Newsletter
April 2004
The Society of Actuaries in Ireland

New Qualifiers' Reception

Pat Healy, President, Society of Actuaries in Ireland & Jeremy Goford, President, Institute of Actuaries; with members who qualified from the September 2003 exams.

Back Row from top: Ronan Mulligan, Peter Doyle, Neil Shepherd, John Paul Noonan, Paul Connor
Second Row from top: Tanya Fick, Mary C. Cahill, Sinead Ni Chuinnegain, Tara Greally, David Coldrick, Maria Quinlan
Front Row, Right to Left: Jeremy Goford and Pat Healy

Penrose: Implications for the Profession

Jeremy Goford, President of the Institute of Actuaries presented an interesting and wide ranging talk, covering both the many important issues that had arisen during his presidency as well as the imminent publication of the Penrose report on the Equitable Life debacle.

Changing Role of the Actuary

Jeremy began by reviewing some of the key changes that have occurred in the UK actuarial profession over the last couple of years. Firstly, a new disciplinary scheme was introduced, with a greater degree of independence from Council. This was a particularly important development to point to when queried by the press as to what the actuarial profession was doing to ensure that problems that had occurred in the past would not happen again.

Jeremy then spoke about the changes that the Financial Services Authority are introducing in relation to the role of the Actuary, including replacing the Appointed Actuary with 3 new actuarial roles, introducing the Principles and Practices of Financial Management, and placing the responsibility for actuarial judgements relating to insurance business with the Board of Directors. The common theme throughout these changes is the regulator's aim to narrow the discretion of actuaries.

continued

Contents

Penrose: Implications for the Profession

contd...

Positive Developments

Jeremy continued by describing some of the positive developments that had occurred in the profession during his tenure. He highlighted the agreement that had been reached on devising a new standard for the discontinuance valuation of pension funds between the contrasting views of traditionalist and financial economic thinking within the profession.

Next, he pointed to the introduction of a formal CPD course on Modern Financial Theory. All actuaries who completed the exams 5 or more years ago should endeavour to take this course. Actuaries no longer have any excuse not to be familiar with this area.

The Education Syllabus has been revised considerably with new syllabus due for introduction in 2005. The major changes in the syllabus are in the middle subjects, which now have a clear framework built around the control cycle in a similar fashion to the Australian actuarial education system. The new syllabus emphasises the need for actuaries to understand their business environment and will provide actuaries with improved project management skills. Jeremy expressed the hope that the course in Financial Economics would be broadened in the future to include elements of Behavioural Economics and Game Theory.

He also mentioned the recently introduced “hopper” system, for actuaries to put forward issues which they believe the profession should pursue in the public interest.

Finally, Jeremy spoke about the 5 year Corporate Plan which has been formulated with the assistance of Caroline Instance, the Chief Executive of the UK Profession, which will provide a framework for the activities of the profession over the next 5 years, covering such issues as changes to regulation, innovation, promotion of the profession externally and greater engagement with the membership generally.

Current Issues

Jeremy went on to highlight some current developments within the actuarial profession. Firstly, it is envisaged that an independent Actuarial Standards Board will be established to oversee the formulation of Guidance Notes. The profession in the UK is proceeding with introducing Peer Review, although the details of how this will work in practice are still far from being worked out and agreed. The Joint Council of the Faculty and Institute has now established an Effectiveness and Governance Group, reporting to the FIMC (Faculty and Institute Management Committee). This group will provide a forum for discussing and forming views on public policy issues, such as the future of with profits and defined benefit and will enable the profession to put forward its views to the general public in a quick and simple manner.

Externally, the profession will continue to contribute to the debate on the future of the State pension, including such issues as increasing the State pension age, introducing compulsory private pension provision, and the means testing of State pension benefits. The profession will also put forward its views on the proposed EU unisex directive, focusing on the importance of allowing insurers the freedom to classify risks. Other issues where the profession is making a positive contribution to public debate include the future of health care, personal injury awards and the effects of climate change.

The Penrose Report

Jeremy then moved on to give his insights into the Penrose Report on the collapse of Equitable Life (publication of which was imminent). As the Penrose Report had not yet been published, Mr Goford’s comments were based on conversations he had had with Lord Penrose.

The Penrose Report will be highly critical of the actuarial profession, although we will not be as heavily criticised as Equitable’s management, the DTI or the Government Actuary’s Department. Penrose will be particularly critical of the lack of a proactive approach by the profession in monitoring that guidance issued by the profession was being followed. Instead, we were reactive, waiting for complaints from fellow actuaries or members of the public before taking any action.

