

Newsletter

February 2005

The Society of Actuaries in Ireland

Education Meeting- 9th December 2004



John Appleby, Michael Marsh, Shane Whelan, Pat Healy & Duncan Robertson.



Lis Goodwin, Michael Hayes, Nikolai Dokuchaev, Gareth Colgan, Mike Claffey, Aisling Kennedy, Philip Boland

The Society's Education Meeting with Lis Goodwin, Chief Education Executive, The Actuarial Profession, together with representatives from the universities and the Society's Education Committee has become an annual event. In attendance were:

Actuarial Profession:

Dr. Lis Goodwin,

DCU:

Dr. John Appleby
Michael Marsh, FSAI

NUI Cork:

Dr. Tom Carroll

NUI Galway:

Dr. Michael Hayes

NUI Limerick:

Nikolai Dokuchaev

UCD:

Prof. Philip Boland, Hon. FSAI

Gareth Colgan, FSAI

Dr. Shane Whelan, FSAI

Society of Actuaries in Ireland:

Pat Healy, FSAI

President

Duncan Robertson, FSAI

Education Committee Chairman

Mike Claffey, FSAI

Co-ordinator of the Society's
Professionalism Course

Aisling Kennedy, FSAI

Society's Director of Professional
Affairs

Mary Butler,

Society's Director of Member
Services

This meeting is an ideal opportunity for an exchange of views by the universities on their actuarial and financial degree courses and of course to get input from Lis Goodwin. As the new education strategy came into effect on 1 January 2005, there was much discussion on the impact on universities and students alike. Indeed following the meeting, Lis Goodwin, addressed students and employer representatives to update them on the forthcoming changes.

That evening eleven of our members celebrated having qualified from the September 2004 exams. They had no worries about the new education strategy! Congratulations to all of them.

New Qualifiers

Dan Carroll	Bank of Ireland Life
Conor Darcy	Canada Life
Una Flynn	Irish Life
Billy Galavan	Eagle Star
Gordon Lee	Eagle Star
Rose McNally	Hibernian
Eoin O'Baoighill	AXA
Paul O'Byrne	Watson Wyatt
Paul O'Callaghan	Bank of Ireland Life
Joanne Roche	Hewitt & Becketts
Marie Ryan	Capita Life & Pensions

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Evening Meeting Review: Stochastic Mortality Modelling

Annuitant mortality was once again under scrutiny at Tony Jeffery's presentation to the Society's evening meeting in the Westbury Hotel on October 20th. Tony was presenting results co-produced by himself and Phillip Olivier.

Overview

Unlike most previous discussions on the subject of annuitant mortality, this presentation did not consider best estimate mortality assumptions or anticipated trends in future experience. Instead, the focus was on the impacts of fluctuations in mortality experience.

Using a number of different stochastic techniques, Tony, in conjunction with Phillip Olivier, estimated the level of reserves needed to cover potential adverse fluctuations in mortality experience.

Even using moderate assumptions, their various models suggest that a margin of in or around 5% of the deterministic reserve could be needed to cover mortality fluctuations. This extra reserve would be required despite the fact that the deterministic reserve already incorporates all expected future improvements. However, Tony emphasised throughout the presentation that the study of mortality fluctuations is very much in its infancy and that the results in the paper are tentative estimates rather than definite conclusions.

Pure Stochastic Variation

In the first part of the presentation the margin required to immunise an annuitant portfolio against pure stochastic fluctuation was considered.

A simple binomial model, based on a group of identical lives, with each life having q_x chance of dying each year gave the following results:

- For a scheme of 100 annuitants an extra reserve equal to 4% of the

deterministic reserve is required (95th percentile).

- As you would expect, this percentage decreases quickly as the number of lives increases.
- The reserve required is lower if the valuation interest rate is higher.
- As age increases the extra reserve, as a percentage of the deterministic reserve, increases.
- Curiously, the absolute value of the reserve doesn't seem to vary significantly with age.
- The lighter the mortality in the base table the lower the additional reserve required for mortality fluctuations.

When this binomial model is applied to a portfolio of non-identical lives some unexpected and counter-intuitive results emerge:

- The total extra reserve for a scheme with 500 identical lives increases by 40% if one single pensioner's benefit is increased to 5 times its original level.
- The reserve required for the 3,682 annuitants on the books of Friends First is about three times as high as it would be if they had 3,682 identical lives.

It is critical therefore that the actual portfolio is considered when assessing appropriate margins. A simplified model based on sample lives will not give an adequate result. It is particularly important that the actual benefit amounts, as opposed to ages, are modelled accurately.

Population Fluctuation

Tony went on to provide compelling evidence that mortality variations from year to year are greater than can be explained by chance or "pure stochastic fluctuation" alone. He plotted annual mortality rates since 1950 for each quinquennial age group based on data from England and Wales. Mortality levels were shown to fluctuate significantly from year to year. However, this simple

plotting of mortality rates demonstrated that the annual variations for each age band moved together. The correlation was particularly strong at older ages.

Tony alluded to recent studies that had investigated this phenomenon. These studies had shown that annual mortality fluctuations are very strongly correlated to average winter temperature and incidence of flu epidemics. In fact, these two factors had been shown to explain about 80% of the annual fluctuations in mortality levels.

Pointing once again to the graphs of mortality rates, Tony drew attention to two major changes in annuitant mortality since 1980. Firstly, the rate of improvement in mortality has increased. More importantly for the purposes of this study, the magnitude of annual fluctuations has reduced significantly.

Interestingly, the reduction in annual mortality fluctuations that occurred about 1980 coincided with the introduction of flu injections and improved central heating in homes. These developments reduced the importance of the factors that had previously been largely responsible for the annual fluctuations i.e. flu outbreaks and cold winters.

Two other features of the data simplified the modelling process significantly:

- Mortality rates in consecutive years are independent i.e. one bad year does not tend to be followed by another bad year or a particularly good year. This was a welcome result as it simplified the modelling process significantly.
- The percentage annual variation in the post 1980 data is largely independent of age and can reasonably be modelled as a constant percentage of the mortality rate.

A normal curve was found to fit the data well. Using this model, Tony concluded that the extra reserve to cover population mortality variation, over and above pure stochastic fluctuation, was only about 0.1% of the deterministic reserve.

Smith Olivier Model

Phillip Olivier wrote this section of the paper. However, Phillip was unable to attend the meeting so Tony gave a comprehensive summary of the Smith Olivier Model and its conclusions.

The model was developed for Internal Capital Assessment (ICA) work in the UK and uses a very different approach to the model of pure stochastic variation above. It is a stochastic model of long-term trends in mortality rather than a model of binomial variation.

This model incorporates the annual valuation process into the model allowing future estimates of mortality to be changed in each year of the projection. The future projected changes in mortality estimates are driven by a random factor that follows a Gamma distribution. The model is calibrated using 1950 to 1999 data.

According to this model a margin of about 5% of the deterministic reserve is required to be 95% certain that mortality fluctuations will not lead to shortfalls. If a 99.5% confidence limit is considered more appropriate a much larger reserve would be required (in the region of 10%). The reserve required for female annuitants is a little higher than that required for males.

Random Walks

The final model presented was a Random Walk Model. This again assumes that a best estimate base mortality table, incorporating all known future trends, is available. It then considers the impact on the reserve required if annual rates of mortality improvement vary from the level assumed in the base case. The variations are assumed to follow a random walk.

