



Newsletter

March 2009

The Society of Actuaries in Ireland

The President's Biennial Dinner



L to R; Olwyn Enright TD, Pat Rabbitte TD, An Tánaiste and Minister for Enterprise, Trade & Employment, Mary Coughlan, TD and Philip Shier, President of the Society of Actuaries in Ireland

The President's Biennial Dinner of the Society of Actuaries in Ireland took place on the evening of Thursday 19th February 2009 in The Royal College of Physicians of Ireland. This magnificent building dates back to 1864.

It has become a tradition that each President hosts a dinner towards the end of the two year term of office to meet with Government ministers and officials, representatives of regulatory and other bodies with whom the Society interacts, colleagues from other professional associations and other friends to thank them for their support.

The Biennial Dinner began as a small gathering to which a modest number of guests were invited, and consequently the number of members attending had to be limited to Past Presidents, Council members and members representing the Society on other bodies and committees. In recent years, the number of guests attending the Dinner has increased significantly and accordingly,

an invitation was extended to all Fellow and Associate members of the Society to attend this year's Dinner.

The President welcomed members and guests and in particular, An Tánaiste, Mary Coughlan, who was the guest of honour; Olwyn Enright, Fine Gael spokesperson on Social and Family Affairs and Pat Rabbitte, spokesperson on Justice for the Labour Party. He also extended a "Céad Míle Fáilte" to those who had travelled from abroad, and in particular the Officers and Secretary of the Groupe Consultatif Actuariel Européen.

An Tánaiste, Mary Coughlan, addressed the Dinner. The President, Philip Shier, thanked her for her challenging remarks before delivering his address.

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

Contents

- The President's Biennial Dinnerpage1
- Solvency Capital Requirementpages2-3
- Estimating Uncertainty in Both Premium & Claims Modelspages4-5
- Principles & Practice of Assessing Damages for Personal Injury & Wrongful Death in Irelandpages5-6
- Exam Correcting-heads or tails?page7
- Towards One Nation in Old Agepages8-9
- Regulation of Financial Advicepages10-11
- Back Pagepage12

The meeting, on the 8th December 2008, began with a quick update from the President on the latest developments in progressing the Solvency II regulations. He then introduced the speakers Kathryn Morgan and Annette Olesen.

Ms. Olesen is Chairman of the Non-Life Solvency 11 Working Party of the Groupe Consultatif and Ms. Morgan is a member of the Insurance Committee of the Groupe Consultatif.

Ms Morgan and Ms Olesen began the presentation by giving a brief overview of Solvency II and the latest developments in making it law.

The next topic on the agenda was the role of the actuary under Solvency II which is detailed in Article 47. The speakers pointed out that considerable scope existed for actuaries to define a role in a number of additional areas. For example the ownership of the internal model, if used, lies with the risk management function but actuaries will clearly have a large role to play in the quantitative assessment of risk across the company.

The presenters then examined the key elements of the technical provisions and what the actuary's role in determining each of these provisions is likely to be.

Best Estimates

The actuarial function will be responsible for the calculation of the best estimate provisions. The method to be used to calculate the best estimate reserves is given under Article 76 as the probability weighted average of future cashflows required to settle insurance (and reinsurance) obligations taking into account the time value of money.

It was agreed that the best estimate provisions do not necessarily need to be stochastically calculated but that, at a minimum, weight should be given to high cost, low probability events in line with the Group Consultatif paper.

When calculating the best estimate technical provisions under Solvency II, there will be a greater requirement for actuaries to document the justification for assumptions as well as to put a formal process in place to monitor any

differences between assumptions made and the emerging experience. There will also be an onus on actuaries to document differences between the Solvency II balance sheet and local GAAP figures.

Risk Margins

The presenters pointed out that there has been greater discussion of the calculation of the risk margin rather than the best estimate provision despite the latter forming a larger part of the overall technical provisions.

The broad principle behind the risk margin is that the overall technical provisions should equal the premium that another company would be charged to take on the reserving company's liabilities. As the market for insurance liabilities is illiquid the approach currently used is to calculate the cost of holding the Solvency Capital Requirement (SCR) for all future years using prescribed discount rates. While this approach only approximates the true market value of the liabilities the speakers commented that at least it is consistent.

The role of the actuary in calculating the risk margin is likely to be limited to projecting the SCR for future years where an internal model is being used to calculate the SCR and to explain the cost of capital margin to the firm's management along with how this differs from both risk margins held in the past as well as the company's own view of risk margins.

