THE SOCIETY OF ACTUARIES IN IRELAND

Correction to December 2009 Newsletter (attached)

The Society's Second Study of Annuitant Mortality

We regret that Table 4 of the above report is not correct. We apologise for any inconvenience this may have caused. The correct Table 4 is as follows:

Age Range	Males	Females	All
- 60	69%	100%	78%
60 - 70	80%	104%	84%
70 +	84%	86%	85%
Overall	83%	87%	84%

This information, and that in the Newsletter report, is presented purely for public interest. The data and results have not been subject to the scrutiny necessary were they to be used for commercial decisions and the Aggregated Data Method used means that mistakes made by contributing offices cannot be identified. The Society makes no warranty as to the accuracy of the results and owes no duty of care to any party in respect of them.

Newsletter
December 2009
The Society of Actuaries in Ireland

Kevin Murphy's Presidential Address to the Society of Actuaries in Ireland

Kevin Murphy, President of the Society of Actuaries in Ireland

The new President of the Society of Actuaries in Ireland, Kevin Murphy, delivered his President's Address to a well attended Society meeting on the 15th of September 2009.

Kevin's Address was structured into three main sections:

1. How the Society might respond to the economic and financial crisis experienced in recent years;
2. Updating on key development areas being worked on in the Society's Strategic Plan;
3. Key additional priorities Kevin wishes to advance during his Presidency.

Responding to the Crisis

In this section of his address, Kevin pointed out that over the long term the Society will not be judged on the quality of its inputs (for example, the skills we have and the models we use), but rather on the quality of its outputs – and in particular whether we enhance the long term financial position of the individuals and institutions we work for.

Actuaries are well regarded for their strong forecasting abilities, but it is important not to overstate the reliability of forecasts, especially when the forecast is over a very long term or where underlying variables are subject to systemic change.

The area of pensions investment risk is of great concern, with many DB and DC schemes currently taking too much risk. Kevin pointed out that we need to take responsibility for dealing with this issue, and suggested a number of stages here, firstly, develop ways of measuring risk effectively, secondly, agree a standard reflecting the maximum level of risk that should be taken and thirdly, agree a timescale for adjustment to that standard with the Regulator.

Kevin's view is that, since evidence shows that consumers have great difficulty understanding financial and investment issues, we can learn from the pharmaceutical industry which operates on the basis that responsibility for ensuring products are used safely rests with the manufacturers and advisors, rather than the consumers.

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Update on Strategic Plan

Council drafted a three year Strategic Plan in 2008, and considerable progress was made on many of the key areas targeted in the Plan during 2008/09, including the establishing of a number of new committees to tackle key development areas, including:

- Solvency II, supporting members in preparing for Solvency II;
- New Opportunities for Actuaries;
- CPD, keeping the need for ongoing member education in focus;
- Demography, to develop new Irish mortality tables.

Considerable work has also been done on the Standards agenda, with the following high-level goals:

- Set up a counterforce to ensure our Standards can be clearly seen not to be subject to commercial capture;
- Ensure Standards are complied with;
- Ensure a strong disciplinary process is in place to support full compliance with Standards.

Principal New Priorities

In the final section of his Address, Kevin drew the audience's attention to a number of key new priorities for the Society during his presidency:

- All main committees of the Society should engage fully and openly with dealing with the implications of the financial and economic crises across all our business areas;
- Keep our skills up to date – perhaps supported by a new Society staff member working full-time on education matters;
- Update our Ethical Standards, perhaps by moving from the current rules - based PCS to a more principles - based approach as recently adopted by some other professions;
- Become risk managers – actuaries have an opportunity to embrace the opportunity that will arise from a much greater focus on risk management (both in the financial services business and beyond) that will arise following the turmoil of recent years and with the introduction of the new Solvency II regime.

Conclusion

Kevin concluded by acknowledging the economic challenges facing Ireland and reiterating his confidence that the actuarial profession can rise to the challenge of serving its customers well in a more challenging world. He spoke of the pride and enthusiasm he feels about serving as President for the next two years, and thanked members for honouring him by asking him to take on the position.

New Qualifiers' Reception

The President, Kevin Murphy, hosted a reception for new qualifiers in Dublin Castle on 22nd October. This occasion afforded the opportunity for the President, members of Council and representatives from UCD and DCU to congratulate the new qualifiers and to meet their families and friends.

L to R: Sheena Frost, Fiona Doherty, Zora Law, Sarah Parks, Cathriona Callan, Carmel McElvaney, Geraldine Ahern
2nd Row: Vincent Kelly, James Bradley, Mairead Kenny, Ann Hayes, Kevin Murphy (President), Donna McEneaney, Caroline Lynch, Gerard Conlon, Linda Collier
Back Row: Elena McElroy De La Rosa, Padraig Flanagan, Denise Collins, Karl Donner, Emmet Leahy, Ben Deans, Paul O'Shanahan, Fergus Collis and Conor Gaffney.

Profile on Kevin Murphy

Where are you from?

I am originally from Cork. I went to the local national school and then on to Christian Brothers College which is in the centre of Cork city. From there I went on to study science in UCC. My final degree was in Maths and Statistics.

What attracted you to the actuarial profession?

When I chose my degree I was interested in science and in particular maths so that reflected my choice of degree. After University it was a choice to become an academic or to work. Having decided to work I looked at the possible options which were to become an Actuary, an Accountant, or join the CSO - a popular option for people with a statistics degree from Cork. I finally opted for the Actuarial Profession as it offered a mixture of continuing a mathematical centred profession and yet applying its ideas to the real world.

What is your career history?

I joined Irish Life in 1972 and qualified in 1976.

In Irish Life I had done the usual range of actuarial jobs. I did pension scheme actuary work in the pension area, product development and marketing work and then gradually my career blossomed into a General Manager role.

I headed up the Retail part of Irish Life and at that stage it was quite a buoyant market with rapid growth in unit linked business and managing as we do today the ups and downs of the Stock Market.

The most significant career change in my life occurred in 1992 when I was asked to head up Irish Life Investment Managers. This was a whole new world for me and it was quite a big challenge for me to get my head around running a fund management company.

However we did find a clear strategy and we focussed on a new active process and a new indexation process which ultimately significantly repositioned ILIM to be the business it is today.

Subsequently I also managed Irish Life Corporate Business which was a business arm of Irish Life which needed to be restructured. We devised a strategy based on significant improvement in customer service and a high level of staff engagement. That has been the driving force behind this business 'til today.
The next change in my career was in 2005 when I became Chief Executive of Irish Life and led Irish Life through a very buoyant period in the Irish economy and then recently the subsequent downturn.

As everybody is aware, in quite unusual circumstances in June of this year I became the Group Chief Executive of Irish Life & Permanent. I became the President of the Society on a Monday and Group CEO the following Wednesday. I am unlikely to have such an exciting week as this again in my career but it certainly was a fantastic week for me.

When did you first get involved with the Society?