Penrose was also critical of actuarial Guidance Notes, feeling that they are too woolly, leaving too much room for the judgement of individual actuaries, and he found it impossible to tell if the Equitable Life actuaries had in fact followed the guidance. Penrose felt that it should be possible for non actuaries to understand Guidance Notes. The Actuarial Standards Board will address these concerns, introducing more specific and objective guidance with clear rules and principles.

Penrose regards the source of Equitable Life’s problems to be the over distribution of bonuses, rather than Guaranteed Annuity Options. At the time, Equitable used its high bonuses to boost sales. Penrose felt that other insurers would have known that the Equitable were over distributing, but no one challenged them.

He highlighted the 1989 paper on the operation of the Equitable’s With Profits Fund. Many actuaries criticised the Equitable’s approach of operating a With Profits Fund with no free assets, and pointed to the flaws in it. However, the profession as a whole remained silent. He was also critical of the fact that actuaries do not allow other professions to look at our work, for example there is no auditing of Statutory Reserves. In addition, we have no solid definition of Policyholder Reasonable Expectations.

Penrose also spelled out his vision for

the future of the actuarial profession.

We should see our primary role as providing guarantees and value for money to consumers. In the future, we should speak out in the public interest and draw attention to what we see as bad practice. He sees the Actuarial Profession as the most independent profession operating in the Financial Services industry. In the past we have shirked the responsibility that this brings. We need to be much more proactive in the future, speaking out when we feel it is necessary, checking standards are being followed more rigorously, monitoring the conduct of the market in general and responding faster to problems when they arise.

Jeremy asked if we should accept the challenge put forward by Lord Penrose – should the profession adopt a pro active approach to policing the markets in which it operates. While we have influence, we have no powers to regulate. He felt that in the future we need a new relationship with the FSA. At the moment, the FSA does not even come to the profession to seek its views on many issues. We need to find a way to be more influential with the FSA and translate our influence into action by the FSA.

An interesting discussion followed with several members expressing increased confidence in the future of actuaries. Having come expecting "doom and gloom", they were impressed with the positive tone of Jeremy's talk. The lessons learned by the profession in the UK in recent years will be invaluable to the Society over the coming years as it develops its relationship with IFSRA.

The Penrose report was published on 8th March. Following its publication, the UK government announced that Sir Derek Morris would begin a review of the Actuarial Profession.

Jonathan Daly

International Update

Insurance rates to be "sexed down"

Towards the end of 2003, the European Commission issued a draft Directive relating to equal treatment between men and women in the supply of goods and services. The scope of the Directive covers insurance services and if it is implemented as proposed, insurers would be prohibited from using sex as a rating factor in insurance. This would mean unisex rates for all insurance sectors - life, non-life, pensions (annuities) and health (although we already have community rating for health insurance in Ireland).

The Society set up a working group before Christmas to consider the implications of the proposed Directive with a view to publishing a position paper on the subject. At the time of going to press, a draft briefing paper has been circulated to the Practice Area Committees for comments. When this stage of the process is complete, a draft of the paper will be put on the members' section of the Society's website to give all members the opportunity to comment on it.

Solvency II

The Solvency II project is entering its second phase. The European Commission has issued a consultation paper on its proposed way forward to various interested parties including the actuarial profession and has asked for comments back by 16th April. The Society is feeding into this process through the Groupe Consultatif, which has set up five working groups covering:

(i) Pillar I Life
(ii) Pillar I Non-Life
(iii) Pillar II
(iv) Pillar III/Accounting
(v) Conglomerates

The Society has nominated representatives to groups (i), (ii) and (v). The Society will also be feeding into the consultation process through its representation on the IFSRA Solvency II consultation groups.

International Actuarial Association (IAA)

The number of member sections within the IAA grew from three to five during 2003. These sections provide members with opportunities for international discussion, information sharing and continuing education in particular fields of actuarial interest.

- The oldest section is ASTIN, which stands for "Actuarial Studies in Non-Life Insurance".
- AFIR – "Actuarial Approach for Financial Risks", was formed in 1986.
- IACA is the section for consulting actuaries.
- IAAHS - the Health Section - was formed in May 2003.
- The newest section, PBSS - Pensions, Benefits & Society Security, was formed in November 2003.

You can join one or more of the sections for a modest additional fee, which is collected annually along with your Society subscription. You can find more information about the sections on the IAA website: **www.actuaries.org.**

The Enterprising Actuary -

It's safe to say that the evening meeting on 4th February on the subject of Enterprising Actuaries was unlike any that preceded it. The Fitzwilliam Hotel hosted a record-breaking attendance that was treated to an insider view of life in the wider fields. Along the way, we learned about such varied subjects as Percy Shaw and his self-cleaning cats' eyes, the second law of thermodynamics, the effect of having parents from the northside on entrepreneurial ability, Socrates' views on life, the beauty of the Datsun Stanza, where to get a good steak, bottle of wine and mission statement in Tampa, and just what it means to have "a Mary O'Rourke moment in the bath".