Solvency Capital Requirement

The SCR is calculated to set the VaR to 99.5% over a one year time horizon. Under the standard formula the SCR is calculated using a modular approach with an assessment of capital for each risk type and several sub-risks which are aggregated using a correlation matrix.

While the shape of the standard formula has seen little change from QIS 3 to QIS 4, the calibration of the SCR used in QIS 4 is still being finalized. In particular a 32% market fall is no longer seen as a 1 in 200 year event in light of the events of 2008.

Actuaries will need to assess if the standard formula adequately reflects the

Solvency Capital

company's risk. This determination will drive the decision to use the standard formula, a partial internal model or a full internal model. The presenters highlighted the danger of a company being seen to cherry pick the modules for which an internal model was used in order to minimize capital requirements.

If the standard formula approach is used in calculating the SCR, this is likely to be carried out by the finance rather than the actuarial function.

If an internal model approach is adopted this will require much greater involvement from the actuarial function. Actuarial models currently in use typically do not meet the six key tests required under Solvency II. The effort required to meet these tests was illustrated by Ms Morgan by showing the FSA's evolving view as to the readiness of the UK insurance industry to use internal models (slides 29 to 30). The FSA's revised view following QIS 4 in October 2008 indicated that the level of readiness is lower and the effort required is higher than had previously been anticipated.

Bruce Maxwell asked if the poor state of readiness of the UK industry was surprising given the ICA regime already in place in the UK. Ms Morgan responded that under the current regime, the ICA numbers are submitted and then discussed with the regulator. Under ICA the capital suggested by the internal model can be added to by the regulator relatively easily, under Solvency II the models should be approved in advance with the level of capital only rarely modified by the regulator.

Colm Fagan questioned if the FSA was alarmed by the poor level of readiness of the UK industry and wondered if the UK industry would be in a position to immediately adopt internal models when Solvency II comes into force. Ms Morgan responded that the FSA was optimistic given that there is four years to build the models and that the FSA was putting a process in place to help companies meet the standards required.

Tony Jeffery expressed scepticism as to whether companies will genuinely "use" internal models for risk management especially given the cultural shift that

Requirement

would need to occur to allow this to happen. He also wondered why the use test was so important. Ms Morgan responded that if a company doesn't buy into the validity of its own internal models, why should the supervisor.

Own Risk and Solvency Assessment & Disclosure

The presentation then moved onto the ORSA. The question of whether this implied that all firms should use an internal model was raised. Ms Morgan amused the audience with an example of her "Household ORSA" whereby she ensures that she can pay all her bills, that her assets are greater than her liabilities and that she has enough cash in hand to replace any single white good if it fails.

Ultimately the ORSA was described as a fairly informal but workable way of a firm managing its risk.

Jim Murphy expressed concern that the ORSA is still largely undefined. CEIOPs has described it as a process but shied away from any further clarification.

The ORSA provides the actuarial function with an opportunity to become involved in the assessment of all risks that may affect the company.

Disclosure has been largely overlooked by companies thus far. Jim Murphy pointed the audience to a paper issued by CEIOPS which has a lot of detail on the disclosures required in its Appendices.

Some concerns were raised as to whether or not the disclosures required by Solvency II would be audited. This is not currently clear.

In conclusion, the presenters felt that Solvency II was an excellent opportunity for the actuarial profession to become involved in the overall risk management of companies but presented some key challenges in terms of technical knowledge and ability to communicate effectively across organizations.

Questions & Answers

Following the conclusion of the presentation a lively questions and answers session got underway. It was questioned if the additional costs

required by Solvency II would put life insurance companies at a disadvantage relative to unit trusts.

The failure of banks to model a 0.5% VaR event was seen to undermine the introduction of Solvency II. The presenters responded that the CEIOPs are doing work to see what lessons can be learnt for the current conditions.

Tony Jeffery expressed concern with the one year VaR approach which implies that a company should be able to meet losses for a year and then trade away the remaining risk (which may not be possible). He suggested that the lifetime run-off of risks needs to be allowed for.

Mr Jeffery also stated that while a 1 in 200 chance of the failure of a single insurance company may be acceptable a similar probability of the systematic failure of the insurance industry would not be and queried what is being done to prevent this from happening.

Colm Fagan then questioned the continuing role of the actuary under Solvency II given that there is no requirement for those carrying out the actuarial function to be actuaries. He pointed to the fact that under the current regime the regulator looks to the actuarial profession for the creation of guidance on the application of the regulations. The President raised the possibility of local governments imposing additional requirements in addition to those in the directive, namely that the people responsible for carrying out the actuarial function may be required to be actuaries.