I have a long association with the Society. I was the Secretary of the Society in the late '70s when it was quite a small group. We did quite a lot of work to professionalise the Society. However my main claim to fame is the purchase of the famous chain of office that hangs around each President's neck. As I explained in my President's speech it took us quite a while to agree the content for the chain. We had collected the money and with the rapid rise in the price of gold unfortunately the weight of the chain fell week by week as we continued to debate the precise emblem of the Society. My only paper to the Society has been on Investment Risk which I presented in 2005 which captures my own personal interest in this area.

What are the main challenges facing the Society and the profession at the moment?

The big challenge for the profession is coping with the current crisis. Obviously everybody is asking pretty fundamental questions of many of the players in financial services including ourselves. Within the pension business we have the difficult environment which many defined benefit schemes find themselves in and in the future we have to be careful that we don't repeat the same mistakes again in the world of defined contribution which is the emerging new world. The life assurance industry has many unhappy customers given the investment experience they have just gone through. So there is a significant change agenda that needs to be tackled.

What are you top priorities for your presidency?

Firstly we have to deal with the knock on effects of the current crisis. These will have implications mainly in the pension and life assurance business; particularly in the area of investment risk.

The other major priority is the whole area of Solvency II. This is about a challenge and an opportunity. The challenge is to move to a whole new regulatory environment and the opportunity I feel is for actuaries to widen the scope of their contribution to the organisations they work with by the advent of a new risk manager position. My view is risk management is a significant growth area for all financial services and Solvency II will be the catalyst for us to widen our skill base to be leaders in this development.

What do you do outside your business time?

I have a range of interests here.

I am an enthusiastic but poor golfer and battle around Old Conna every Sunday morning.

I am very interested in sports and I attend many major sporting events. I recently attended the Olympics in Beijing which was a fantastic and interesting place and the quality of sport was unsurpassed.

I also like playing cards where I have developed occasionally lucrative skills in the areas of poker and bridge.

And in summary

In summary, Ireland is in a difficult position at the moment. But we as actuaries have a strong history of looking after our clients with integrity, professionalism, and objectivity. Tomorrow is going to be even more demanding for those qualities but I am confident we will rise to the challenges of this world.

I am really delighted to have been chosen by you to be the President of the Society of Actuaries. I look forward to the challenge of leading the profession for the next two years and I do thank you for the honour of asking me to do it.

Life Office Valuation Principles:

Introduction

On Tuesday 6th of October, Tony Jeffery presented, to a well attended evening meeting in the Alexander Hotel, on how life office valuation methods have changed over the years. The main aim of the presentation was to outline the role of the life office actuary under Solvency II and to emphasise the importance of Pillar 2 and Pillar 3. The views expressed in the presentation were Tony's own personal opinions rather than being those of his employer or any previous employer.

Part A: A Review of the Principles of Life Office Valuations

Tony opened by introducing the principles of Life Office Valuations which were laid down by Skerman in 1966, namely:

1. That liabilities should be valued by a net - premium method or on some other basis producing stronger reserves.
2. That appropriate zillmerized reserves would be acceptable in order to allow for initial expenses.
3. Adequate margins over the current rate of expenses should be kept in the valuation of the liabilities in order to provide for future renewal expenses.
4. Appropriate recognized tables of mortality should be employed.
5. That valuation of the liabilities should be at rates of interest lower than implicit in the valuation of the assets, with due regard to the incidence of taxation.

In the above, assets are only mentioned once and there is no account taken of credit, market or operational risk. What is being described is a method rather than setting principles for solvency.

He went on to outline what he believes are the appropriate principles to take into account:

1. **Basic Principle:** A company needs to ensure that it has enough reserves to meet its liabilities as and when they fall due.
2. **Timing Principle:** The reserves set up must be sufficient to pay for all liabilities that have already been incurred.
3. **Prudence Principle:** The chance that the reserves are adequate to meet the liabilities should be reasonably high.
4. **Public Perception Principle:** Risks should be assessed on the basis of how the public would perceive them, in retrospect, should the office fail.
5. **Publicity Principle:** If an approach cannot withstand exposure to the public view, then it is not valid.
6. **Stability Principle:** If a method leads to the financial system being unstable or pro-cyclical, then it is dangerous.

In the next part, Tony described various valuation methods that have been used or are currently being used by life offices. The first of these is the net premium valuation method which involves calculating a present value for the contractual liabilities of a contract and deducting the value of future premiums. Both contractual liabilities and future premiums in this calculation allow only for mortality and interest. Prudence is allowed for by using lower interest rates than are earned and from the gap between the office and the net premium. However, this method is not commonly used nowadays.

The second methodology that Tony described was the Solvency II model where the company starts with the economic best estimate of the liabilities to which is added the market value of risk. This is then projected forward one year in order to see what the chances of the various risk factors occurring are. The target capital requirement under Solvency II is referred to as the Solvency Capital Requirement (SCR). It is to be calculated by means of a standard formula or through the use of an internal model. The basic principle of the SCR is that we meet contractual liabilities with 99.5% confidence over a one year time horizon. The risks considered include market risk, credit risk, insurance risk and operational risk.

The next methodology that was described was Solvency I. In practice, what we do under Solvency I is far more complex than the pure Valuation Balance Sheet concept. Cash reserves are based on a lifetime deterministic projection. New business profitability is calculated using profit tests. Mismatching is calculated using stress tests. The cost of guarantees is calculated using stochastic projections. The FCR is based on scenario projections with new business. This has to be carried out every three years.

Part B: Welcome to the Black Parade

In this section, Tony outlined some of the reasons for the recent financial crashes and the issues with Solvency II. The "Black Parade", which is the title of the third CD of the leading EMO band My Chemical Romance ("Minimum Capital Requirement"), is used as a metaphor for the never - ending and more frequent financial crashes and collapses that have been seen in our financial markets in recent years.

Under Solvency II, companies are required to have sufficient capital to cover a 1 in 200 year event but is this conservative enough? Tony felt that in the UK, there has not been a significant failure of a l ife company since the 1970's, even though Equitable did have their issues but nonetheless remained solvent.
The problem is that the public have become less tolerant of any form of failure of life assurance companies in recent years and this has placed a significant amount of pressure on actuaries.

In Ireland, there are approximately 350 insurance companies, including direct companies and reinsurers. Assuming the chance of failure of 0.5% is independent for each company in Ireland, then the number of companies failing (to meet their SCR requirements) would be given by a binomial distribution. This would result in failures 5 years out of 6. However, companies' chances of failure are, in fact, not independent of each other.

Other issues with Solvency II (Pillar 1)

Firstly, we should consider whether the calibrations being used are correct. Secondly, the calibrations are done on an individual 1 in 200 for each risk factor and then a correlation matrix is applied, resulting in the correlations being based on very sketchy data. Stresses are not additive. For example, the effect of lower interest rates and lower mortality on an annuity may be worse than the sum of the two effects taken individually.

The next issue is that the one year approach conceals problems that are more clearly illustrated in a lifetime projection. If a 1 in 200 event was to occur, realistically the price of the company should be lower than it was before. However, due to the natural swarming of companies together, there may be several companies in the same position all looking for a buyer which would then push the price up. Another issue is whether it is correct that companies should place a value on the chances of consumers staying with the company in the future.