Tony demonstrated that random steps of 0.2% to 0.3% are appropriate for use in the model. Therefore, the key assumption underlying this model is that the rate of mortality improvement varies from the base case by 0.2% to 0.3% each year with the variations following a random walk.

If an unbiased random walk is modelled then the steps are equally likely to result in rates of improvements that are higher or lower than the base case. Such an unbiased walk results in a mortality fluctuation reserve of about 5% of the deterministic reserve (95th percentile).

As with the Smith Olivier Model the extra reserve is much larger if a higher percentile is chosen.

The reserve increases significantly if a biased walk is modelled where the probability of unfavourable variations from the base rate of improvement is assumed to be greater than the probability of favourable fluctuations.

Tony also presented the results of accelerating walks and walks with minimum levels of mortality improvements.

Conclusions

The various models point to a reasonably consistent result. To achieve 95% certainty of being able to meet all annuity payments as they fall due, an additional reserve of about 5% of the deterministic reserve is required. However, this conclusion is sensitive to the assumptions used in the models. The additional reserve covers mortality variation only. A separate reserve is needed to protect against interest rate fluctuation unless assets and liabilities are perfectly matched. Of course, matching of assets and liabilities for the purposes of minimising interest rate exposure is made all the more difficult by mortality fluctuations.

Q&A Session

A number of interesting points were raised in the course of the lively

discussion that followed the presentation.

Much of the discussion surrounded the appropriate choice of confidence limit. In the course of the presentation Tony had demonstrated that the 95th and 99.5th percentile results differ dramatically.

Some speakers suggested that the general public would be shocked if insurance companies and pension schemes had any more than a 1 in 200 chance of being unable to meet their obligations in full. Even this would translate into one company per year in the UK having to renege, in part at least, on its commitments to annuitants. The consensus was that the general public demands certainty but is not prepared to pay for it!

Speakers also suggested that the reaction of the FSA next year to the results of the ICA work currently under way in the UK should give an indication of the confidence level that might be considered appropriate. Interestingly, Tony mentioned that he has already been asked by the FSA for a copy of his paper.

The issue of joint life annuities was also raised. Tony indicated that he suspected that reserves required for joint lives would be lower than for single lives despite the lack of independence of mortality rates. The reason for this is that the combined mortality rate would be lower than for a single life.

Finally, one speaker pointed out that the conclusions of this study could ultimately lead to more capital being required to back annuity business and to a resultant increase in annuity rates in the marketplace - potentially more bad news for those saving for retirement.

The slides used in the presentation are now available on the Society's website as well as the paper.

Andrew Hodnett

Evening Meeting Review: Operational Risk– management and measurement

Kate O'Reilly and Ian Carey gave a stimulating talk on the management and measurement of operational risk to the Society on November 4th in the Davenport Hotel, Dublin 2.

Kate O'Reilly spoke first and began by defining operational risk as that of direct or indirect loss resulting from inadequate or failed internal processes, people, and systems or from external events. This is a wide-ranging definition and includes such risks as the following or those arising from the following:

- internal fraud;
- external fraud;
- employment practices and work place safety;
- clients, products, and business practices;
- damage to physical assets;
- business disruption and system failures; and
- execution, delivery, and process management.

Some recent examples of operational risks are those involving Barings Bank, Equitable Life, and Enron, as well as the scandals surrounding the overcharging of customers by AIB and NIB and the mis-selling of pensions in the UK.

Although operational-risk management is not compulsory in Ireland yet, there is a movement towards implementing it on a voluntary basis. This is being done for three reasons: it is best practice, it can protect the company and directors, and regulation making it compulsory is inevitable. In the UK, meanwhile, the regulator—the Financial Services Authority (FSA)—is becoming more prescriptive, a trend also seen in other countries. Kate gave some examples of this increasing prescriptiveness of the FSA.

The other trend seen is that measures of capital requirements for financial-services companies are

becoming increasingly sensitive to risk. Kate pointed out that the more sophisticated and developed the measure is, the more having good operational-risk-management processes in place will be rewarded. In the UK, firms calculate this capital requirement using stress tests and scenario analyses or economic models. So far, most of the focus has been on the calculation of the capital required rather than on the need to demonstrate effective risk management. Kate emphasised the need for firms to ensure that they have a robust risk-management framework in place and that they can show that this framework is in place and is affecting behaviour.

The next part of Kate's talk concentrated on best practice for operational-risk management, using the Basel II definition of best practice (please see 'Sound Practices for the Management and Supervision of Operational Risk' by the Basel Committee on Banking Supervision, which can be found at www.bis.org/publ/bcbs96.htm). This definition of best practice covers the following:

- oversight of operational risk provided by the board of directors or management committee;
- monitoring, measurement, and active measurement of operational risk by line management;
- the role of supervisors; and
- the degree of disclosure of operational risk.

Kate outlined the steps to be taken to achieve best practice:

- understand what needs to be achieved and what the current internal approaches and activity are;
- agree what constitutes best practice, identify any gaps in current policies and processes, and develop and document new or enhanced policies and processes; and

- ensure that roles and responsibilities reflect the new policies and processes, that adequate management information is available, and that audits take place.

Risk-management activity needs to be embedded in and integrated across the business. Kate produced an organisational diagram of how this would work and the roles and responsibilities of each area, that is, the board; the executive, investment, risk, and audit committees; the risk, compliance, and auditing functions; and each operating entity.

Kate then returned to the need to demonstrate that risk management is affecting behaviour. The existence of a risk-management framework is not sufficient evidence of best practice: the framework should affect decisions and uncover problems. Companies should look for evidence of compliance with the principles of risk management, awareness and management of key industry risks, improvement in risk-management documentation and data, and appropriate governance arrangements and management information. All this can be encapsulated in one key question: can the company produce evidence of effective risk management?

Kate finished her talk by giving numerous examples of the risks applicable to the administration of a life-insurance product and the pricing and design of a general-insurance product, and by reminding everyone present that operational-risk management is never ending.

Ian Carey's talk began with him defining what a stress test is and describing a stress test that could be used to measure a sample operational risk: mis-selling claims from customers with mortgage endowments. Stress tests measure the capital required to

guard against extreme outcomes, rather than the best-estimate outcomes; they look at the tail of the distribution rather than the mean. In the UK, an extreme outcome means that there is a risk of ruin of 1/2% within one year.

It is important to identify risk exposures, and Ian presented a list of the main causes of insurance-company failure, which causes include reinsurance failure, unforeseen catastrophes and claims, gross incompetence, rapid expansion, investment failure, under-pricing, and under-reserving.

After identifying risk exposures, a company should prioritise its risks; a risk-assessment matrix can be useful in accomplishing this. A risk-assessment matrix plots the impact of each risk against its likelihood. The company should assume any risks with a low impact and a low likelihood and avoid those risks with a high impact and a high likelihood. If a risk is highly likely and has a low impact, the company should control it; whereas if a risk is not very likely and has a high impact, the company should seek to transfer it. Ian showed where various insurance-company risks fit in this matrix.