Ms Morgan replied that in the UK the FSA was looking to the Board of Actuarial Standards to "fill in the gaps" not covered by the regulations under Solvency II. This raised the question of the requirement for an EU wide body to give guidance on the application of the regulations to ensure a consistent approach across the EU. Ms Olesen stated that while this would be ideal it may be difficult to implement on a pan-European basis.

Gareth Colgan queried the likely impact of Solvency II on the types of business that are written and whether, for example, life companies would cease

writing annuities. Ms Olesen said that the issues around annuity business were recognised and that a wait and see approach is probably best at this time given that the SCR parameters have not been finalised.

Gordon Lee

Estimating Uncertainty in Both

On Thursday, November 13 2008, at the Westbury Hotel there was a Society of Actuaries evening meeting entitled "Estimating Uncertainty in Premium and Claims Models". John McCrossan of Hibernian Aviva General Insurance gave a presentation entitled "Reserving Uncertainty". This was followed by a presentation given by Derek Bain of Axa Insurance entitled "Estimating the Predictive Distribution for Risk Premiums using Bootstrapping". Both John and Derek are members of the General Insurance committee of the Society of Actuaries in Ireland.

Reserving Uncertainty

John set the scene for his presentation with a brief introduction. ASP GI-1 states that actuarial reports must make reference to and address the issues arising out of the uncertainty of results. He said that the content of his presentation would be from a practitioner's point of view rather than that of an academic and would be drawn from his experience of these techniques in his every day work. John started with an overview of stochastic reserving methodology and highlighted the outputs of such a technique – the ultimate cost of claims for each origin period (mean) and the prediction error (variance).

He then reviewed the actual models which are in use:

ODP (Overdispersed Poisson) Model

John first discussed basic chain ladder methodology behind the estimation of the mean value of ultimate claims in the ODP model.

The model assumes that both origin periods and incremental movements within the same origin period are independent.

Some constraints of the model were that the sum of incremental amounts in any column must exceed 0 which means such a model is usually only applied to paid data. A further constraint is that all projected future incremental amounts are positive.

He then introduced some sample paid data to illustrate the steps in the modelling and highlighted the

difference in the ultimate value chosen in the model due to the choice of averaging period. The variance (prediction error) was then estimated using back casting and the fact that, in this ODP model, the variance is proportional to the mean. The scale parameter applied to the mean to get the variance can be calculated for the whole triangle. This produces a constant scale factor. A scale parameter, for each development period, can also be calculated which produces a variable scale.

John then highlighted the areas of the model in which the actuary needs to apply judgment. Areas of judgment in the estimation of the mean are the removal of outliers and choice of development factors. For the volatility, judgment is applied in overwriting the pattern of volatility and determining the impact of overwriting the pattern.

He then covered the bootstrapping technique to provide simulations as applied to the ODP model. This method back forecasts from the leading diagonal to create a pseudo incremental data triangle from which the volatility can be estimated.

Mack Model

John then moved on to the Mack model. This model is different to the ODP in that it allows negative increments and so can be applied to incurred data. The model is also 'distribution free'.

The model assumes that origin periods are independent and claims are path dependent.

The variance calculation is performed for each development period for the Mack model.

Again, John introduced some data to illustrate the model, this time using incurred data.

He highlighted areas in which actuaries apply judgment in the Mack model which are the same areas as in the ODP model.

He then covered the bootstrapping technique to provide simulations as applied to the Mack model. This method projects forward from the

previous development period to create a pseudo cumulative data triangle. Care must be taken to provide non-negative results as, using this method, projected increments do not have to be positive.

John then touched on the topic of scaling to a mean calculated by another method and the different methods of performing such scaling. In the question and answer session that followed, there was a lively debate as to the appropriateness of choosing a mean from one distribution and estimating uncertainty from another distribution.

Estimating the Predictive Distribution for Risk Premiums using Bootstrapping

Derek Bain presented a recent presentation given at the General Insurance Pricing Seminar of the Institute of Actuaries. The work that he had done had stemmed from trying to estimate the volatility around the mean of motor insurance premiums particularly where data is scant. The methodology could be used to calculate the degree of risk associated with entering certain segments of the market and for communication to non-technical colleagues. This methodology could help derive a risk adjusted load to each premium rate and could also come in useful in the field of capital modelling.

Derek began by highlighting the shortcomings of traditional severity distributions in that they can't cope with the spike at zero and how the Tweedie distribution overcomes this.

