were clear in a single currency context – i.e. adjust for risk of default vs. risk free in the same currency. If we are likely to have a more difficult regime under Solvency II, e.g. a requirement to use AAA Sovereign gilt rates as risk free, then the iteration to this could present significant change risk to the profession.

The general view on the expense reserving proposal was that the reserves would be on a more sensible basis while still retaining prudence. Tony Jeffery felt that the changes were fully within the scope of the profession. Bruce Maxwell was of the view that, even if guidance was not updated, or while we are waiting on the guidance to be updated, an Appointed Actuary could consider adopting this approach. The guidance requires the Appointed Actuary to use a generally accepted approach (e.g. per policy expenses) or to justify the use of an alternative approach, but we have now been presented with a sensible alternative.

A podcast of the meeting, the report and the presentation are all available on the Society's website.

James Treacy

Reminder of CPD Returns

The current CPD year ends on 30th June 2010. Most members are required to submit details of CPD completed to the Society – to do this, log on to the website (www.actuaries.ie) and go to My CPD/ Create Return. It's best to keep up to date with submitting returns as you attend CPD events or carry out personally assessed CPD activities, rather than have to submit lots of information in one go.

Please also remember to let us know if you have changed CPD category during the year - to do this, go to My CPD/Create Category Declaration. You must let us know your CPD category even if you are retired or on a career break, or if you are doing work other than actuarial work.

If you are based in the UK and are a fully regulated member of the UK Actuarial Profession, you must submit full details of your CPD activities to the Actuarial Profession. You do not also have to submit full details to the Society – but you must keep your category declarations to the Society up to date. Also, at the end of the CPD year, you must confirm to us that you have complied with the Actuarial Profession's CPD scheme - to do this, go to My CPD /Create Compliance Declaration.

Full details of the CPD scheme are on the Society's website at https://web.actuaries.ie/cpd.

Podcasts of recent events are now available on the website (under Events/Podcasts). Listening to a podcast may be counted as personally assessed CPD – or as verifiable CPD if you listen to it with other people (e.g. as part of a company meeting) and a record of the attendees is kept.

If you have any questions, please contact us at info@actuaries.ie.

Medically Underwritten Annuities

On 16th April, Kevin O'Regan and Bjorn Ladewig of PartnerRe gave a presentation on Medically Underwritten Annuities to members of the Society.

Kevin introduced the presentation by outlining the main themes that would be covered:

- The challenges presented by entering into and operating in this market.
- The impact on a market when selection is introduced where it hasn't been before.
- The wider question of whether it is a good thing to individually rate annuities. Should a poor life support a healthy life in the same way that a healthy life would support a poor life if term assurance were not underwritten?

Kevin discussed the view of a risk carrier in this market. He considers the market to be interesting because of its size, the financial impact of segmentation and the actuarial nature of the product.

Potential new entrants to this market must evaluate their annuity market knowledge, product development expertise and medical underwriting capabilities. Standard annuity providers must also pay close attention to this segment of the market and consider the effect of open market options and the potential cannibalisation of the standard annuity book.

Bjorn took over the presentation at this point and gave us a brief history of the medically underwritten annuity market in the UK. This product has been sold in this market in various guises and with varying levels of sophistication since 1995. The sales of these annuities have been rising steadily in recent years both in terms of market share and overall sales volume and now accounts for £1.8 bn in sales and 17% of the market.

The basic product features of a medically underwritten annuity are the same as those of a standard annuity but the annuity rate depends on the health of the annuitant and the level of underwriting performed. The poorer the health of the annuitant the greater the level of underwriting needed and the higher potential rate available.

Entering this market imposes a serious underwriting challenge for any provider. It is an inversion of the standard underwriting process. In the UK there is an Industry wide common form in use for quote requests. This form stretches to 18 pages and captures detailed medical information. The form consists of different sections with basic questions on demographics and lifestyle, generic questions that cover all conditions and detailed questions on specific major conditions.

Various possible underwriting solutions are available ranging from outsourcing completely to a reinsurer to completing the full task in-house. The solution could be fully automated, fully underwritten or some combination of the two. PartnerRe took the view that a skilled underwriter will be more accurate than an automated system in the long run and decided to use an expert system operated by an underwriter. The system output is a bespoke mortality curve for each individual based on the underwriting information available.

This system is then used to determine pricing. The survival curve is determined by applying a bespoke extra mortality vector to a base mortality curve.
The extra mortality vector is derived using multivariate models that take combinations of conditions into account. Adding profit and risk to the curve leads to the price to charge.