Ian illustrated the development of stress tests. The tests should cover all reasonably foreseeable adverse events. For each event, it should be assumed to have occurred, and the worst-case impact should be assessed at the chosen confidence level. This needs to allow for the effectiveness or failure of controls. It can be very difficult to ensure that the results are realistic, and there can be disagreement between internal and external assessments of the risk—what is internally assessed as a rain cloud could be externally assessed as a mushroom cloud, in Ian's colourful language. Most insurers believe that they are running a low-risk business, while external analysis often suggests that there are significant risks; Ian believes that a middle ground is needed. For the insurer's analysis to be credible, the insurer must incorporate relevant data and be able to explain its assumptions. Ian

pointed out that the corporate structure of an insurer can reduce its exposure to operational risks, for example, by using third-party administrators.

Ian then moved on to the modelling of operational risks. There are several possible approaches, including some that most actuaries are probably familiar with: actuarial modelling, probability distribution functions, stochastic modelling, regression, and Bayesian methods. Actuarial analysis will generate good answers with complete data; if an extreme event is missing from the data, however, the analysis will underestimate the risk. Extreme-value theory can help in these situations.

Most insurers are using simplistic stress tests to measure operational risks, while Ian believes that significant further effort is required to add additional value. He compared the current stress tests against benchmark-based approaches and best practice under such headings as focus on risk, data needs, level of sophistication, and transparency. Using advanced modelling techniques can help insurers to show how their controls are reducing operational risks. They can also bring significant capital savings, which come from the following five sources:

- an improved understanding of how controls can reduce risk;
- the ability to identify hedges against the risks;
- a focus on loss distributions rather than worst-case scenarios for each risk;
- an improved understanding of how risks interact with each other; and
- the ability to introduce more-advanced analytical techniques to combine data and expert judgement.

Ian finished his talk by highlighting that operational risks do not just happen: they are the result of operational failures. There is a chain of events that leads from risk factors through risk triggers to the risk event. The risk factors are regular occurrences and are usually detected; the risk triggers are not necessarily

detected and do not necessarily cause a risk event; and the risk event is the eventual loss and is certainly detected. Ian suggested the use of a 'risk thermometer' to report on the precursors to the risk events. This 'risk thermometer' would take into account such soft factors as the absence of experienced staff; these soft factors often combine to create circumstances that operational failures can occur in.

The chairman, **Pat Healy**, then opened the discussion up to the floor. The general feeling was that operational-risk management was essential, but there was scepticism about the ability to measure operational risks and estimate the costs in advance. One speaker, sounding rather like Donald Rumsfeld, stated that while it was possible to measure the known unknowns, he could not see how the unknown unknowns could be measured. The uncertainty surrounding measurement of operational risks, felt another speaker, could lead to the possibility of actuaries being held responsible for the next disaster; this could arise if the actuaries got the numbers wrong, even if the operational-risk managers were at fault for failing to put adequate controls in place.

Another speaker raised the issue of the effect on the rating of insurers of introducing operational-risk capital requirements, although it was suggested that rating agencies tend to be more concerned with operational-risk management than with capital requirements.

The problems presented by a lack of data led one speaker to wonder whether insurers could pool their data and include near misses as well as actual operational failures.

Some other comments from the floor were that operational-risk management cannot guard against a corrupt board of directors and that dominance risk can be a considerable risk that can be controlled but not measured.

David Kavanagh

IFSRA Publishes Irish Insurance Statistical Review

During October the Irish Financial Services Regulatory Authority (IFSRA) published the Insurance Statistical Review 2003¹. The Review, which was previously known as the Insurance Annual Report (or colloquially as the Blue Book), has been given a make-over and appears now in the new IFSRA corporate colours rather than the traditional blue. As was the case with the Blue Book, the Review includes statistical and financial data relating to the Irish Insurance industry. However, this year's review also includes some new content arising from the recommendations of the Motor Insurance Advisory Bureau (MIAB). In particular there is a breakdown of motor statistics between private and commercial business as well as further detail on the 2003 accident year from the largest motor insurers.

In the non-life insurance area the published statistics confirm recent reports that the industry has achieved high levels of profitability in 2003. Profits have been particularly strong for motor classes, with liability classes also making a substantial contribution.

The review also signals IFSRA's intention to consult on modifications to the non-life returns in the near future, and summarises EU developments in the regulation of reinsurance companies.

Non-Life Insurance Highlights

The high level statistics in the Review are summarized below, with 2002 figures also given for comparison purposes. Gross Written Premium has grown from €6.4bn to €7.4bn with the vast bulk of the growth in the non-Irish risks for which premiums have grown by almost 29%. Growth for Irish premiums has been retarded because of a 0.4% decline in motor premiums. This is consistent with media and other reports of premium reductions in response to improved claims performance.

2003 Gross Revenue a/c €m	Irish Risks				Foreign	Grand
	Motor	Liability	Other	Total	Risks	Total
Net Written Premium	1905.4	966.7	1516.1	4388.3	2966.3	7354.6
Earned Income (EP)	1952.6	929.5	1473.0	4355.2	3130.1	7485.3
Paid Claims	994.3	345.3	611.5	1951.2	839.3	2790.4
Incurred Claims	1379.6	719.6	622.1	2721.2	1135.4	3856.6
Expenditure	281.1	152.6	371.3	805.0	450.2	1255.2
UW Profit	292.0	54.6	476.1	822.7	1152.6	1975.2
Inv Income	181.7	106.4	51.5	339.6	88.4	428.1
Ins Result	473.7	161.0	527.6	1162.3	1241.0	2403.3
Loss Ratio	70.7%	77.4%	42.2%	62.5%	36.3%	51.5%
Expense Ratio	14.4%	16.4%	25.2%	18.5%	14.4%	16.8%
UW Result % EP	15.0%	5.9%	32.3%	18.9%	36.8%	26.4%
Inv Income % EP	9.3%	11.4%	3.5%	7.8%	2.8%	5.7%
Ins Result % EP	24.3%	17.3%	35.8%	26.7%	39.6%	32.1%

2002 Gross Revenue a/c €m	Irish Risks				Foreign	Grand
	Motor	Liability	Other	Tot Irish	Risks	Total
Net Written Premium	1913.1	846.4	1360.2	4119.7	2303.1	6422.7
Earned Income (EP)	1801.7	755.4	1215.1	3772.1	2134.2	5906.3
Paid Claims	1121.3	356.5	604.3	2082.1	853.5	2935.7
Incurred Claims	1542.2	755.7	750.6	3048.6	1190.5	4239.1
Expenditure	231.3	125.1	298.3	654.7	357.8	1012.5
UW Profit	28.9	-125.8	166.2	69.3	352.3	421.6
Investment Income	168.8	60.3	39.3	268.4	72.1	340.5
Insurance Result	197.8	-65.5	205.4	337.7	424.4	762.1
Loss Ratio	85.6%	100.0%	61.8%	80.8%	55.8%	71.8%
Expense Ratio	12.8%	16.6%	24.5%	17.4%	16.8%	17.1%
UW Result % EP	1.6%	-16.7%	13.7%	1.8%	16.5%	7.1%
Investment Income % EP	9.4%	8.0%	3.2%	7.1%	3.4%	5.8%
Insurance Result % EP	11.0%	-8.7%	16.9%	9.0%	19.9%	12.9%

Reported loss ratios have reduced dramatically, with the overall loss ratio down from 71.8% to 51.5%. Despite the drop in premium income the loss ratio for motor risks has fallen from 85.6% to 70.7%, surely a signal of further premium reductions to come.