Now and Tomorrow

The Fish and the Shoal

In this section, Tony introduced a very good picture of the behaviour of financial institutions in the industry using the concept of the fish and the shoal. With animals and birds there is a natural tendency for them to flock together for defensive reasons together with being able to watch out for predators. Financial institutions tend to exhibit similar behaviour in the products that they sell, the price they charge, in their assessment of risks and how they reserve for them. There are several reasons for this:

- Distribution channels expect companies to sell products that are similar to their competitors.
- If other companies are making money, shareholders expect the same from their company.
- Company's assumptions can be driven by what the regulator sees as conservative.
- Safety in numbers for the individual company.
- It can be difficult to resist the call of what other companies are doing.

However, this can lead to many problems. It is in the interest of the fish for the shoal to be close together. An example of this at the moment is where the bank bail outs are being forced on the national government. We can see that much of the current financial turmoil is as a result of the shoal being close together and no one financial institution foresaw the incoming problems. It is in the interest of the shoal for the shoal to be widely dispersed so that some financial institutions may be able to see the risk of incoming problems. The current situation that we have with our banks is that they were all in the same boat which has exacerbated the problems.

There is a concern that life assurance companies may be subject to manipulation with the existence of the shoal. Solvency II is being driven as a maximum harmonisation initiative in the EU and, therefore, if there is any chance of manipulation it could have adverse consequences.

Part C: ORSA's for Courses

So far in the presentation, Tony presented quite a grim picture of Solvency II. However, he has only been referring to Pillar 1 of Solvency II. In this section, Tony covered Pillar 2 and Pillar 3. Pillar 2 sets out requirements for the governance and risk management of insurers, as well as for the effective supervision of insurers. Pillar 3 focuses on disclosure and transparency requirements. They are basically trying to achieve the same thing but from a different viewpoint. There is much greater scope for individual assessment and variation under these Pillars than under Pillar 1 and Tony has suggested some of these.

The non-use test

If a company wants to use an internal model instead of the SCR, they are obliged to demonstrate that it is used throughout the company and not just within the actuarial department, including that the business is controlled and main risks are identified/managed via the use of the internal model. However, the concern in the use of an internal model is that people accept it as it is and fail to question whether the assumptions used in it are still acceptable. Tony suggests that non-use tests should be employed as well as stress tests and scenario tests being applied together with the use of past real events, for example, the performance of Japanese equities in the past. The key message is to use things that you haven't tried or questioned before.

The Abuse test

For companies that may be open to abuse from predators particularly forced trades, you should ensure that you are not the first company in the shoal in this position. You could hold higher capital than your competitors to avoid this.

The use it or lose test

If your company is dependent on management actions, you should ensure that there are procedures in place to allow these actions to take place before the situation becomes too late.

The Losing Policyholder test

The company should check that it can remain solvent if it were to lose all of its policyholders and also have sufficient capital to pay policyholders, their benefits. Capital provided by the future earnings of policies is considered as Tier 3 capital and cannot be used to meet the MCR.

Tony concluded the presentation with a summary of the topics covered outlining how the role of a life office actuary under Solvency II will be more than just calculating SCR's and emphasised the importance of Pillar 2 and 3 over Pillar 1.

Discussion

The presentation was followed by a number of questions and comments from various attendees. It was suggested that all the pillars will not stop something from happening in the future but how will we deal with the crisis the next time round? Tony commented that we have seen things happen in the past but we didn't do anything to stop these. We need to ensure that we are not discussing the parameters used by an individual company outside of that company similar to the fish and the shoal effect.

Another issue raised was that it is difficult to set best estimate assumptions when there is a lack of data available and also whether Tony feels that there is too much publication in Solvency II? Tony responded by stating that the lack of data issue is only problematic for start up companies. He also emphasised the importance of good documentation and communication of Solvency II is very important. It is important to keep our eyes wide open and Solvency II will help us.

Another attendee commented that under Solvency II, we have to tell the regulator what we are doing whereas under Solvency I the regulator tells us what to do. Tony commented that, yes, this is correct but this will result in companies starting to question their internal models even more as it lays down the law for companies to manage their own risks. Another attendee commented that he liked the picture that Tony had presented of the fish and the shoal. However, do you not have to be in the shoal to be protected? Tony commented that it is necessary to look out for any hidden risks and that there have been various examples of these in the past.

Finally, an attendee commented that European actuaries are trying continuously to emphasise to regulators the application of judgement. Regulators want more detail and less dependency on judgement. The Actuarial Profession needs to come up with an approach on the application of judgement. Tony agreed with the above comments stating that regulators always push for prescription. Tony also commended the work of the European Consultative Committee.

Both the presentation and the paper are available on the Society's website.

Geraldine Ahern

InDCent Exposure -

Eoghan Burns, Damian Fadden and David Harney gave a presentation to the Society of Actuaries in Ireland on 20th October 2009 on their joint paper entitled "InDCent Exposure – making DC safer for members". The authors investigated:

- how DC product providers might maximise customer satisfaction for a portfolio of customers with varying risk appetites
- how much risk a customer may take if he/she wants to achieve increasing predictability approaching retirement
- practical issues to consider for defined contribution investment strategies.

David Harney was the first to present. He questioned whether intermediate information matters to a customer on the road to retirement. To address this question, he firstly examined a simple binomial model which illustrated that the expected return from investment in a risky asset was greater than the expected return of an asset with risk free return. David gave a simple risk constraint to be considered in conjunction with this model; that the probability of positive return must be greater than 66%. Over the longer term, the constraint was satisfied if one invested in risky assets but failed as the term was shortened. However a number of issues arise, namely:

- the rule is arbitrary which can be a problem with more complex models
- the rule does not allow for all available information
- the 'term paradox' is a big problem as this means the investment term for risky assets can never be more than the time period for information updates.

David then presented a utility model to demonstrate customer satisfaction as utility theory overcomes some of the hurdles outlined above.

This model makes use of diminishing marginal utility, that is, additional customer satisfaction decreases as outperformance increases. Conversely, added customer dissatisfaction increases as underperformance increases. David illustrated that, whilst the percentage invested in risky assets depends on your utility decay factor, for the 'average' customer the optimal exposure to risky assets as determined by his model is a 50/50 strategy between risky and risk free assets.

David provided illustrations for a wide ranging portfolio of customers with different risk profiles. His results estimated the optimal investment in risky assets for each category of customer and their associated expected utility if this optimal investment strategy is followed. David took this a step further and introduced to the illustration the outcomes for emotional customers who expect money back. In both of these models, a 50% investment in risky assets emerges as the optimal strategy for the 'average' customer.

Moving from theoretical modelling to customer expectations, David emphasised the fact that nowadays customer expectations from private DC pension plans are too high. David stated that a much more realistic expectation would be a tax free lump sum of 1.5 times salary plus a pension of 25% of salary. The State pension may be taken into account in addition to the above. David also advocated providing members with illustrations based on 0% real return so as not to create an expectation in this regard. Using zero real returns also simplifies communication and removes some of the subjectivity of different projections depending on your fund choice.