David Muldowney

David Muldowney got proceedings underway with a talk on his investment software business Aeternus technology. It was interesting to hear how many of the themes touched on by David would recur in the later presentations. David had seen an opportunity to combine his knowledge of the investment markets with his ability as a software developer in providing investment software that greatly improved on what he saw in the marketplace. Inspiration and ability were only part of the story though - pig-headedness and determination were also crucial in making a go of things.

The value of an actuarial background was clear too. David mentioned the benefits from the actuarial reputation, the education process and the fact that actuarial qualifications were something he could fall back on if things didn't work out. In addition, the actuarial profession supplied a network of people who offered support, advice and guidance.
It was heartening to hear this aspect of the actuarial community echoed by later speakers.

From a practical point of view David emphasised the assistance he received from Enterprise Ireland, particularly in terms of the development of his business plan. David summed up his philosophy with the analogy of Percy Shaw's self-cleaning cats' eyes; have your product go that one step further in distinguishing itself from the competitors.

Stephen Loughman

The second speaker, Stephen Loughman, echoed the Enterprise Ireland point. Since leaving the traditional actuarial areas, Stephen's career has followed an interesting path through software development and biometric technology back to the more familiar territory of a health insurance start-up.

Stephen was keen to emphasise the value he gained from an MBA which gave him a broad management education, and an opportunity to meet people from a variety of business backgrounds. The formal setting of sitting exams and doing a thesis also helped focus the mind.

Actuaries working in the wider fields will be in the unusual position of not being an expert in the area. Stephen made the point that actuaries would never know as much as the "techies" about the technological side, but the knowledge we can bring on the wider business issues can be invaluable.

Many of the benefits Stephen saw in an actuarial background echoed the points made by David. In particular, actuaries have knowledge of numbers, financial projections and risk.
In corporate finance terms this gives an advantage in understanding the creation of value. In addition the insurance knowledge that actuaries have can be useful, and the reputation of the profession is a strong asset. There are disadvantages to be borne in mind, not least having to explain what an actuary is!

Following an enterprising path into the wider fields can be exciting, and can lead to both opportunities for learning and potentially greater rewards. However it can also be stressful, risky and all-consuming. Stephen left us with some solid advice: "you'll be successful only if you would be happy to do it for the rest of your life".

Catherine McGrath

The third speaker, Catherine McGrath, gave a very interesting and practical insight into the issues involved in setting up your own company. After 15 years working in traditional life assurance areas, Catherine was left with a choice of pursuing an appointed actuary style role, moving into general insurance or moving into the consultancy arena. At this point the advice of Socrates kicked in. Socrates maintained that "the unexplored life is not worth living", and with this in mind Catherine

Risks & Rewards

decided to try something different and set up an IT consultancy called "Act on IT".

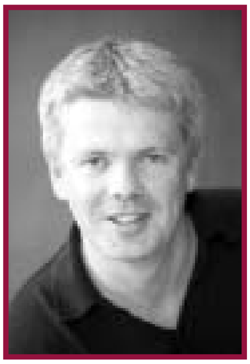
It is important for anyone taking an entrepreneurial decision to recognise an opportunity that adds value. The idea must be attractive, durable and timely, and for Catherine this opportunity was the gap between what actuaries want and what software developers need to know. It is important at this stage to examine your own motivation and make sure you know yourself. For Catherine, the key motivators were the need for challenge, the desire for autonomy and the aim to add value.

Catherine saw the benefits of an actuarial background as being the excellent grounding actuaries get in many aspects of running a business. The actuarial background is practical, respected and gives an understanding of market direction in terms of future products and services. Most particularly, the actuarial background gives "a helicopter view" which is needed to see the forest from the trees.

Of course there are all sorts of risks involved – not getting work, getting the wrong work, not retaining clients, financial risks. There are also lots of extra responsibilities, such as having to find time to keep your skills up to date, doing your own work as well as the clients' work, dealing with the tax man, dealing with pensions and health insurance, covering legal issues like contracts and trying to keep a healthy work-life balance. However, there are rewards – job selection, being your own boss (sometimes!), the opportunity to meet, work and interact with varied people, the continuous training and development and not least the removal from office politics.

Catherine saw four key areas that you would need to think through fully in any start-up situation: IT, HR, Operations and Marketing. In addition, Catherine echoed the benefits of an MBA that Stephen had highlighted.

Social responsibility was a key motivator for Catherine, and she felt that enterprising actuaries were well placed to use their advantages to further the social good. With that in mind, Catherine had a very rewarding period as a volunteer in the Special Olympics.