However, the loss ratio reductions have been consistent across the board. The 2003 loss ratio of 77.4% for liability business will lead to pressure for reductions in commercial liability premiums. Reflecting the exceptionally low loss ratios, the industry has produced an underwriting profit in 2003 in all the major classes. It is also interesting to note that the actual claims paid during 2003 declined in absolute terms relative to 2002 for motor and liability classes.

Expressed as a percentage of earned premium, expenses have for Irish risks risen slightly, mostly reflecting the decline in motor premiums. This may well lead to some pressure on costs in the near future.

Some Interesting Motor Statistics

In response to the recommendations of the MIAB, the Review contains two interesting tables giving more detail on motor insurance.

The first is a breakdown of motor into Private and Commercial business. The MIAB had requested a more detailed breakdown but the figures presented are the currently available statistics from the IIF, in which "Personal" includes motorcycle and "Commercial" includes motor-fleet.

Gross of Reinsurance		2001	2002	2003
Loss Ratio	Private Motor	95.1%	85.8%	70.4%
	Commercial Motor	101.6%	81.3%	74.5%
UW Result as % of Earned Premium	Private Motor	-9.6%	0.9%	15.4%
	Commercial Motor	-14.8%	7.5%	13.2%

The table above summarises the improvements in loss ratio and underwriting result from 2001 to 2003. It is clear that the improvements have been strong in both Private and Commercial motor.

The second element of new detail in the Review is a breakdown of the motor insurance statistics for the 2003 accident year for the ten largest motor insurers. The figures given are effectively the 2003 data from Form 8 of the IFSRA returns. The data is not immediately useful in the format given and would benefit from the inclusion of the corresponding Earned Premium data.

Applying approximate earned premium data highlights a very great variation in estimated loss ratio for the 2003 accident year across the companies concerned. Large variation is also evident in the estimated average cost per claim by insurer. It will be interesting to see how the wider availability of this information impacts on the market in the future.

Future Developments in Non-Life Statutory Returns

Recommendation 31 of the MIAB related to the format and content of Statutory Returns. The 2003 Review notes that the financial returns are being examined with a view to

revised formats being put in place during 2005 following consultation with the Irish insurance industry. Reading between the lines this is also likely to affect the frequency with which returns will be required.

EU Reinsurance Developments

The Review draws attention to the draft EU Reinsurance Directive which proposes a model of regulation based principally on current direct insurance supervision rules. The Directive applies to reinsurance undertakings in the EU that conduct only reinsurance business. Companies that write both direct business and reinsurance will continue to be regulated under the direct EU Insurance Directives.

Declan Lavelle
HLD Actuarial Consultants

Christmas Charity Table Quiz

This year the newly formed social committee decided to replace the traditional Christmas Drinks Evening in the Stephen's Green Club with a Charity Table Quiz. It was a huge success with 32 tables. The quizmaster was Stephen Lalor, an affiliate member of the Society. In Stephen's own words he set questions to challenge the mighty intellectual forces of the actuarial profession and duly presented signed

Supergenius Certificates to the winning team!

The winning team comprised of Paul Victory, Joseph O'Dea, Eleanor O'Callaghan and Donal Keating. They also received Christmas hampers for their efforts. There were also some seasonal Christmas spot prizes during the night.

The President, Pat Healy, announced

that the Society would meet the costs of the evening and that the entire proceeds, which amounted to €3,285, would go to charity. The winning team very appropriately chose Barrestown Gang Camp as the chosen charity this year. This was the charity chosen by the Goold family on the sudden and untimely death of Jonathan's wife, Liz, RIP.



Evening Meeting Review: "Being Actuarial with the Truth"

There is an urgent need for Actuarial Truth to mean "Clarity" and not "Confusion", which probably reflects more accurately the current thinking- so says Simon Carne in his paper "**Being Actuarial with the Truth**" discussed at the Society Meeting of 9th November 2004.

This was the first of two November discussions on the Great Debate in the pensions arena. Simon Carne does not apologise for advocating equity investment for pension schemes because he firmly believes that they have their rightful place in the pension scheme investment portfolio. Simon speaks well and sends a message that sits well with the conventional view (equities are good for your pension scheme) which makes his argument persuasive. Is he right?

But wait, there is no Great Debate says Simon Carne. The two competing approaches produce different conclusions because they answer different (albeit similar) questions. Confusion is often caused because the same terminology is used with different meanings.

Simon Carne summarised his arguments before the questions commenced.

- i) Pensions for future generations cannot be guaranteed even if there were a will to make them guaranteed. The next generation cannot be forced to pay pensions to this generation and may not be able to. For the avoidance of doubt, this does not mean they won't and pensions must automatically fail.
- ii) Investing in bonds is not the solution. They are not a match for the liabilities. They do not take into account salary increases nor demographic changes which mean that payments could be

higher or lower, sooner or later than the predicted liabilities.

- iii) Pension funds are so large (in the UK economy, at least) that if all pension funds suddenly switched into bonds from equities, equity markets would falter, companies would be forced to issue bonds but they would be risky bonds. "Risky equities" would be replaced by "risky bonds".
- iv) International accounting rules are based on bonds but schemes are not invested in bonds. The so-called transparency created is misleading.
- v) The Pension Protection Fund (in the UK) may spread the cost of failure more fairly. Spreading the cost of failure is not an enticing prospect but perhaps the best realistic outcome.
- vi) A "valuation" is not a valuation but a budgeting exercise. A projection of future cashflow would be a more appropriate form of presentation than discounted value. The term valuation is misleading.

And so the debate began with questioners variously probing the logic.

How does the situation of an Irish scheme with different priorities on wind-up fit into the model? It is not contradictory.

What of FRS17, using bond based assumptions with equity investments? Companies must appraise analysts of the true position and show outcomes if equity outperformance is realised to avoid analysis being based on the bond outcome alone.

Do equities outperform bonds? This is generally accepted and intuitively correct. There are greater risks in investing in equities and so investors will seek a greater reward to compensate for the risks or won't invest. Evidence in the twentieth

century suggests that the logic holds.

What of members expectations that their pensions are guaranteed?

They are being misled and should be made aware of the risks involved in the traditional pensions model. Here appears to be one of the major points of contention.

Financial Economics? Are we not told that these arguments are contrary to Financial Economics?

No, most definitely not. What they do is recognise the risk inherent in the pension promise.

As the debate continued, so did the compliments about Mr Carne's paper. You may not agree with the views expressed but it is well-written.

If Round Two is as well presented as Round One, then the overall level of understanding within the Profession in Ireland will have been considerably enhanced, even if we are no nearer agreement on a "correct" way forward.

Ken Edgar

P.S. Round Two was led by Charles Cowling, another excellent communicator but with a somewhat different message. Charles presented his paper at the evening meeting held on 24 November. This meeting is reviewed on pages 9 and 10 of this newsletter.

Simon Carne is an independent consultant and commentator on the economic issues in competition, regulation, and litigation. He is a member of Institute Council. His paper "Actuarial with the Truth" is available from the Society's website.

Evening Meeting Review: Funding Defined Benefit Pension Schemes

Charles Cowling gave a presentation to a very well attended evening meeting at the Stephen's Green Club on November 24th.

Overview

This paper was presented to the Institute of Actuaries earlier in 2004 and puts the case for revising and tightening standards on actuarial funding advice (i.e. GN9) in relation to UK occupational pension schemes.

While some important distinctions between the Irish and UK situations were pointed out during the presentation, the paper nevertheless brings some strong and thought-provoking arguments up for discussion in relation to actuarial advice for Irish schemes.