David concluded with three points:

1. The case for life-styling is simple. People generally become more risk averse as they approach retirement.
2. Projections should assume fund growth equals salary inflation
3. More realistic private pension provision expectations are needed.

Next to the presenters' podium was Eoghan Burns. Eoghan set the scene by looking at the journey that customers make in respect of pension provision. For DC pensions the uncertainty is enormous. Lifestyling is often viewed as giving away upside risk. However, there is the obvious argument that predictability is needed as retirement approaches and the customer's risk appetite should determine his/her investment strategy.

Eoghan presented a model for a 30 year old individual demonstrating the chances of missing a pension target of 40% of salary given different investment strategies varying from 100% in equities to 100% in risk-free assets. Following a risk free investment strategy results in a definite failure. Adopting one of the three given switching strategies results in a higher chance of failing to meet the target than remaining in the relevant initial fund mix. However, investing in 100% equities gives the best mean and median results.

The second example presented was for a 64 year old. Under this scenario the results illustrated the best strategy is investment in 100% risk free assets. Therefore, we see that the best strategy can vary significantly depending on the age of the individual in question.

From this the importance of the intermediate information provided to DC members is evident. Ultimately, individuals have three possible decisions at each review of their pension provision arrangements:

1. Accept the changed outcome
2. Change contribution amounts
3. Ignore the information provided.

Eoghan noted the need for predictability. Contributions obviously lower disposable income. In addition, variability of outcomes along the path to retirement may reduce confidence in the pension provision and result in a reluctance to increase funding.

Eoghan then illustrated another model which included a series of reviews of an individual's funding position at ages 40, 50, 55, 60 and annually thereafter for a range of investment strategies. The aim was to assess the stability of the expected 'Pension Replacement Ratio' (PRR) over time. The proposed measure is that the projected PRR is no worse than 10% lower than the PRR at the preceding review.

The model demonstrated that most strategies have a low risk of substantial reduction in projected pension at age 40. This is due to the fact that a significant proportion of the projected pension is funded from future contributions. At age 50, 55 and 60, all strategies, apart from the risk free approach, result in significant chances of failure of up to 45%. The chances of failure are considerably reduced in the annual review from age 61 to 65 for two strategies, namely, the managed fund approach switching into risk free assets over the ten years prior to retirement and the high equity approach which switches over 25 years. However, it is evident that having fixed contributions has a substantially negative impact on the results.

Consequently, Eoghan considered a similar model allowing for variable contributions. The fixed interest strategy gives the best outcome; however, the trade off is a significant increase in cost. The outcomes improve substantially for the switching

Making DC Safer for Members

strategies. Eoghan concluded that, in order to achieve an acceptable level of predictability, a switching period of 10 years or more gives the most favourable results. Eoghan noted that whilst it is impossible to fully eliminate uncertainty, traditional strategies risk a significant level of disappointment to the individual without the incorporation of life-styling. He also highlighted that effective targeting requires contribution flexibility but such flexibility is often not practical. Overall, he concluded that modelling supports high equity holding at younger ages but equities should be reduced at least ten years from retirement.

Damian Fadden introduced the concept of designing customer friendly lifestyle strategies. He set out a number of stages that should be considered.

- Definition of risk – Damian believes that we must redefine risk to be the variability in benefits achieved compared to those targeted. This will result in extending the concept of risk to incorporate realistic target benefits, member engagement, member's time horizon, funding flexibility and other broader personal circumstances.
- Benefit Targeting – Damian reiterated David's suggestion of defining a more rational target benefit as a tax free lump sum of 1.5 times salary plus a pension benefit of 25% of salary. He also advocated incorporating State pension benefits into the benefit target. He went on to suggest having a priority order for benefits. Namely, tax free lump sum followed by an appropriate pension with the balance used to fund either additional pension benefits or an ARF arrangement.
- The 'Accumulation' Fund – The panel favour an approach which would involve reviewing the benefit target and building more effective de-risking programmes via prudent phased de-risking within a lifestyle approach.
- De-risking – With the aim of limiting the downside to a 10% maximum expected peak to trough fall and include some inflation protection, the theory is to invest mostly in cash, fixed and inflation - linked bonds, with small holdings in equities and alternative assets. A further consideration is whether to de-risk within the fund or set up a separate de-risking fund. The net impact in financial terms is the same. However, the panel believe the latter option provides psychological and presentational advantages as the risk management element is more apparent.
- Targeting phase – Damian suggested a gradual movement to appropriate benefit matching funds with a cash fund backing the targeted lump sum, annuity matching (to the degree possible) bond based investments for the pension element and possibly an investment mix similar to the de-risking fund mix for the ARF element of the fund where appropriate. This can be modified to reflect individual circumstances.
- Stakeholders Roles – Damian also set out what he believes are the roles for each of the stakeholders.

1. Providers:
   - Provide more tailored and effective risk management services.
   - Identify poor investment choices within schemes
   - Improve communication to improve members' understanding
2. Trustees:
   - Adopt considered position on default investment choice
   - Offer a suitable but limited range of appropriate investment fund choices
   - Manage risk surrounding members investment choices as they approach retirement
3. Advisors:
   - Broaden investment conversation in relation to risk management
   - Provide the advice and guidance that members want
4. Regulators:
   - Extend ARF offering to DC funds
   - Recommend a lifestyle strategy as appropriate default strategy
   - Change projection basis so that investment return is set in line with salary growth only
5. Employers:
   - Set up appropriate scheme with reasonable contributions
   - Awareness of employees' pension outcome
   - Incentivise behavioural triggers

   Provide financial education
6. DC Members:
   - Must take ownership of pension savings

Damian concluded the presentation by recapping on the main items addressed. He reiterated the belief that we must assess the risk appetite of the consumer. As risk appetite generally decreases as retirement approaches, the case for pursuing lifestyling becomes apparent. Whilst modelling shows a case for equity investment it also emphasises the need for de-risking well before retirement.

In addition, Damian stressed the importance of redefining individuals expectations at retirement. These must become more realistic. Furthermore, funding and investment issues must be considered together. We must respond to changing variables and each individual's circumstances.

Finally, Damian noted two possible actions for the Society. He believes that the Society could lobby for regulatory changes to require the use of a lifestyling as a default strategy. He also believes the Society should consider changing projection bases by setting assumed fund growth to be equal to assumed salary inflation.

The presentation concluded and the floor was opened up to questions. A lively discussion ensued.

The presenters were thanked for their contribution. The paper setting out the presenters' research and conclusions is available on the Society's website.

Laura Eyres

Climate Change

Trevor Maynard is manager of emerging risks at Lloyd's of London. His role involves monitoring risks like nano-technology, cyber terrorism, pandemics and, of course, climate change. He has authored or edited most of Lloyd's reports on climate change, represents Lloyd's on the managing board of Climate Wise and is also on the Finance Initiative of the United Nations Environment Program. He came to Dublin on 29th October to discuss climate change: – risks, politics and opportunities.