John Morrissey

The final speaker of the night was John Morrissey who gave us a highly entertaining run through a roller-coaster career, primarily positioned in the area of aviation finance. It is no disrespect to the excellent preceding speakers to say that John's presentation was the biggest eye opener of the night.

John began by questioning what he saw as a view that entrepreneurs needed to minimise risk. As actuaries, he maintained, we are well positioned to understand risk, and therefore manage it successfully. As a result his view was that entrepreneurs do not seek to minimise risk – and in fact, in some situations he suggested that maximising risk might be the most appropriate course of action.

John then introduced us to the world of aviation finance - a world recently thrown into turmoil by an article in Air Finance suggesting that there was an $8 to $10 billion dollar hole in the books of aircraft leasing businesses worldwide. John seemed pleased with the turmoil, as he had written the article!

John began in Hibernian in 1984 as a school-leaver. It was not long before he had begun to diverge from the traditional actuarial path, partially prompted by a financial crisis involving a Datsun Stanza. He joined the Investment Bank of Ireland in 1987, one week before Black Monday. The education he received there was invaluable, but after a year he felt he had learnt as much as he was going to, and moved on. (In addition John had been struck by his second crisis, having lost a full year's wages on Black Monday!) Following a brief and unhappy foray back into the actuarial fold John joined GPA and began his love affair with aircraft finance.

The success of GPA at the time was phenomenal ($1 million of profit per employee), and the company was at the forefront of the developing Celtic Tiger. John spent much of his time travelling, yet still managed to qualify as an FIA in 1991, largely thanks to hours spent studying in airports while waiting for connecting flights. During this time John became involved in a huge restructuring of American West airlines, which was on its last legs, and not expected to survive. It did, albeit at the loss of 2,500 jobs.

John's third and largest crisis came in June 1992 when the IPO for GPA was withdrawn. The upshot of this was that John had a net worth of minus £475,000 and was financially in very big trouble. It was illuminating for most people present to see how it is possible to deal with adversity like this without being swamped. Some hard bargaining with his bank, interspersed with some travel to Spain and then South East Asia, and the boon of a short period of work in the USA that netted him £100,000, allowed John to negotiate his way out of trouble. It was at this point that John's entrepreneurial skills really took over. He had a friend who was a marketing genius, but who also happened to be "financially illiterate". Using their complementary skills, $415 of start-up capital and a business plan lifted off a steakhouse menu, they set to work setting up IAMG.

The Enterprising Actuary - Risks & Rewards

contd...

The experience gained from the American West crisis allowed them to successfully restructure a number of airlines in North and South America, and get into the airline leasing business. They took some risks (like paying a $400,000 non-refundable deposit on an aircraft that allowed them only two weeks to find a buyer), but the risks paid off, and the $415 grew into a small fortune and created 12 millionaires.

Eventually, John exited IAMG and went back to college in Dublin. He has since been involved in many projects including the GroCorp set-up and the Riverdeep IPO as well as investing heavily in the Dublin property market. Currently his work sees him raising finance for a computer games company in Dublin.

John finished off with his views on the actuarial profession. The advantages of an actuarial background included unrivalled training and highly relevant skills. He cautioned against actuaries being too passive or staid, and felt that in many areas actuaries were losing out to accountants. He also questioned the profession's public image ("About Schmidt" in America and the recent furore about the retirement age here). A principle worry of his was that the profession was too risk averse.

The President, Pat Healy, thanked the speakers for their enthusiasm and commitment, and for providing much food for thought to the individuals present, and also to the profession. It was interesting, he noted, to see the parallels and the differences between the experiences of the four speakers. He finished by making a presentation to each, although the discussions continued long after in the hotel bar.

If you have been reading this report in the hope of finding out what is meant by "a Mary O'Rourke moment in the bath" I'm afraid you will be disappointed, but perhaps it will encourage you to go along to the next evening meeting.

Kevin Manning and Roma Crawford

Enhanced embedded values to ensure a market-consistent valuation of a life insurer

John Ryan, Gavin Palmer & David Dullaway

On 16 February, the Society held an evening meeting on the topic of Market Consistent Embedded Values (MCEVs) in another new venue, this time the Westbury Hotel. The meeting commenced shortly after 18.30 when the President Pat Healy introduced the three speakers for the evening: Gavin Palmer, Derek Ryan and David Dullaway.

Gavin was the first speaker and opened with an explanation as to why it may now be considered time to move on from the traditional embedded value calculation methodology:

- The economic environment has changed dramatically over the past 15 years, with interest rates having tumbled while the volatility of equity returns have sharply increased.
- Investors are now much more demanding in terms of the level of information they seek and wish to know how embedded values relate to the actual value of life offices and the performance of management.