Background to Defined Benefit Pensions in the UK

Pension provision in the UK has changed. Discretionary benefit increases have been replaced by statutory indexation, and the obligations of sponsoring employers to provide financial support to pension schemes have been steadily strengthened. The increasingly guaranteed nature of DB pensions has, the paper argues, not been reflected in actuarial funding advice.

In addition, since June 11th 2003, a solvency deficit in a UK defined benefit scheme is now effectively a debt on the corporate sponsor – a major tightening of the pension 'promise'.

While distinctions in the level of 'guarantee' currently inherent in DB pensions can be drawn between the UK and Ireland, Charles cited commonly used practices and phrases like:

- "the scheme is 100% funded on an ongoing basis" when they do not have enough money to meet their solvency benefits with any degree of certainty;

- "full transfer values" are being paid, when these transfer values would not secure even 50% of the solvency benefits in some cases; and
- The use of discount rates in excess of bond yields, thus taking advance credit for possible future investment out-performance, with no reserving for the associated risk.

The paper argues that these practices (and others) have the potential to mislead, and are not in the public interest.

10 Principles for Funding Advice

The paper then sets out ten core principles which the authors believe should underlie actuarial advice on pension scheme funding (at least in the UK):

- 1) When referring to the value of a scheme's liabilities, actuaries should only use the solvency measure of the liabilities; any other measure should be qualified to avoid confusion. Assets should be taken at market value.
- 2) Funding advice should disclose the broad impact of priority rules on different classes of members' benefits at the date of valuation, and give guidance on how they will impact on the scheme as time passes.
- 3) Actuaries should advise on funding only if the party or parties responsible for setting contributions have set a funding objective which is expressed in terms of solvency, and which is sufficiently well-defined that two different actuaries would then

arrive at similar answers for the future funding of the scheme.

- 4) Funding targets should either be solvency based or be described unambiguously in relation to solvency.
- 5) If contributions are being paid that are below the level required to maintain solvency (including priority coverage for all members), this should be highlighted.
- 6) Options that can be exercised against the scheme should be disclosed and, in any measurement of solvency, they should be reserved for fully.
- 7) Before the actuary advises on spreading contributions to meet a deficit or where a mis-matched scheme investment strategy creates a material likelihood of a future scheme deficit, the company covenant needs to have been evaluated.
- 8) The amortisation method used should be described in full. If the method allows for re-amortisation at future reviews, this should be disclosed, and the impact of re-amortisation at future reviews quantified.
- 9) The solvency position projected to the next review date on a range of scenarios should be disclosed. These scenarios should demonstrate expected solvency levels and quantify the mismatch risks. This is to ensure that basic risk management information is provided.
- 10) Actuaries should not advise on the level of contributions

Principles 4 and 5 are to prevent funding advice being confused for valuation advice.

continued

Funding Defined Benefit Pension Schemes continued...

extending beyond the next review, unless they specify unambiguously the basis for determining contributions after the review period.

A Sample Funding Method

The authors also extended the principles above to define an idealised funding method, based around the solvency measure. Its key features are:

- (a) The funding target is the solvency measure plus a value at risk reserve for any planned investment mismatching;
- (b) Future accrual is assessed as the value of the benefits accruing up to the next review period on the solvency measure (including salary increases);
- (c) Deficits are addressed immediately, or over a short period with a fixed target date, with no re-amortisation of the deficit at future dates;
- (d) Maximum acceptable deficits, that take account of the creditworthiness of the sponsor

and the impact of priority rules, are specified;

- (e) In the event that the maximum deficit level is breached, pre-agreed action is taken to restore the deficit and the credit risk to acceptable levels.

The advantages of this method, the authors contend, are that:

- It does not falsely incentivise trustees and companies to adopt a more risky investment strategy, on the basis that this will cause the actuary to provide a lower contribution recommendation;
- It is less likely to mislead trustees and members over the current and future financial positions of their pension schemes; and
- It is broadly consistent with principles applied in practice by life actuaries.

Q&A Discussion

A lively discussion ensued, with compliments to the authors for the high level of clarity in the paper (a paper which was notable for the complete absence of formulae!). Speakers expressed broad agreement

with many of the principles put forward, as these would increase the level of transparency associated with actuarial funding advice.

Some concerns were raised on the issue of investment policy, as some of the principles would perhaps inevitably lead towards lower levels of equity investment in DB pension schemes. The authors contended that a risky investment strategy should imply a higher target level of funding (not lower as is currently the case) for the same level of risk to the members.

Overall conclusions reached were that, although the UK regulatory environment does currently differ from the Irish environment with regard to the level of the pensions "guarantee", this paper provides some extremely valuable principles that should be built on to improve the clarity and transparency of funding advice in Irish actuarial circles.

Eamonn Liddy

The paper is available from the Society's website

Evening Meeting Review: Update on Accounting Issues

INTRODUCTION

On 7th December 2004 in the Alexander Hotel representatives from the Accounting Sub-committee of the SoAI gave presentations on the new accounting initiatives currently affecting Irish life insurance companies. This meeting was very well attended reflecting the importance of the issues under discussion. The topics and their respective presenters were as follows:

- European Embedded Values (EEV) presented by Peter Gough
- Financial Reporting Exposure Draft 34 (FRED34) presented by Tony Jeffery
- International Financial Reporting Standards (IFRS) presented by Adrian Cooper and Niall Naughtan

Each discussion was supplemented by the results of a recent survey that was

carried out by the Sub-committee to assess how Irish life insurance companies intend to address the issues and problems arising out of these new accounting initiatives. Fourteen life offices participated in the survey and we are very grateful for their input.

continued

Update on Accounting Issues *continued...*

EUROPEAN EMBEDDED VALUE (EEV)

The EEV principles were devised by a group of CFO's from leading European insurance companies. Their purpose is to improve consistency in EV reporting and ensure more explicit allowance for risk in calculations, thereby addressing many criticisms of the traditional EV. The principles were launched in May 2004 to be implemented by end of 2005. Although the CFO Forum has no formal standing, the EEV initiative is expected to be supported by analysts and rating agencies alike. The main requirements of the EEV regime are as follows:

Risk Discount Rate (RDR): An active approach to setting the RDR is required and thus the risk margin must be regularly reviewed. A more rigorous process for setting RDRs is encouraged e.g. the risk margins may be set both by territory and product group. The RDR could reduce if projections make explicit allowance for risks not previously recognised in EV calculations.

Options and Guarantees: Any financial options and guarantees in products must be explicitly valued. This may allow an offsetting reduction in the RDR. Stochastic modelling techniques (simulations or closed-form solutions) should be used to capture the time values. The assumptions must be based on those adopted for the underlying EV calculation.

Capital: It must be decided what capital is tied up for the purposes of the locking-in adjustment e.g. is it a multiple of MSM or should a Solvency II approach be used? A higher level of 'Required Capital' should translate to a lower RDR.

New Business: New business margins should be calculated as the ratio of

the value of new business to the present value of new business premiums. Margins may also be disclosed based on APE as additional information. The definition of new business (e.g. treatment of future premium increases) must be clearly described in the disclosure.

Disclosure: A significant amount of additional disclosure around methodology, assumptions and sensitivities is required. This may conflict with desires to withhold information that is seen as commercially sensitive.

Holding company expenses: There is a requirement to include holding company expenses attributable to the life company in unit costs.