Bjorn proceeded to give us a colourful but macabre demonstration of how this works in practice. He started with the base survival curve and then added diseases and adjusted their severity to show the different impact of different diseases on survival rates. The particularly unfortunate fellow in the example had severe forms of Diabetes, Cancer and heart problems. The differing effects of these diseases were well demonstrated with this example showing that a degenerative disease like Diabetes has increasingly worse relative mortality over time whereas the relatively worse mortality for Cancer reduces with duration.

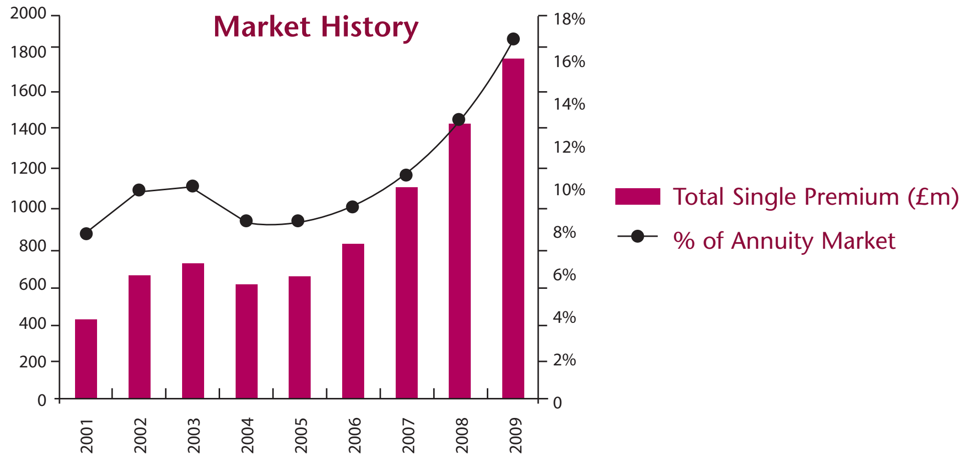
Kevin returned to conclude the presentation sharing his belief that the strong growth in the UK enhanced market in recent years will continue. He believes that sophisticated underwriting and pricing techniques are required to avoid anti-selection and that developing and keeping these skills up to date is the key for success in this market.

On questioning from the floor, Kevin and Bjorn gave further views and information on the topic. Bjorn quantified the effect on rates of underwriting where postcode for example could lead to a 3% change in annuity rate right up to the possibility of a rate doubling for a severely impaired case. Kevin can see the UK moving to a position where most of the market is underwritten and though annuity underwriting is more nuanced than term assurance he still thinks the majority of lives will receive ordinary rates.

The presenters revealed that incidents of over-disclosure to date are extremely low. This could be due to the large risk a person is taking by over-disclosing or perhaps a natural tendency to under disclose. For most cases, a spot check of disclosure is done but over a certain size all cases are checked.

The presenters see the potential for this product to be successful beyond the UK but a number of conditions need to be in place. At the moment the UK is the only place medically underwritten annuities have been sold successfully.

Peter Martin



A Holistic Framework for Life Cycle Financial Planning

On the 9th March 2010, Joshua Corrigan gave a presentation to the Society entitled *"A Holistic Framework for Life Cycle Financial Planning"*. Joshua is a senior consultant with Milliman's Financial Risk Management practice based in London, specialising in product development, life cycle wealth management and risk management.

Current Frameworks and Tools

Joshua opened the presentation by commenting on current financial frameworks and tools which are primarily focussed on wealth accumulation and generally utilise the regulatory basis i.e. deterministic projections under a range of prescribed nominal returns to present different outcomes to consumers. With the change in market conditions, deficiencies in this approach have been highlighted specifically in the identification and communication of risk.

A Holistic Financial Planning Framework

Joshua proceeded to discuss the key elements of a holistic framework for life cycle financial planning;

- incorporation of an explicit allowance for Human Capital;
- changes in the definition of financial goals and assessment of risk; and
- communication and presentation of alternative options.

Allowance for Human Capital

One of the major features of a holistic framework is the incorporation of Human Capital i.e. the present value of an individual's future earning potential. Human Capital is fundamental to a financial plan in that it determines an individual's future savings capacity, a means to assess the benefit of education and insurance and should also influence the investment strategy.

Joshua highlighted that the discount rate used in the present value calculations should reflect the riskiness of an individual's profession and role. For example, the discount rate used for an investment banker should be higher than that used for a school teacher to reflect the higher level of risk associated with their future earnings potential.