He then highlighted three particular areas of uncertainty where current embedded value methodology may be thought to be weak:

Enhanced embedded values to ensure a market-consistent valuation of a life insurer

contd...

- The decision as to what risk discount rate should be used. At the moment, with risk discount rates often not being adjusted to take into account changes in risk profiles, it is possible to increase the embedded value of a company by, for example, switching holdings in gilts into corporate bonds.
- The treatment of options and guarantees contained in products, which at present may create uncertainty in analysts' minds.
- The allowance in the embedded value for the cost of capital.

Derek then moved on to the topic of what MCEVs are and how they can be calculated. He explained MCEVs by presenting a sample balance sheet where the MCEV is the balancing item:

Assets

Market value of tangible assets
Market consistent value of in-force
Market consistent embedded value

Total assets	XXXX

Liabilities

Statutory liabilities
Cost of capital

Total liabilities	XXXX

He explained that the risk discount rate should reflect the level of market risk inherent in liability cash flows. Under the certainty equivalent approach, all assets are projected forward as if earning the risk-free rate and subsequent surpluses are also discounted at the risk-free rate, with the exception of those cashflows where options exist. This avoids the danger of capitalising market and credit risk premia.

Derek provided the reasoning behind this approach, namely that financial theory has shown that the risks associated with mortality and expense cashflows can be diversified away, for example by an investor investing in a range of insurance companies so as to access a sufficiently large pool of underlying policyholders or in companies immune from mortality risks. As such, investors will take advantage of any situation where an unmerited risk premium is offered.

He then followed by saying that options should be valued by reference to the market prices of equivalent assets, for example guaranteed annuity rates can be equated to a series of swaptions on bonds. However, even here there are potential difficulties in that policyholder option exercise rates are partially dependent on the economic environment and can also be influenced by management actions, such as increased communication with policyholders of early retirement and tax-free lump sum alternatives.

The next area that Derek covered was the cost of capital, which is often allowed for under present embedded value methodology by way of the present value of the difference between the required return (the risk discount rate) and the projected return on the locked-in capital (often a fixed multiple of the solvency margin). Under the MCEV methodology suggested by the speakers, the cost of capital is treated as arising from two different sources:

- Double taxation; whereby investing in assets through an insurance company results in a higher tax on earnings than investing in the same assets directly.
- Agency costs; which arise where management rather than shareholders have control over capital invested and their interests may not perfectly align.

David then took the stage to go through some of the more technical calculation issues involved in implementing an MCEV model. He opened by suggesting that the principal challenge with MCEV is in translating a product into a series of options and that this is all up-front work at the outset, rather than an annual task. As an example of this, he spoke about how with-profits business can be valued as the present value of guaranteed benefits, plus a series of call options to allow for future bonuses.

Another issue that David raised was the decision of which risk-free rate to use. While this doesn't impact on the value of assets-linked cashflows, which are to be projected forward and discounted back at the same rates, it is very significant in valuing fixed cashflows. There is a range of potential "risk-free" rates available, e.g. government bonds, super-national bonds, LIBOR and swap rates. David's view was that swap rates were a good "risk-free" rate to use, as they are consistent with the pricing of corporate debt, are part of a deep and liquid market and have minimal associated credit risk.

Gavin then finished the presentation by providing a brief summary of the potential of MCEV as a framework for:

- Communicating with shareholders
- Pricing risks, guarantees and options
- Balancing risk and reward
- Evaluating de-risking strategies
- Assessing value in mergers, acquisitions and re-structuring exercises.

A lively but brief question and answer session then followed to conclude the meeting.

Colm Guiry

International Accounting

Colm Fagan, Vice President, Society of Actuaries in Ireland, with the speaker, Richard O'Sullivan

Richard O'Sullivan presented this paper to a well attended CPD meeting at the Fitzwilliam Hotel on January 21st. This topic is on many people's minds at the moment, with the IASB expected to issue a final Phase I standard by the end of March. Also, the need to produce comparatives for 2004 means that there is a requirement to prepare a closing 2003 balance sheet on an IFRS basis.

Background

The meeting began with an overview of the International Accounting Standards Board's somewhat tortuous progress towards producing an International Financial Reporting Standard.

In May 2002, the IASB split the insurance project into two phases. Phase I focuses on enhanced disclosure requirements with limited improvements to accounting practices for insurance contracts. It also provides a definition of an insurance contract. Phase II, for which an exposure draft is expected in early 2005, will provide a comprehensive framework for insurance accounting based on fair values.

The EU requires all companies listed on an EU stock exchange to prepare financial statements under IFRS for periods beginning on or after 1 January 2005. As there is a need for prior year comparatives, companies also need to prepare a closing 2003 Balance Sheet on an IFRS basis.