Service companies: A look-through approach to service companies must be used to avoid overstating the EV via a loss-making subsidiary. The cost to the group of operating the covered business must be measured. Care must be taken to avoid double-counting a profitable subsidiary (e.g. EV takes credit for lower unit costs and Market Value of subsidiary is included in NAV).

EEV Survey Results

Three (20%) of those surveyed intend to calculate their EV using CFO Forum principles by end of 2004 with a further 6 (40%) by end of 2005. Four companies (27%) intend to disclose that calculations are in line with EEV and another one will 'probably' disclose.

The survey identified the following (in no particular order) as the areas causing most problems for the implementation of EEV:

- Uncertainty around method & bases to be used in calculations
- Choice of and methodology for RDR

- Deriving a RDR (and Required Capital) on bases consistent with other groups preparing EEVs
- Determining the appropriate level of Required Capital
- Market consistent valuation of guarantees & options
- Agreeing approach with parent company
- New Business definition (e.g. treatment of indexation)

FRED34

The Penrose Report cited accounting deficiencies as one of the reasons for the Equitable Life debacle. FRED34 is an attempt to address these deficiencies. It was released for public consumption in July 2004 with a request for submissions by 8th October 2004. A submission was made by a group of actuaries from the SoAI and this is referred to as "the submission" in the report that follows. The discussion on FRED34 was divided into 4 parts:

1. Realistic Balance Sheets (RBS)
2. Capital Position Statement (CPS)
3. Options and guarantees
4. Embedded Value adjustments

Realistic Balance Sheets

If you currently produce a Realistic Balance Sheet then it must be used under FRED34.

A UK company must already prepare a RBS if its assets exceed €500m. However Irish companies are not part of the RBS regime and thus do not have the benefit of several years RBS experience. Therefore to have a RBS in time for the year-end is very onerous for Irish companies.

The submission proposed that some companies should be exempt from producing a RBS based on the materiality of the fund, especially if it is closed to new business.

continued

Update on Accounting Issues continued...

Capital Position Statement

The purpose of the CPS is to present a comparison of the total available capital resources with the regulatory capital requirements relating to life assurance business. It is required for all Irish and UK life assurance groups, but is not required for a wholly owned subsidiary if the parent entity includes a CPS complying with FRS in its consolidated accounts.

The CPS includes an analysis of movements that may prove very onerous to complete. However, this analysis is not required until the 2005 statements are produced.

Many companies operating in Ireland are wholly owned subsidiaries of a parent company. These companies do not publish accounts in Ireland or the UK if the parent does not reside in these districts. For such subsidiaries there is very little added value for such onerous CPS work. The submission proposed that all wholly owned subsidiaries should be exempt from producing a CPS.

8 (57%) of the companies surveyed intend preparing a CPS at year-end 2004 with another 5 (36%) planning to have the CPS implemented for 2005.

Options and Guarantees

Entities that have With-Profit Funds within the scope of the FSA's realistic capital regime will measure the liability either at:

- Fair value; or
- An amount estimated using a market consistent stochastic model

For other business with policyholder options and guarantees, where these are not valued using one of the above approaches, significant additional disclosure is required.

One issue of uncertainty is the exact nature of the options and guarantees to be included. For example, can mortality options be excluded?

Embedded Value Adjustments

Companies that currently include a VIF asset in their accounts may be permitted to continue to do so, but must exclude the following from the value of that asset:

- Any VIF that reflects future investment margins.
- Any value attributed to the contractual rights to future investment management fees that exceed their fair values as implied by current fees charged by other market participants for similar services.

One approach suggested for the risk margin issue is to use a discount rate that is greater than the asset rate. Although this is thought to be acceptable it is not exactly what is written in the FRS and therefore clarification is required.

Conclusion

The following suggestions were made:

- The IIF should get a definite position on EV assumptions
- Start preparing a Capital Position Statement, unless you have a UK parent.
- Start (or at least quantify) the disclosure process for options and guarantees

INTERNATIONAL FINANCIAL REPORTING STANDARDS

Niall Naughtan and Adrian Cooper presented this final section of the meeting. The presentation contained a combination of technical detail together with results from a recent survey carried out by the life assurance accounting issues subcommittee. This report focuses on the survey results, as there was a very high level of interest in what other insurers are doing. The detailed technical content can be downloaded from the SOAI website.

The presentation began with Niall walking us through the messages that

- The goal of IFRS is comparability across companies, industries and countries.
- IFRS applies to all listed companies' consolidated accounts for accounting periods beginning on or after January 2005.
- Listed companies of EU Member States are permitted, but not required, to prepare Annual accounts under IFRS.

Niall then followed with detailed technical content while Adrian addressed the practical application and business implications of IFRS for Irish life assurance companies.

Adoption of IFRS by Life Insurance Companies in Ireland

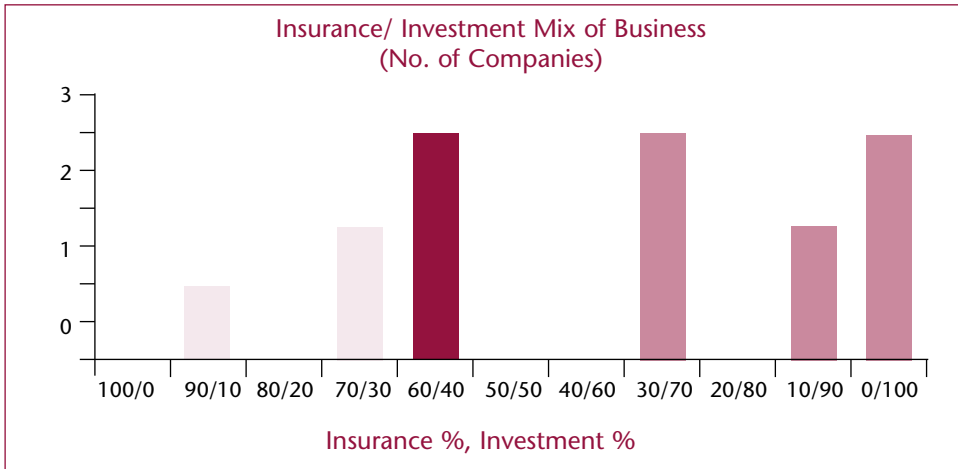
13 companies responded to questions on their plans for adopting IFRS. In summary

- 8 companies have already prepared internal versions of IAS Balance Sheets and Income Statements.
- 6 will prepare interim IAS results in mid 2005 with 2004 comparatives.
- 10 do not intend producing Modified Statutory accounts under IFRS.

Product Classification

Under IFRS, contracts must be classified as either Insurance or Investment, and, where Investment, whether or not they have a Discretionary Par element. This classification determines how this business is valued and accounted under IFRS.

The mix of business between Insurance and Investment among Life Insurance Companies in Ireland is well spread as the graph on page 13 shows: The greatest area of uncertainty and variation in relation to product classification is the interpretation of "significant insurance risk". Significance was considered as the difference between



the death benefit and the fund value at issue. While all companies felt 1% was insignificant, 3 companies used 5% as their cut-off and 8 used 10%.