A brief lesson…

A pre-assumption of this meeting was that climate change is really happening so if you are a cynic, stop reading now! The meeting began with a brief explanation of what climate change is. The greenhouse effect is the heating up of the earth due to the presence of greenhouse gases. These greenhouse gases in the earth's atmosphere act as a blanket above the earth, trapping the heat in. The main greenhouse gases in the earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone. An increase in greenhouse gases leads to a thicker blanket and more heat being trapped, thus increasing the temperature of the earth.

As an actuary you might question the validity of the whole theory – a reasonable question might be whether there is sufficient data to say with any certainty that the earth is heating up. In fact, scientists have developed a way of analysing ice-cones in order to determine the levels of carbon dioxide, oxygen and methane in the atmosphere and also the temperature at various points in history. This data goes back 420,000 years and analysis of the data shows that carbon dioxide and temperature are highly correlated. In the more recent past, the amount of carbon dioxide in the atmosphere has increased from 280 parts per million to 380 parts per million in 150 years – that is an increase of 31% on pre-industrial levels!

Another tempting question might be whether the effect is natural or man made. After all, it wasn't too long ago that we had an ice age. Trevor addressed this issue by discussing the various modelling carried out on historical data. The modelling was three-fold. Scientists tried to create a model of "naturally caused" global warming, but the historical data did not support the back testing. A similar situation occurred when a "society caused" model was constructed. It was only when the two were combined, could an accurate model be constructed. Obviously there is large parameter and model risk associated with the modelling processes. However, the conclusions were that, whilst it is acknowledged that the temperature is variable, part of the increase in temperature can be attributed to society.

Despite all of the recent publicity surrounding the effects of carbon dioxide, it was noted that methane is still a big unknown. It should not be ignored when trying to tackle global warming - although it does occur less frequently in the atmosphere than carbon dioxide. Sulphur dioxide, which is produced in various industrial processes; actually reflects the suns energy, thus counteracting the effect of greenhouse gases. So with decreasing levels of this in the atmosphere, the effects of carbon dioxide may become more pronounced in the future.

Global Impacts…

A number of potential impacts were discussed at the meeting, some obvious and some not so obvious. Whilst some might seem like doomsday scenarios, it was stressed that these are just that, scenarios and not predictions.

Water is considered one of our most valuable resources. In times of scarcity, actions to control water flow or supplies can cause political unrest. For example, building a dam can be seen as an act of aggression. Control of water supplies might also be used as a political tool, with obvious effects on the population as well as food supplies to the world.

In the last sixty years, the population of the earth has increased threefold. There has been a 1,100% increase in the use of fertilisers (produced using natural gas) and a 300% increase in the use of irrigation. Irrigated land produces 40% of the world's food, so a scarcity of water has a huge impact on the food supply for the planet. Continuation of the use of such high volumes of fertilizers will also put a strain on natural gas resources, as well as adding to the levels of carbon dioxide in the atmosphere.

Existing oil wells will eventually dry up. Potential conflicts may arise between nations regarding the ownership of new reserves. Recently, a Russian flag was placed on the Arctic seabed, much disputed by Canada. Much called for reductions in the use of oil by the west could result in the marginalisation of major oil producing nations. They subsequently may not be able to support their populations (leading to climate refugees).

Changing climates have already driven many populations to move from inhabitable lands to more hospitable shores. This has obvious impacts on both the countries that were abandoned and those that act as hosts. The question remains as to whether you close borders, risking political unrest or do you tackle the problem and accept the cost to the more developed world?

The migration towards cities in recent years effectively concentrates the human exposure to climate issues. The movement of people away from more vulnerable areas towards cities also increases the usual social problems associated with large cities.

One product of climate change is geo-engineering –the deliberate manipulation of the earth's climate to combat the effect of climate change. The impacts of this will take time to emerge. If this goes wrong, a blame game may ensue. If these risks are insurable, there maybe a knock-on effect for insurers.

Impacts on Actuaries…

The impacts of climate change are far ranging and not always obvious for the insurance industry. The most obvious impacts are those which impact property damage – wind, flood, subsidence and fire. Recent hurricane seasons in the US have been longer than usual with changing frequency and severity patterns as well as changing landfall locations. Flood tracks are also changing and downpours becoming stronger. Subsidence problems are worsening in areas experiencing drier summers, whilst heaving is a problem with wetter winters. Fire seasons are longer, and are being worsened by drier conditions.

- Risks, Politics and Opportunities

Liability claims behaviour also has potential to be impacted by future climate change. Examples include professional indemnity cover for professionals within the construction industry, environmental liability or vehicle liability.

Longevity & mortality could be affected also. In some regions mortality will improve as winters become less harsh, whilst there are obvious mortality impacts of large natural catastrophes. There are knock-on effects for pension schemes. On the other side of the balance sheet, asset prices are unlikely to include the impact of future climate change events. Price shocks to equities and subsequent reductions to earnings forecasts are the likely impact of a large climate event. Property prices would also be affected by such an event. Both currency and the bond markets could also be impacted by any political risk associated with climate change.

More broadly than the insurance industry, perhaps the global business centres will move towards countries and cities not adversely affected by climate change. The distribution of expected losses is therefore likely to become wider. There are obvious capital implications for insurers as a result of this. With greater risk comes a greater requirement for return by shareholders. Coupled with the potential impact on the asset side of the balance sheet, there could potentially be a three-fold impact on financial statements. Obviously, society must think of ways to mitigate these risks, such as building suitable flood defences & reducing carbon dioxide emissions. However, the insurance industry can also play a part - an example would be encouraging high standards of re-building in areas prone to floods or storms – this would reduce damage in the event of future activity. Another example given was a house insurance policy with an "upgrade to green" option, all damaged goods to be replaced by green alternatives. The insurance industry has formed "Climate Wise", a collaboration of worldwide insurance players with the main aim of working together to respond to the myriad of risks and opportunities of climate change. They will attend and actively lobby on behalf of the insurance industry at the upcoming United Nations Climate Change Conference in Copenhagen in early December 2010.

Julia Moore

Actuarial Economic Forecasting

On a rainy evening on the 11th November, Colm Fitzgerald presented a session entitled "Actuarial Economic Forecasting".

The presenter is both a qualified actuary and has an MA in Economics. The essence of the presentation was that actuaries working in the field of investments could and should be contributing from their actuarial training to better interpretation and forecasting of economic data.

Colm's work has applications in the areas of economic forecasting (especially short term economic forecasting) and, in particular, for financial market traders. Colm used the scenario of trying to predict the monthly US employment report, to illustrate the application of his work, with a brief comment on applications to other economic variables.

Colm has been developing these applications over the last 5 years, both as a trader and as Head of Quantitative Trading in Bank of Ireland Global Markets.

Application for long-term basis-setting should also be possible, although this was only touched upon at the end of the presentation and research has not been done for that application as yet.

Introduction

Colm opened by noting that releases of key economic data can move markets substantially. Having reliable expectations and forecast of future movements can therefore significantly aid a trader or analyst – the holy grail of market investors!!

Colm noted that his work, which comprises original research, has focussed on applying actuarial theory and techniques to short-term economic forecasting. The model is currently marketed in the US (over the past 4 months).