Model Form

Derek discussed fitting an exponential model with 7 rating factors - age, gender, licence, cover, group, area and no claims discount. The model was kept simple to facilitate the bootstrap procedure and keep running time to a minimum and so contained no rating factor interactions. Derek highlighted the many complications arising from the form of the variance function, including specification of the form of the deviance increment into standard software and also the difficulties in estimating 'p', the power of the variance function. He then went on to demonstrate the mathematics behind the specification of

Premium & Claims Models

the deviance increment and the estimation of 'p' using quasi likelihood functions.

Results

Even though the model was kept relatively simple, Derek presented results that demonstrated a good fit.

Bootstrapping regression models

The next step was to perform the simulation. Two techniques were discussed, resampling residuals or resampling cases. Derek noted that resampling residuals is more efficient but meaningless if the incorrect model is chosen whereas resampling cases is a more robust measure of parameter uncertainty in cases where an incorrect model is fitted.

The next step was to produce an empirical distribution for risk premium which was done by randomly sampling a vector of parameter estimates from the multivariate empirical parameter distribution taking care to preserve the dependence structure between the parameters. Repetition of this process gave an empirical distribution for risk premiums. Bias adjustments were also discussed.

Derek illustrated the results using the methodology for the risk premium distribution for 17-25 year old male drivers and commented that the range of the distribution of risk premiums was much narrower where there was more data.

Finally he commented that, in order to examine the full predictive distribution,

the process variance would need to be included. This could be done by generating an observation from the Tweedie distribution. A simplified approach would be to assume the observation comes from a gamma distribution.

A lively question and answer session followed the presentations with a high level of participation.

Both sets of presentations slides are available on the Society of Actuaries website.

Kate Tobin

Principles & Practice of Assessing Damages for Personal Injury & Wrongful Death in Ireland

Shane Whelan, Lecturer in Actuarial Science, gave a presentation to the Society of Actuaries in Ireland on 18th November 2008 entitled "Principles and Practice of Assessing Damages for Personal Injury and Wrongful Death in Ireland". The focus of the talk was on how damages are calculated in the Irish Courts and to illustrate the assumptions to which the quantum of damages is most sensitive and discuss the assumptions that are more debatable. A final version of his paper will feature as a chapter in a forth-coming book on how damages are assessed around the world.

Background

Shane opened the talk with some background on the role of the actuary in the Irish Courts. There has been a long history in Ireland of actuaries advising the Irish Courts on the assessment of the capital value of future financial losses. A Supreme Court judgment in 1968 concluded that, in many cases where there is a substantial element of future loss of earnings involved with any claim, the evidence of an actuary is not merely desirable but necessary. Professional guidance

indicates that it is the actuary's role to assist the Court and not primarily the party who engaged his services. The actuary's evidence should be confined to matters lying within his expertise and experience.

Legal Principles

Shane explained that compensation for personal injury in Ireland is based on the principle that the wronged party should be restored to the position that he/she was in, prior to the action of the other. Compensation must be in a single lump sum for both past and future loss, with no further redress, even if losses subsequently arise that were unknown at the time of the trial. The overall lump sum is contingent on numerous factors many of which are non-monetary. As a result a practical approach is required to establish a suitable level of compensation. The actual lump sum award is treated as capital received and is not subject to tax in the hands of the recipient. Any investment income earned on the lump sum will be subject to tax in the normal way.

Actuarial Technique Applied in the Assessment of Damages

Shane outlined that the lump sum in respect of future monetary losses is generally calculated by multiplying the multiplicand by the actuarial multiplier.

The multiplicand is essentially the estimated weekly loss. It is commonly referred to as the net loss per week, and is a matter for evidence. It is contingent on a large number of factors and legal principles.

The multiplier is the capital value of €1 per week.

The Multiplier

In order for the actuary to arrive at an appropriate multiplier it is necessary to make assumptions on the following:

- The probability that each future payment is made. Generally, the only contingency allowed for is mortality. However, there could be allowance for other contingencies.

continued...

Principles & Practice of Assessing Damages for Personal Injury & Wrongful Death in Ireland *continued.*

- The rate at which the net loss per week might increase into the future.
- An appropriate rate of discount to be applied to each future payment.
- An appropriate level of taxation to apply on any future investment returns that may be earned on the lump sum.
- Numerous other assumptions may be required depending on the particular circumstances of the case. For example, marriage statistics may be required in a fatal injury case.

Shane then went on to discuss, in detail, some of the key assumptions.