Key Principles

The goal of the IASB is to develop accounting standards that can be used worldwide – both between countries and across industries. The current differences in accounting treatments make it difficult to compare the results of insurance (and other) businesses globally.

Another incentive for change is the lack of transparency in current financial reporting. Users of financial statements require more information on the inherent risks of the business. Financial statements should also be more easily understood by users.

The IASB wishes to use the "asset and liability" approach based on fair values rather than the more traditional "deferral and matching" approach to insurance accounting.

Phase I

On 31 July 2003, the IASB published Exposure Draft 5 (ED 5), a draft of the IFRS for insurance contracts (Phase I). The objective of this was to provide an interim accounting standard on insurance contracts until Phase II is finalised.

A key issue for Phase I is the definition of an insurance contract. This is required in order to identify which insurance contracts fall within the financial instruments standard (IAS39) and which are exempt under Phase I.

The IASB defines an insurance contract as follows:
"A contract under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder or other beneficiary if a specified uncertain future event (the insured event) adversely affects the policyholder or other beneficiary."

It goes on to define insurance risk as "risk, other than financial risk, transferred from the holder of a contract to the issuer". Therefore, products with investment guarantees only do not qualify as insurance. If a policy does not qualify as "insurance" then:

- It is an "Investment" contract and must be valued using IAS39, or
- It is a "Service" contract valued using IAS18

The presentation continued with examples of contracts that were clearly "insurance" or "investments". Contracts that are unclear require further rules for classification, which may require major system changes.

Systems must also be able to cope with the fact that once a contract is defined as "insurance" then it is

Standards and Insurance

always "insurance". However, investment contracts can be reclassified as insurance if they acquire significant risk at a later date.

It was the IASB's intention to make it as easy as possible to qualify as insurance.The IASB allows current accounting practice for Insurance Liabilities until Phase II except:

- Catastrophe and Equalisation provisions are not allowed
- A loss recognition test should apply to liabilities less any Deferred Acquisition Cost
- An insurance liability should only be de-recognised when settled
- Reinsurance should not be netted off against liabilities

Under IAS39, embedded derivatives not closely related to a host contract must be separated and measured at fair value, with movements in fair value going through the income statement.

There were concerns that the IASB would require extensive unbundling of the insurance and deposit components of insurance contracts. However, it seems that this will only be required in limited circumstances – mainly financial reinsurance.

ED 5 has given a temporary exemption from policies with a "discretionary participation feature" for Phase I. These can be valued using current accounting treatments. However, the definition of what constitutes a discretionary participation feature is not clear, e.g. what happens to products where With Profits is a fund choice but the customer opts not to select it?

Assets must be valued according to IAS39/40. Therefore assets, other than those meeting the stringent held-to-maturity rules, will be booked at fair value. IAS39 also requires the use of bid value rather than mid market prices. This could have systems implications for many companies.

Under Phase I, contracts not meeting the above definition of an insurance contract will be accounted for as financial instruments under IAS 39. Policyholder premiums for investment contracts are then treated as deposits, which go straight to the balance sheet. Similarly, claims become withdrawals, unless payment is in excess of the surrender value.

The liabilities of financial instruments can be valued by using either the amortised book cost method or by fair value. However, if you choose the amortised book cost approach, fair values must be disclosed!

Richard then presented us with the profit signatures of various investment contracts under different accounting treatments – from Statutory through Embedded Value to Fair Value. These highlighted some of the financial implications for companies, with significant changes in reported profits possible. It also drew attention to issues regarding accounting under Phase I - many of which remain unanswered.

Phase II

The IASB indicates it will have an Exposure Draft for Phase II in early 2005 for proposed implementation in 2007. However, past experience suggests a strong possibility that these dates may slip. A Fair Value approach is very likely to be adopted, using best estimate assumptions for projection purposes and the risk free rate for discounting purposes.

The following tentative conclusions have already been mentioned:

- General approach should be Fair Value rather than Deferral and Matching
- Entry method (i.e. no profit on sale)
- Entity specific assumptions to be used where appropriate
- Market consistent interest and discount rates to be used
- Acquisition Expenses should be recognised as incurred (i.e. no DAC)
- Renewal premiums allowed only if valuable to policyholder

Conclusions

Clearly, we are going through a period of major accounting changes. Switching to IFRS for insurance companies may prove to be costly, depending on system implications and current accounting policy.
It may also be costly from a financial point of view, due to significant changes to reported profits.
It remains to be seen what stakeholders will use to measure the performance of insurance companies.

The meeting concluded with a very lively discussion.