Illustration – forecasting the monthly US Employment Report

To illustrate the principle of applying actuarial techniques to economic forecasting, Colm used the example of the US Employment Report. It was noted that this is the biggest "regular event risk" that US markets face each month as evidenced by the fact that US equity and bond markets move substantially on what is known in the US as 'Jobs Friday' each month. The output of the model designed to forecast the US Employment Report output is called the Rosenblatt US Payrolls Indicator.

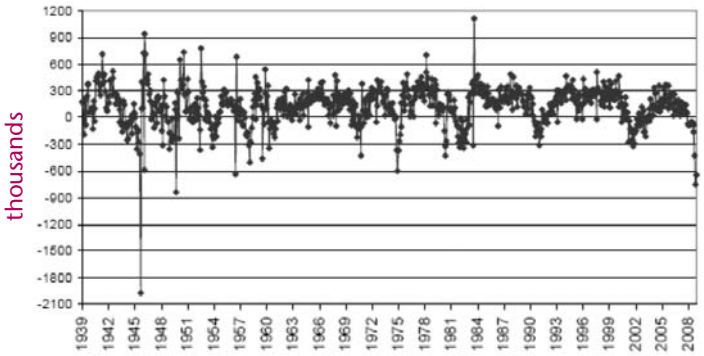
Colm's proposition is that the current approach adopted by economists does not have a track record for estimating the monthly US Employment Reports and that actuarial principles can be used to produce a better estimate.

An illustration of the US (Non-Farm) Payroll employment data set since 1939 demonstrates the significant spread and volatility of this series, as shown in the chart below:

The difficulty increases further, because the aim is to forecast relative to the consensus estimate. Markets generally move significantly depending on whether the released data is stronger or weaker than the consensus estimate.

Statistics Background

Monthly Change in US (non-Farm) Payroll Employment



DCU aragon research ltd ROSENBLATT SECURITIES INC

Forecasting by economists to date

Colm gave an overview of some of the typical approaches economists adopt to produce monthly views about the US Employment Report figures – ranging from highly subjective, to the rarely-used econometric approach. Essentially, economists do not have a good track record for predicting the US Employment Report.

Colm used an example of a current payroll model and its approach of using data (going back to 2001 or so) for under 10 variables, and then carrying out a number of ordinary least squares regressions. A combined average from those regressions would then be used as the estimate. Some potential issues with an approach of this kind include:

- 61 potential variables are available.
- Data is available for much longer periods.
- No adjustment being made to the data to make them correspond to the survey period over which they are supposed to be forecasting.
- No adjustment being made for other biases.

Actuarial principles – using the example of an actuarial mortality investigation

Colm then used an example of an actuarial mortality investigation to illustrate the actuarial principles which he is transferring to his economic forecasting model. Essentially, the example of a 31 year old male in 'Actuaria' was used to illustrate how actuaries typically calculate the mortality rate using different data sources. The underlying lesson was that forecasts cannot be reliably produced from high-level statistics and in order to develop a better model, you need to fully understand the inputs and, in particular, the sources of data and its constituent parts.

The actuarial techniques highlighted by Colm in particular were the principle of correspondence and the use of rate intervals, neither of which he states are used by other disciplines.

Moral of the story – in order to produce reliable forecasts, you need to work out more precisely the period to which source (indicator) data refers. Other factors which also need to be allowed for include any biases (e.g. sampling biases), heterogeneity, adjusting for relevant factors such as gender, nature of employment and so on. Finally the data would need to be graduated.

Comparing the forecasting approaches of the actuary and economist

Returning to the US employment example, a number of possible problems

with economists' estimates arise from the actuarial investigation example:

- weekly fluctuations in data not allowed for, and can swamp more general trends;
- not all indicators are taken into account;
- heterogeneous samples – not comparing like with like;
- reliance on correlation coefficients versus maximum likelihood estimates.

For dealing with weekly fluctuations he suggested analysing each employment indicator to see the period over which data is collected and period to which the data refers. This was illustrated using the main employment indicators and their incidence.

Colm then touched briefly on the traditional use of correlation coefficients between the outcome of the report and the various indicators to estimate the US Employment Report. He compared this with producing a maximum likelihood estimate, stating that the former is a piecemeal approach and doesn't allow for reconciliation of conflicting indicators. For example, some of the stronger indicators for a given month may be issued in week three of that month, whereas weaker indicators may be issued in week one. To produce a reliable estimate, one should adjust for the incidence of the data releases.

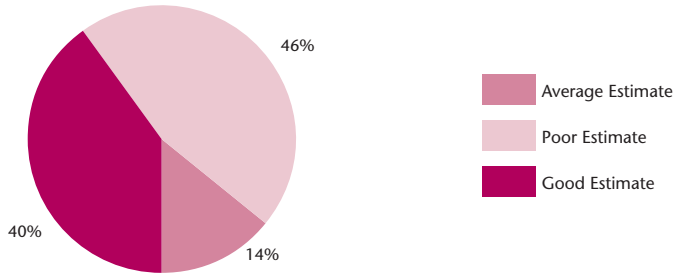
In terms of other potential estimate problems, Colm noted some of the most common adjustments which would be required – for seasonal influences, regional adjustments, other sampling biases and graduation. The purpose of these adjustments would be to extract credible and objective data from the subjective indicators.

Results

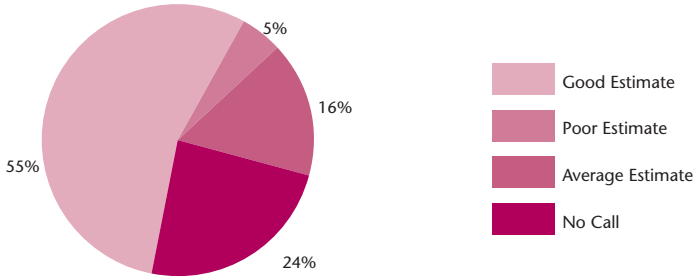
The results of the ADP indicator and Colm's model are shown in the following two graphs. The ADP payroll data was initially perceived as a good indicator when it became available a few years ago. However, Colm pointed out that the ADP survey would appear to have sampling biases, and so is not a reliable indicator of the total market without adjustment to remove these biases.

The Paragon or Rosenblatt Indicator was run prospectively from 2006 (and back-tested to 2005 for marketing reasons). This suggested that the model has been wrong only 5% of the time. Notably, the model does not make any call 24% of the time i.e. if it does not have enough data to differ from the consensus.

ADP Performance Record - May 2006 to date



Paragon Payroll Indicator Performance - 2005 to date



Final comments

In his final comments, Colm noted that his analysis can also be used to assess the cyclical positioning of the economy to better assess what is moving markets. As an example, one can consider the stage of the employment cycle in which the market is.

Colm also highlighted that the analysis enables an assessment of the underlying 'vitality' of the US economy, making the broader comment that generally speaking, the more 'vital' the economy, the better it will be able to withstand shocks. In fact, he commented that the vitality of an economy is probably the best predictor of how it will do over the next 6-9 months. Colm used the example of an oil price shock, stating that the economic impact would vary depending on whether, at that point in time, the economy was essentially 'vital' i.e. it would either be hit by the shock, but otherwise be in good shape or, if not essentially vital, would require a cut in interest rates.