In a framework which seeks to optimise total wealth (Human Capital and Financial Capital), Human Capital should also influence the investment of financial assets in order to minimise risk and maximise return to an individual. Joshua noted, however, that individuals often displayed own industry bias i.e. pilots investing in aviation stocks rather than using financial assets to diversify their Human Capital risk.
Definition of Goals and Assessment of Risk
Existing models tend to define financial objectives in terms of capital accumulation and consequently focus on a single definition of risk - volatility risk.
Given that financial capital is simply a means of enabling consumption i.e. an income in retirement, Joshua suggested that defining goals in terms of consumption needs may be more appropriate.

He also suggested that new frameworks should focus on managing risk rather than maximising return. There is a need to identify and assess the different types of risks an individual is exposed to throughout their lifetime e.g. mortality risk, longevity risk etc and consider how these can be managed or mitigated. These risk exposures will change through various life stages - the relative significance of which are dependent on an individual's Human Capital and financial assets.

Presentation and Communication of Options

Joshua noted that consistent projection rules across different products would be a starting point for analysing different product strategies. However, the value of a potential strategy/outcome to an individual is largely subjective and behavioural biases play an important role in the decision making process. Joshua suggested that the industry should consider how these particular biases could be incorporated into the presentation and communication of options. Joshua concluded by presenting the challenge to the industry

"To develop a tool that financial advisers can use to communicate financially difficult concepts in simple ways so that all types of clients can make informed decisions".

Q & A Session

Joshua took questions from the floor which offered an opportunity for members to express a general agreement with the lifecycle financial framework presented. Given that most consumers of financial products have poor financial knowledge Joshua acknowledged that developing communication tools which addressed the limitations of different market segments remained one of the key challenges facing the industry.

It was noted that if the profession was to be constructive in the development of new financial planning techniques, consideration should be given to the training and development of financial advisers - perhaps as part of ongoing discussions with Regulators and member interest groups within the Industry.

The ability and appetite for advisers to move away from the simplistic models was queried and it was suggested that the profession should consider placing greater emphasis on developing appropriate models for the mass market as distinct from complex tools with limited application.

The presentation is supposed by a Research Report (A Holistic Framework for Life Cycle Financial Planning) which is available on the Society's website.

Sandra Rockett

Important Diary Dates

SAI Annual Convention
Thursday 20th May 2010
Alexander Hotel

Time-table:

8.00 a.m.	Registration / tea & coffee
8.30 a.m.	General Insurance / Life / Pensions Fora
10.30 a.m.	Coffee break
11.00 a.m.	Plenary Session
Part I:	Review of Professional Conduct Standards and Disciplinary Scheme
Part II:	Presentation by the SAI New Areas Committee
1.30 p.m.	Lunch in the Davenport Hotel
Charge:	€60 p.p. to include lunch

SAI Annual Lunch
Friday 28th May 2010
New Aviva Stadium

Guest Speaker: Hugo MacNeill

Tour of Stadium and pre lunch drinks from 12.30 p.m.
Lunch at 1.30 p.m.

Charge €65 p.p.

To make reservations:

Website: www.actuaries.ie/events
Email: info@actuaries.ie
Phone: +353 (0)1 660 3064

All members, i.e. Fellows, Associates, Students and Affiliates are welcome to attend the Convention and the Lunch.
Full details of the above events and all other SAI events are available on our website: **www.actuaries.ie/events**

SAI Golf Update

Hi Everyone,

Now that the Masters is over and invites to corporate days are arriving, we are now firmly back into the golfing season. We have had a great entry into this year's match-play which confirms that actuaries are a competitive bunch. The draw is now posted to the Society's website at https://web.actuaries.ie/golf. As numbers are large, we will be under pressure to stick to the closing dates, so please arrange your first round matches as soon as possible.

The next date in the golfing diary is the Trip to the West on 11th/12th June. Over 2 days and one night, this promises to be an epic competition rivalling the British Open in intensity (if not talent). The closing date has passed for this but if anyone else is still interested in joining in, please let me know and I will do my best to get extra spaces. Both courses should be in prime condition in June so it promises to be a great weekend of golf.

I'll be arranging the Captain's prize for the end of August. This will be taking place in the Dublin region with final details to be confirmed shortly. I'm also looking to arrange a beginners section this year.

We will be taking on the Faculty of Actuaries again in September. The SAI Golf Society remains unbeaten in this series, so the pressure is on to maintain these stats. As is customary, the team will be picked primarily on performance in the Society's competitions during the year.

Peter Doyle,
SAI Golf Captain 2010

On the Move

Liam Dempsey has moved from Aviva to **Hannover Life Reassurance (Ireland)**

Mark Burke has moved from Eureko to the **Financial Regulator**

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