The presentation is available to download on the Society's website (http://www.actuaries.ie)

Stephen O'Kane

Investment Risk for Defined

Introduction

The Stephen's Green Club was the venue for the Society's well attended evening meeting on February 24th entitled "Investment Risk for Defined Benefit Pension Schemes". The meeting was chaired by the Society's President, Mr Pat Healy, whose introductory remarks highlighted how investment risk had come to the fore in recent years and questioned how the profession could better identify and communicate investment risk to interested stakeholders. The President also thanked the Working Party for the time and effort they had put into their report before handing over to the Chairman of the Working Party, Mr Tom Murphy.

Report on Investment Risk in DB Pension Schemes

Tom prefaced his remarks by referring to the full Report on Investment Risk in DB Pension Schemes and the supplementary accompanying paper "Measuring Investment Risk in Pension Funds", both of which are available on the Society's web site, and encouraged the audience to read the full papers.

Tom began his presentation by clearing up a few myths and emphasising that the Working Party were not suggesting that:

- all DB funds should invest in bonds
- there is such a thing as a risk free portfolio for all DB plans
- trustees or employers should (or should not) take risks

Tom went on to explain what the Working Party were suggesting, namely that:

- bonds can be used to reduce risk
- a liability reference portfolio (LRP) exists for all DB plans
- the LRP can be identified and risk should be measured against the LRP
- stakeholders should be educated on the issue of investment risk and risks taken should be measured and communicated

Next Tom discussed the Working Party's terms of reference. These included assessing the suitability of each asset class with regards to pension fund liabilities, assessing "appropriate" investment strategies under various scenarios, how to communicate and account for investment risk to interested stakeholders, potential amendments to GN9, recommendations and how to manage any transition from current practice to any new proposal.

Tom then went on to illustrate how the pensions environment has evolved in recent years, drawing particular attention to the rapid growth in discontinuance liabilities resulting in an increased focus on discontinuance funding levels. Tom then handed over to Mr Shane Whelan who discussed the issues surrounding Measuring Investment Risk in Pension Funds.

Measuring Investment Risk

Shane began by considering what we mean intuitively by "Investment Risk" and went on to formally define Investment Variation and Consistent Valuation Methods coinciding with our intuitive concepts. Shane then went on to outline a number of consequences of investment risk under consistent valuation methods. In particular, he noted that if assets are valued at market value and there exist assets that perfectly match the liabilities then investment variation is positive only if the actual return on assets exceeds the return on the matching asset (i.e. the return on the matching asset is the hurdle rate for the return on the assets to show positive variation). The extent of the variation would, however, depend on the method and assumptions used.

Next, Shane explained that investment risk for ongoing and discontinuance valuations should be considered separately as they will be different. However, for the meeting, Shane chose to concentrate on Discontinuance Valuations.

Under a Discontinuance Valuation assets are taken at market value. The question then arises as to how to consistently value the liabilities. Shane explained that this can be done for known nominal liabilities falling due within the next three decades using yields on Euro denominated Government Bonds. He also explained how this can be very closely approximated for index linked liabilities falling due within the next thirty years (albeit with assumptions regarding convergence of Irish and French/Eurozone inflation). For liabilities with a term in excess of thirty years, Shane explained that this can be approximated by either extrapolating the yield curve or simply using the yield on an appropriate thirty year bullet bond (i.e. a stripped bond with a single payment in thirty years' time).

Shane then went on to consider the Standardised Investment Variation arising under different investment strategies over the past one hundred years and, arguably of more relevance, over the past thirty years based on historical data. Interpreting the geometric mean as the "Return" and the standard deviation as the "Risk", Shane's analysis showed that while an equity based investment strategy offered the greatest "Return" it did not necessarily involve the greatest "Risk". In particular, it was noted that both long bonds and cash offered significantly lower returns and significant levels of Investment Risk (higher in the case of cash) relative to equities. Shane also showed how these results held for both the US and UK markets.

Next, Shane considered the impact of

Benefit Pension Schemes

the time period chosen for assessing the Investment Risk. As expected, when the period under review increases the range of possible outcomes also increases ("the expanding funnel of doubt") but, significantly, while the expected funding level increases as the period under review increases so too does the probability of extremely poor outcomes. Hence, risk averse investors may actually prefer more frequent reviews.

Shane concluded by noting that we can both define and estimate investment risk and find a portfolio to minimise it (depending on the method and basis used). By taking assets at market value we can also find the LRP and therefore quantify the effect of Investment Risk. Shane then handed back to Tom to outline the Working Party's recommendations.

Recommendations

Tom explained how the working party had considered whether the liability discount rate should reflect the LRP (i.e. determined independently of the investment strategy actually pursued) which would lead to any excess returns generated as a result of taking excess risk being recognised as they occur rather than taking credit in advance. However, it was felt that the resulting shock would be too severe and that the proposal would severely diminish flexibility on the pace of funding to be adopted.