Colm included an example slide where he had provided a US Economic Outlook on January 2008.

Colm sees the applications of this research and analysis as potentially being used by Central Banks, investment banks and traders. Different models would be needed depending on the period over which forecasts were desired. He also highlighted that insurance companies and pension funds could use this to improve their financial and economic assumption setting.

While the gauntlet was laid down to apply the estimation of long-term economic assumptions, little was actually said about how that would be done using the work carried out so far (which has focussed on short-term economic forecasts). Colm would like to see the Society carrying out further research in this area using the theory and techniques that he outlined.

It would also have been interesting to see more of the actual modelling process.

Questions from the floor included whether this analysis could be applied to Ireland? The answer was that there is not enough statistical data to do this.

A question was asked about trends at this time – are they more/less stable? They were generally acknowledged to be the latter, and that economic movements are getting bigger and bigger.

The slides presented are now available on the Society's website.

Grainne Newman

The Society's Second Study of

Background

The Society's second study of Annuitant Mortality has now been completed. As with the first Annuitant Study and first Insured Life Study, it has been completed using the "Aggregated Data Method". This method, developed by the Society, facilitates low cost mortality data investigations by pooling individual life companies' experience. Each company provides (on a confidential basis) the actual and expected claims using a pre-agreed common standard table for the expected. The Society then adds up all the expected and all the actual and divides the latter by the former to give a claims ratio.

As for the first study, the "expected" table is the 2000 Series CMI table.

This second study was supported by 6 companies, as was the first. Five of these six were in both studies, with one company changing between the last study and this one.

The first study covered just 2006; the second study, however, covers both 2006 and 2007. In the first study, the experience was based on annuity amounts at date of death and not on numbers of lives. It is generally expected that an Amounts basis will give a lower rate of mortality than a Lives basis. In the second study, information was obtained on both lives and annuity amounts. The expected tables were the Amounts version for both Amounts and Lives experience.

For confidentiality purposes, the actual numbers of deaths were not made accessible to the Life Committee. This necessarily places some constraints on being able to analyse the statistical credibility of the results.

The Society would like to express its thanks to the participating companies for their assistance.

Overall Results

The results for both 2006 and 2007 in this second study are set out in Tables 1-4.

Comparisons between 2006 in the two studies

The previous study (reported in the Society's November 2007 Newsletter) included Table 5 in respect of 2006. At first sight, the overall results for the two studies (i.e. Tables 1 and 5) look very similar, with the overall result being 81%.

However, subsequent to the first study, we were informed by some companies that there were inaccuracies in their submissions. Correcting for this would give a new table, Table 6.

The increase from 74% to 81% may be due to two effects. Firstly, the change in participating offices may have changed the experience. However, it is suspected that this is not the case. Secondly, it is now generally accepted that, unless life companies pursue an active program of checking continued existence, there can be a considerable problem with IBNR. It is believed that, in recent years, life companies have become more active in this space and therefore there may have been some catch-up in death notification.

Comparisons between 2006 and 2007 in the second study

It is interesting that the experience for 2007 (Table 3) appears to show heavier mortality than in 2006 (Table 1). One would expect that, on average, the later experience would show lighter mortality. There are two reasons why this might be so. Firstly, there is the general trend of improving mortality. Secondly, 2007 would be less developed than 2006 and so there could be a few deaths yet to be reported in respect of 2007.

Against that, it must be pointed out that pure statistical fluctuation is going to happen. This is more prone to happen when the experience is done on an Amounts basis because the distribution of annuity amounts is likely to be skew (possibly showing Pareto distribution) and deaths of one or two annuitants receiving large annuity payments may have a disproportionate effect. That this effect may be occurring is borne out by the fact that on the Lives basis, the pattern is reversed; 2006 (Table 2) is heavier than 2007 (Table 4).

In addition to this, there is the seasonal variation of mortality from year to year. Some years have more adverse experience due to the climate or due to infections that are prevalent.

In any case, one cannot tell from simply one year whether this might be the beginning of a new trend or just fluctuation.

Comments on shape of experience

In respect of 2006 deaths, the experience for those below age 60 was much higher than the standard table. In respect of 2007 deaths (collated in the second study), this was reversed. It is generally believed that early retirements may include a proportion of annuitants who are retiring due to ill-health. These people may be expected to suffer excess mortality. Most companies contributing to the study were unable to remove data referring to ill-health early retirement from their submission so the 2006 experience is scarcely surprising. Equally, the numbers of cases involved are likely to be extremely low and therefore the 2007 experience is not remarkable either.

Other conclusions

It is interesting that the 2007 experience does not show any difference in total between the Lives and Amounts basis. This may be fluctuations again. This will be worth observing in future years.

Tony Jeffery
Life Committee

Annuitant Mortality

Table 1: 2nd Study, 2006, Amounts

Age Range	Males	Females	All
- 60	172%	129%	157%
60 - 70	67%	53%	65%
70 +	82%	85%	83%
Overall	81%	83%	81%

Table 2: 2nd Study, 2006, Lives

Age Range	Males	Females	All
- 60	120%	201%	143%
60 - 70	88%	93%	89%
70 +	90%	95%	92%
Overall	90%	96%	92%

Table 3: 2nd Study, 2007, Amounts

Age Range	Males	Females	All
- 60	19%	90%	42%
60 - 70	65%	126%	72%
70 +	86%	88%	87%
Overall	83%	91%	84%

Table 4: 2nd Study, 2007, Lives

Age Range	Males	Females	All
- 60	19%	90%	42%
60 - 70	65%	126%	72%
70 +	86%	88%	87%
Overall	83%	91%	84%

Table 5: 1st Study, 2006, Amounts

Age Range	Males	Females	All
- 60	222%	180%	208%
60 - 70	58%	53%	58%
70 +	83%	87%	84%
Overall	80%	86%	81%

Table 6: 1st Study, 2006, Amounts, Corrected for Errors

Age Range	Males	Females	All
- 60	155%	125%	145%
60 - 70	52%	49%	52%
70 +	76%	80%	77%
Overall	73%	78%	74%

Pension Risk

Ian Sykes and David O'Sullivan gave a joint presentation to the Society of Actuaries on 17th of November entitled "Pension Risk". The presentation was based on a paper published recently by the Pension Risk Working Party which also includes Ross Mitchell and Peter Byrne. It focused primarily on defined benefit pension schemes, although Ian mentioned that another paper based on defined contribution scheme risk may follow in the future.

The central message of the presentation was that, in Ireland today, pension scheme risk management is inadequate and must be improved.

Enterprise Risk Management

The concept of Enterprise Risk Management (ERM) was introduced as a framework by which pension scheme risk can be identified, quantified and dealt with. In the context of a pension scheme, ERM is defined as "a process effected by the scheme's interested parties (primarily the sponsoring employer) designed to identify potential events which may affect the scheme, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of the scheme's objectives". Ian and David recommended that all pension schemes should adopt the ERM approach. With the help of some interesting graphs, they showed that for many large Irish quoted companies, the value of the pension scheme deficit is far greater than the market capitalisation of the company. This is why they argued that a pension scheme along with its many risks should not be managed by trustees as a stand - alone entity, but by the sponsoring employer as an integral part of their business. The difficulties that this would present under the current trust based legal framework were duly noted.