Investment Contracts (with no Discretionary Par element)

The issues under discussion here related to:

- Difference between Amortised Cost and Fair Value
- Bid Price market value of unit liabilities
- EU partial endorsement of IAS39 – and the “carve-out”
- DAC and DIL for Investment Contracts with Service Fees (IAS18)

The precise nature of this liability varies across the companies surveyed, as the graph below shows:

The survey feedback indicated a mix of approaches to amortisation of DAC on this business, ranging from:

- USGAAP (in line with actual and expected margins)
- Straight Line method
- Over expected life of policy

However, there was no outright preferred approach and many companies are still undecided.

Impact of IFRS

As expected, Financial Reporting was identified as the area of business where greatest impact would be felt.

There is a perceived lack of clarity in relation to the EU Carve-Out, differences between Fair Value and Amortised Cost for Unit Linked contracts, and deferral of initial margins. Practical issues included timing and resource problems, and asset-liability mismatch.

Adrian highlighted the practical implications of setting up systems and processes to handle the new reporting requirements. These included assessment of data requirements, establishment of product classification procedures, development of actuarial and accounting systems to handle DAC, DIL, Amortised Cost calculations, Deposit Accounting, and Additional Disclosures.

Adrian also drew attention to possible future business implications, including:

- Potential switch from GAAP to IAS

for subsidiaries

- Need to manage IAS profits
- New Product Design implications from IAS Classification
- Stakeholder, Management and Market communications

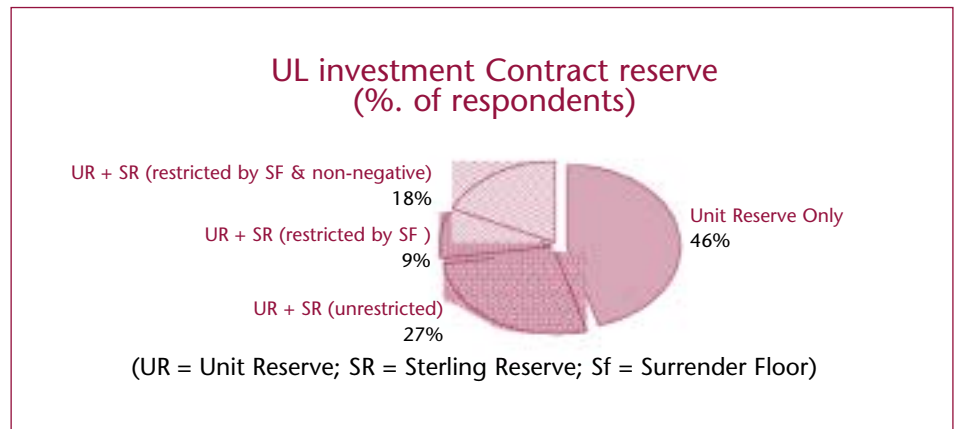
Conclusion

Adrian wound-up the presentation with a brief review, a discussion on responsibilities and the authority of the IAA Practice Guideline, and a list of websites where those in attendance could seek significantly more detailed information on this important topic.

Tony drew particular attention to the IAA website and its draft Practice Guidelines for IFRS. All interested members are invited to review these practice guidelines and forward that feedback to the life accounting issues sub-committee.

We hope that all present experienced a degree of relief and solidarity that they are not alone in their worries and not out of line with everyone else in their preparations. And most importantly, that IAS did not keep them awake at night over the Christmas holidays and New Year celebrations.

John Bolger and Olive Gaughan



Celebrating Actuarial Science at UCD

On 13th December 2004 the newly named Department of Statistics and Actuarial Science at UCD hosted a successful evening event entitled "Celebrating Actuarial Science at UCD" in the University Industry Centre, Belfield, UCD. The event, which was supported by the Society of Actuaries in Ireland, celebrated the department's new name, 10 years of graduates in its Bachelor of Actuarial Studies (BAFS) degree programme, and the 150th anniversary of the founding of UCD.

The Deputy President of UCD, Dr. Philip Nolan, opened the evening. Professor Philip Boland then spoke on "Actuarial Education in UCD – the Past Leading to the Future". Shane Whelan introduced Professor Phelim Boyle (Waterloo University), who spoke on "Actuarial Science and Finance: Friends Reunited". Gareth Colgan then introduced Professor Angus Macdonald (Heriot Watt University) who spoke on "Genetics and Insurance - Can They Live Together?" The President of the Society Pat Healy finished the evening with typically thoughtful concluding remarks. A summary of Philip Boland's presentation, in his own words, is carried below, and copies of the main presentations can be found (under Previous Events Calendar) on the Department of Statistics and Actuarial Science website at <http://www.ucd.ie/statdept/>

Actuarial Education in UCD – the Past Leading to the Future By Dr Philip J. Boland, Hon. FSAI and Professor of Statistics, UCD

I can trace the origins of our Actuarial Degree programme at UCD back to 1987, when Bill Hannan and Frank Downey of the Society's education sub-committee contacted us about the possibility of giving special lectures on Statistics to actuarial trainees in Dublin companies. The recent experience in the exams in Statistics under the new syllabus of the Institute/Faculty had been disastrous for Irish students, and it was felt there was a need to help these students (most of whom had only recently completed their Leaving Certificate). This led to successful courses in Statistics being given to many students in the evenings at

Belfield and Earlsfort Terrace on subjects S1 and S5 over the next few years. One consequence however was a concern that a good number of talented Leaving Certificate students were bypassing the university experience to take up positions as actuarial trainees, but were also failing to complete the qualification process to become an actuary! This concern played a major role in the establishment of the UCD BAFS (Bachelor of Actuarial and Financial Studies Degree) programme in 1991.

Early Concerns

How broad should our actuarial science degree be, would we get enough high quality students who wanted to pursue the degree, and would there be reasonable job opportunities (in Ireland or elsewhere) for our graduates? We decided on a reasonably broad structure for the degree programme relative to those already existing in the UK, with a good emphasis on statistics, economics, finance and the more traditional actuarial subjects. However we also incorporated courses in computer science, mathematics, accountancy and a business language. We negotiated an agreement with the Institute/Faculty on exemptions (covering the equivalent of the current CT: 1-8 exams). Our small class size (initially 28 but now 40) has been a major factor in encouraging collegiality. Initially a 3-year programme, we increased it to 4 years in 1998 and incorporated a 6 month work experience element into the 3rd year.

Our Students

From the beginning our programme attracted students of the highest calibre. In its initial year, and for many years in the early 90's, it had the highest CAO entry cut-off of any programme in Ireland. In 2004 the cut-off was 560 points, with 50% of the 48 entrants coming in on entrance scholarships. Our retention rate has always been high with 95% of those starting the programme eventually graduating (over 50% with First Class Honours degrees). An unusual aspect of our programme (for a Dublin university) is that approximately 74% of our students have come from outside the Dublin area.

The Gender Issue

In the early years we were only attracting small proportions (~20%) of females into the programme, although this has increased significantly (~39% in past 5 years). Media reports in 2000 suggested that males were outperforming females at university level in Ireland, and hence I asked John Ferguson (BAFS, MSc, 2001) to perform a statistical study to assess the impact of gender on performance in the UCD degree. He studied various factors at entry and first year, and found (to no great surprise) that there was no significant difference in degree performance between males and females. He did find however a significant difference in performance between Dublin and non-Dublin students (those from Dublin doing slightly better), that entry year was a significant factor, younger students were doing better than older ones, and that 1st year performance was a much better predictor than LCP points.