As regards the suitability of asset classes with regard to pension fund liabilities, the Working Party were recommending that assets should not be assessed in isolation of the liabilities and that while bonds were the primary constituent of the LRP other asset classes should earn their place on return grounds relative to bonds. However, the suitability of any particular strategy will depend on the particular circumstances of the scheme.

The Working Party were also recommending that future actuarial valuations should seek to communicate and illustrate the concept of Investment Risk with a dedicated section in the valuation report describing the liability profile and likely future pattern of cashflows, the concept and derivation of the LRP and its implied discount rate together with sensitivity analysis and/or resilience tests. While the actuary should comment on the results it should be made clear that such comment does not construe Investment Advice.

Tom explained that the Working Party were undecided as to whether their recommendations should be incorporated into GN9 or a separate Guidance Note. He concluded by noting that a Task Force of the Canadian Institute of Actuaries had reached similar conclusions to the Working Party as had several papers in the UK.

Questions & Answers

The President thanked the speakers for their presentations and invited questions and comments from the floor.

A number of speakers made the point that satisfying the minimum funding standard was not the primary objective in pension funding. In addition, it was noted that the minimum funding standard has evolved over time and may well be subject to further change in the future.

While some speakers agreed that under GN9 there should be a clear statement of both ongoing and discontinuance funding positions and sensitivity analysis they felt that the Working Party's recommendations were possibly over prescriptive.

A number of speakers expressed reservations that the recommendations could lead to schemes pursuing a bond based investment strategy with greater expected cost, thereby accelerating the decline of DB schemes. On practical grounds a couple of speakers felt that it would be hard to justify the additional work (and cost) involved in following the Working Party's recommendations. In addition, difficulties in communicating the relevant concepts to interested stakeholders were anticipated.

One speaker queried the added value of the recommendations making the point, which was accepted, that an Asset Liability Model provides a much greater insight into the level of Investment Risk associated with different investment strategies.

A number of speakers accepted that the Profession would need to move to provide more information in this area in order to remain credible and to enable informed decision making.

Finally, other speakers noted that pension funds face a variety of risks (salary inflation, legislative, demographic, etc.) which weren't being singled out for special attention. A further factor that was highlighted was the gearing effect of changes in interest rates for large mature schemes with significant pensioner liabilities. Again the difficulties of adequately explaining and illustrating these risks to interested stakeholders was noted.

Ronan Fitzpatrick

Members of the Working Party were:

Tom Murphy (chairman), Mary Cahill, John Caslin, Derek Hunter, Eamonn Liddy, Pat Ryan, Shane Whelan.

Website

If you have not given the Society a username (maximum 5 characters) and password (maximum 8 digits) in order to access the Members' Section of the website, please email the Society with these details, and the facility will be set up for you. Email: **info@actuaries.ie**

Quiz Winner

Brian Dreeling, Mercer HR, was the winner of our 20 Question's Quiz in the February issue. Hewitt & Becketts have kindly sponsored the prize. A magnum of champagne is on its way to Brian.

Des Ryan, FSAI, Memorial Bursary Established

In memory of the late Des Ryan, FSAI, Mercer Human Resource Consulting has funded, with the assistance of Professor Phil Boland, a four year bursary in the UCD – BAFS programme for a student in need.

Des's wife, Helen, his family and his colleagues and friends in Mercer felt that this bursary, although appropriately low-key, would be a very fitting way to remember him and assist a deserving student in overcoming some major financial challenges in pursuing an actuarial career.

Golf

Matchplay Competition

The Piers Segrave-Daly Matchplay Competition starts in April. Good luck to all!

Golf in the West

Connemara Golf Club on Friday 28th May and Oughterard on Saturday 29th May. If you haven't entered, contact the golf captain, Jonathan Goold.

Captain's Day

Thursday 22nd July in Malahide Golf Club

You can enter and pay for the Matchplay and Captain's Day through the Members' Section of the Society's website under the **Social Section.**
Please contact Jonathan Goold directly regarding Golf in the West – **Jonathan.Goold@acornlife.ie**

Affiliate Membership

Affiliate membership of the Society of Actuaries in Ireland is now available to professionals who work with actuaries or are involved in similar fields of interest.
A brochure is posted on the Society's website under About the Society/Application Forms. If you think any of your colleagues or business contacts would be interested in this category of membership please let the Society know, or forward them a link to the brochure.

Annual Ball

- Don't forget to diary Saturday 22 May for our Annual Ball in the Four Seasons Hotel.
- You can book online www.actuaries.ie/members' section/social.

On the Move

Fellows John Hannon is moving from Centre Solutions to NCB.

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