The ERM Process

The process involved in putting ERM into place is very similar to the Actuarial Control Cycle which will be familiar to anybody who has studied for the later actuarial examinations. The main steps are as follows:

- **Set the objectives**

  For example, that the scheme will be fully funded on the Minimum Funding Standard basis within 3 years.
- **Construct a project plan**

  This sets out the actions and resources required to meet the objectives.
- **Identify the main risks**

  A risk is defined as an event leading to project failure.
- **Assess the risks**

  Some risks will have a low probability of occurrence but a great financial impact. Many risks are not independent of one another.
- **Mitigate the risks**

  Either avoid, reduce, transfer to another party or accept.
- **Monitor the process**

  New risks may emerge over time so the ERM process needs to be kept under regular review.

In conjunction with ERM, Ian and David stressed that communication with the sponsor and the members of the scheme must be improved. For example, sponsors should be given a realistic expectation of returns on pension assets as well as a clear understanding of the impact of granting salary increases to active members. Beneficiaries should be told clearly whether their defined benefit pension is a promise or an aspiration on behalf of the sponsoring employer.

The interaction between investment, funding and benefit policy was explained. Central to the ERM framework is the realisation that risk taking in any policy is dependent on it being consistent with the tolerance for risk of the ultimate sponsor. Before the discussion began, the speakers touched on defined contribution scheme risks which are fundamentally different from defined benefit scheme risks from the point of view of members and sponsoring employers. Many members of defined contribution schemes are ill equipped to deal with the investment risks which they face. This needs to be addressed as defined contribution schemes will grow in importance over the coming years.

Discussion

Following the presentation there was a lively discussion session. A wide range of views were expressed and the main areas of debate centred on:

- The importance of employer covenant above all else
- Should actuaries be more proactive in assessing and dealing with the risks?
- What (if any) powers would the trustees have under ERM?
- Would it not be better to drastically improve communication with members rather than introduce a complicated ERM process?
- Why do most trustees currently control the investment strategy?
- Companies should be able to concentrate on their core business without having to deal with the significant risks involved in operating a pension scheme
- Should actuaries be more familiar with the business of their clients?

Many speakers from the large crowd present congratulated Ian and David on an excellent presentation.
The presentation and the paper on which the presentation was based are available on the Society's website.

James O'Connor

Student Society's Pool Competition

Pool Competition winner Cathal Fehily

The Student Society held their annual pool competition on the 3rd of November in the Palace bar on Camden Street. There was a strong entry in the competition and after introductions the contestants quickly got down to the business of playing pool. The display of strategic play, skilled spin shots and the occasional mis-cue made for a great night's entertainment. Students caught up with old friends, recounting tales of work and study, and made many new acquaintances as the music blasted out on the bar speakers.

The contestants were divided into groups, with each member playing the rest of the group once. Two players emerged from each group and were placed against the winning members of other groups at the quarter-final stage. The quarter-final winners progressed to semi-finals, at the end of which Cathal Fehily and Ciaran Belton became the final two.

The final was a "best of three" affair. Ciaran and Cathal won a frame each and so it went down to the last frame of the night. Both played well in the final frame, each displaying the skills that got them to the final. Defending champion, Ciaran Belton, almost had the title sewn up when, having potted all of his balls, took a shot on the black. He struck the black and it rolled agonisingly close to his chosen pocket but would not fall in. Cathal duly took his opportunity to clear his remaining ball and took the title with a simple tap into the corner pocket. A great game with a deserving champion.

Donal Murphy

Faculty of Actuaries vs Society of Actuaries Golf Match

The 5th match between the Faculty and the Society took place on 6th October in Bruntsfield, Edinburgh.

There is a close affiliation between both organisations. Tom Ross, Past President of the Faculty, presented a beautiful Quaich for this event back in 2003. Tom is also a member of the Society's Committee on Professional Conduct. David Kingston is a Past President of both the Faculty and the Society. Harry Taylor, the Faculty's captain, is a member of both the Faculty and the Society. However, despite these close links between the two bodies, there is keen competition for the Quaich on each outing.

The Society prevailed in a very closely fought contest. Four of the five games went up the 18th hole and the Society held its nerve to win two of the matches and halve two of the matches.
The results were as follows:

- Neil Guinan and Frank Downey halved with Andy Scott and Kenneth Ettles
- Jonathan Goold and Don Browne halved with David Simpson and Maurice Paterson
- Steve Hardy and Kevin Begley lost 4 & 3 to Mike Smith and Alistair Campbell
- Colm Fitzgerald and Peter Doyle won by 1 hole over Russell Pugh and Chris Young
- Brian Morrissey and David Kingston won by 1 hole over Harry Taylor and Brian Duffin

The match against the Faculty was the last event for me as Captain of the SAI Golf Society. I certainly enjoyed my year and thanks to all the golfers for their participation in the events. I wish the incoming Captain, Peter Doyle, every success as he plans the 2010 SAI golfing calendar.

Brian Morrissey

Faculty's team

Harry Taylor (captain)
Alistair Campbell
Chris Young
Kenneth Ettles
Brian Duffin
Mike Smith
Russell Pugh
Andy Scott
David Simpson
Maurice Paterson
Ewan Smith non-competing
Tom Ross non-competing

Society's team

Brian Morrissey (captain)
Colm Fitzgerald
Don Browne
Kevin Begley
Neil Guinan
Peter Doyle
David Kingston
Jonathan Goold
Frank Downey
Steve Hardy

SAI Christmas Drinks and Charity Table Quiz

The Society's Christmas Drinks followed by the traditional Table Quiz took place in Dicey Reilly's on 1st December. The President, Kevin Murphy, took the opportunity to wish all members a very Happy Christmas and Peaceful New Year.

28 teams participated in the table quiz and the winning team of Kate Tobin, Michael O'Sullivan, Stephen G Jones and James Deegan from Zurich Insurance had the privilege of choosing the charity to whom the Society will donate the proceeds which came to €3,000. Focus Ireland was their chosen charity.

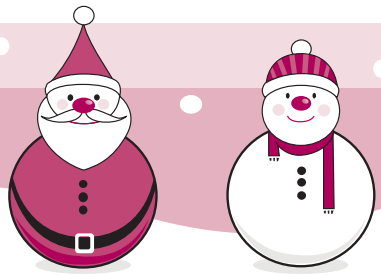
Once again, we had a superb quizmaster in Kevin Manning. The teams and indeed the Society is indebted to Kevin for all his efforts in providing a most competitive and entertaining event. Thanks also go to Alex Breeze for doing trojan work in speeding up the marking process this year.

Kevin Manning, Kate Tobin, Michael O'Sullivan, Stephen G Jones, James Deegan and Alex Breeze

On the Move

Fellows

Eric Brown moved from Sun Life to **Ernst & Young**



The Newsletter team wish all its readers Seasons Greetings!

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