Our Graduates

I remember well meeting our first class at the initial advisory session in September 1991, where the first question asked of me was "Will there be jobs for us when we graduate in 1994?" Of course I didn't know the answer, but I said then (and I still now say to new students) that they should concentrate on doing well and enjoying UCD, and that if they did there would be plenty of opportunities on graduation. Our graduates have done extremely well and there have always been plenty of job opportunities. The majority (~75%) of our 292 graduates over the past 10 years have obtained jobs as actuarial trainees, and to date 86 have qualified as Fellows of the Institute or Faculty. The other 25% have obtained jobs in finance, banking, consultancy, computer science, economics, accountancy, academia (2 winners of the NUI studentship in mathematical science), medicine and music (1995 Young Musician of the Year).

In terms of numbers entering the actuarial profession, UCD now ranks among the top 10 universities in the UK and Ireland. However perhaps more importantly our graduates are qualifying as actuaries at an

impressive rate. In his MSc thesis in 2004, Donal McMahon (BAFS) investigated the Time to Qualify as an Actuary for UCD graduates and compared this with the more general population of trainees in the UK and Ireland. He found that for UCD graduates there was no difference in qualifying times for males and females, and that students with high final year university marks tend to qualify quicker (but that this effect wears off over time). He also found that UCD students perform better than the general actuarial student population where a higher % of students who start are qualifying, and

doing so in quicker times.

In addition to our basic undergraduate (BAFS) degree at UCD, a successful MBS degree in actuarial studies was run by Ronan O'Connor in the 1990's and had about 35 graduates. This year we also introduced a Higher Diploma in Actuarial Science at UCD, which is a one-year programme for students with degrees in a cognate area but who want to enter the actuarial profession and obtain a significant number of professional exemptions quickly. One might naturally ask if the continued success of programmes like

the BAFS at UCD highlights the need for broader horizons for the Actuarial profession both here in Ireland and abroad?

Future Aspirations

At UCD we intend to continue our quality educational programmes in Actuarial Science and combine this with the establishment of a centre for Research in Actuarial Science. One of our principal objectives is to assist and inform the actuarial profession on key issues like genetics and insurance, Irish mortality, pension provisions (the challenge of change), and risk control.

The Groupe Consultatif's Colloquium in Munich

The Groupe Consultatif's 17th Colloquium was held in Munich on September 10th 2004. The historic Munich Re head office was the setting for the colloquium. Once the chairman, Maria da Luz Fialho, welcomed the participants, Rolf Stolting of Munich Re gave a very insightful presentation on **risk based capital**. He spoke of quantifying risk on the basis of internal risk models and the possible methods of allocating capital to the various risks of a company.

Managing Director of Towers Perrin, Stephen Lowe, then gave a very interesting presentation on **managing overconfidence in pricing and underwriting**, drawing on his considerable knowledge of the US Workers Compensation Insurance business.

After the morning break, Norbert Heinen, CEO and Chairman of Board Of Gerling Privat AG and Gerling Lebensversicherung, concentrated on **German life industry issues** and attracting capital into the industry. Poor capital investment was seen as the result of very tight rules on policyholder profit participation and the low maximum shareholder capital levels allowed in the industry.

Asset liability management was the subject of Andrew Rear's presentation which was well received by the participants before ending the morning session.

Following lunch, Philipp Keller from the office of the Swiss Regulator

spoke about **risk based insurance supervision in Switzerland** and the various stages involved in introducing the new solvency regime there.

Jan Kamieniecki of Partner, Deloitte & Touche made his presentation on **the main issues currently facing the UK insurance industry**, including realistic balance sheets and individual capital assessments. He noted how the UK regulator had forced the industry to adopt a stochastic approach to measuring exposure and risk.

Stefan Engeland of KPMG then dealt with the moving beast that is **IFRS**. He spoke about the changing role of the actuary under IFRS from one of 'calculating the numbers' to risk management, monitoring and outlining risks for the business. Rainer Furhaupter then summarised the main issues covered at the Colloquium before the chairman made her closing remarks.

Later that evening, a group from the Colloquium met for a meal at The Augustiner-Keller, a popular beer garden and restaurant near the centre of Munich. This was a fantastic evening where all present really experienced a traditional Bavarian evening with delicious food, traditional music and of course some of the local beer. On the following day, a group from the Colloquium went on a day trip which started with a cruise on the Starnberger See, a lake outside Munich. This was a thoroughly enjoyable trip and really gave visitors a real flavour of daily life

in Bavaria. The boat passed by many small towns, ports and harbours with the German Alps forming a wonderful background. The day concluded with a trip to the Andechs Monastery where the group enjoyed a lovely meal and tour of the monastery itself. It was interesting to get an insight into the regulatory environments in other European countries. The speakers covered regulatory issues in both Germany and Switzerland. It was informative and interesting to see how different regulators adopted different approaches and strategies in tackling common underlying issues in the European insurance industry. It also gave an insight into how developed the insurance industry is in other parts of Europe versus Ireland and the UK, and the different areas of emphasis around Europe's insurance industry. Meeting different actuaries through European gatherings like those organised by the Groupe Consultatif is an excellent way to increase our knowledge of actuarial issues facing the wider actuarial community and getting feedback on how such issues are being dealt with around Europe.

**David Coldrick and
Oisín O'Shaughnessy**

The Groupe Consultatif's next Colloquium will be held in Lisbon on 27 May, 2005. The title of the colloquium is **New Challenges to the Actuarial Profession: Implementation of the International Accounting Standards and a New European Solvency System**.

Call for Volunteers for the Society's Website Sub Group

The Member Services Committee is setting up a sub group, chaired by Frances Kehoe, to review our website. We are anxious to appeal to any members with a knowledge and interest in this area to join this group. The purpose is to review the website and ensure that information and documentation required by members is available on the site and is easily accessible. Please contact **Mary Butler** at the Society's office if you are interested.

Liz Goold, RIP

Members of the Society were shocked and saddened to learn of the sudden death of Liz Goold, wife of Jonathan Goold, on 22 November last. We extend our sympathy to Jonathan and his family.

The first Life Forum - 23 November 2004

There was a huge response to this forum with 75 members attending. We carried out a quick survey of members following the event and the feedback was very positive. All practice committees will be holding forums during the year in line with Council's efforts to improve communications with members. Minutes of all practice committees will also be available on the Society's website from now on.

Evening Meeting held on 16 November 2004 *Everything you need to know about Financial Economics*

Actuaries in the insurance and pensions fields are encouraged by The Actuarial Profession to consider seriously taking the CPFE (certificate in practical financial economics) course, with the possibility of certification thereafter. It is held to be an important facet of CPD, which may well prove a valuable tool in the execution of daily actuarial duties. Neil Hilary and Niall Franklin addressed the Society on 16 November to provide an insight into this certificate. Further details are available on the UK Actuarial Profession website.

Annual Ball

It's never too early to diary the date for our annual ball

Saturday 14 May 2005
Four Seasons Hotel

Joint IAPF and Society of Actuaries in Ireland Investment Seminar

Not Enough Assets to Meet Pension Liabilities

Thursday Morning 17 February – Alexander Hotel.
Book online on the Society's website.

On the Move

⇒ Fellow Members

Mike Frazer has moved from Eagle Star to **IFSRA** (Irish Financial Services Regulatory Authority)

Steve Wilson has moved from Scottish Provident/Abbey to join **Royal London Group**

Kevin O'Regan has moved from AON Re to join **XL Re Limited**

Brendan McCarthy has moved from Canada Life to **KPMG**



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