Mortality

Shane indicated that mortality rates have declined markedly over the world in the 20th century. The current practice of actuaries operating in the Irish Courts is not to explicitly allow for future mortality improvements in calculating the multiplier. The mortality table currently accepted by the Irish Courts is the Irish Life Tables No. 14. This is the most recent population mortality table available from the Central Statistics Office in Ireland.

Shane undertook an exercise to establish the effect on the actuarial multiplier if some allowance is allowed for future improvements in mortality. He compared the multiplier based on ILT14 mortality with the multiplier that is based on projected mortality rates used in the official forecast of the population and labour force in Ireland. The second option involves a cohort approach. The broad results of this exercise were that it made little difference for the multiplier up to age 65 given that there is already a low probability of dying before that age. However, there is a material increase in the multiplier for life.

Discount Rate

The actuarial multiplier is calculated using a real rate of return. This is the assumption to which the actuarial multiplier is most sensitive. The current practice in the Irish Courts is to use a real rate of return of 3% per annum. Shane outlined different methods, based on a market-consistent valuation principle, of arriving at an appropriate real rate of return.

One method is to consider the yield available on French index linked bonds, as there is no currency risk. However, there is a risk that French inflation might differ from Irish inflation into the future. Shane argued that it could be reasonably maintained that over the long term the average inflation rates in the countries of the eurozone will be reasonably close.

Another method, although somewhat looser, is to consider the yields available on index-linked stocks worldwide. Shane indicated that his analysis of worldwide index linked bond yields suggests a real yield in the range of 2 to 3% seems reasonable over the last decade.

The current rate applicable in the Irish Courts of 3% per annum was arrived at in the case of *Luke Boyne v Bus Atha Cliath and James McGrath*. Mr. Justice Finnegan ruled that as there is no index-linked stock available in this jurisdiction, a prudent investor would invest in a mixed portfolio of higher risk equities and lower risk gilts. He acknowledged that the portfolio mix between these two asset classes would depend on the particular circumstances of the case but held for the Plaintiff, Mr. Boyne, a portfolio consisting of 70% in equities and 30% in gilts was prudent and would reasonably mitigate the damages. On the basis of the evidence presented he judged that the real rate of return on such a portfolio would be 3%. Shane's analysis of this type of portfolio historically, acknowledging the inherent difficulty of such an analysis, suggested that a real rate of return of 3% per annum was not unreasonable but then neither would be 4 or 4.5%.

The real rate of return crucially depends on the timing of the investment of the lump sum. Shane indicated that the considerations so far are based on the scenario where future losses increase in line with the consumer price index. Over the last century wages have risen faster than inflation.

His investigation indicates a reasonably stable relationship with wage increases on average 1 to 2% above inflation over the long term. If the discount rate were reduced by 2% it would lead to a material increase in the actuarial

multiplier. Shane indicated that the multiplier for a 25 year old with a regular loss up to age 65 would increase by approximately 40% and that the multiplier for a 45 year old with a regular loss up to age 65 would increase by approximately 20%.

Other Contingencies

Shane indicated that the actuarial multiplier makes allowance for mortality and interest. The calculations do not make any allowance for other contingencies such as sickness or unemployment. The actuarial evidence is a guideline to the Court. The Court will normally make a deduction from the actuary's calculations to allow for other possible future contingencies.

Conclusion

Shane concluded by indicating that the actuary employs an approach that emphasises the key assumptions to which the quantum of damages is particularly sensitive. He outlined how the uncertainties inherent in estimating a lump sum for future pecuniary loss can be quantified and the risks managed. More sophisticated models are not warranted as they would detract from the more financially significant decisions the Court must make.

Shane dedicated his paper to the memory of Brian S. Reddin, FFA, FSAI, who introduced Shane to the actuarial profession, was an inspirational mentor, and later friend.

Discussion

Many questions and comments from a diverse audience followed the talk, with a high level of participation and discussion. The slides from the talk and Shane Whelan's paper are available on the Society's website.

Peter Byrne

Exam Correcting – heads or tails?

For the many actuarial students sitting exams in April 2009, study is currently continuing in earnest and all these months of work will be put to the test in three hours of frantic scribbling in a room in DCU. After the exams though, there will be the few months of rest and recuperation before the cycle begins again.

During this period of R&R, the busiest actuaries are those on the exam correction teams – whose work begins the very day after the exam and continues on until the results are published some ten weeks later.

Why so long?

As a student, this ten week gap always annoyed me. How could it possibly take so long? What could these examiners be doing? Don't they fail half of us anyway, so surely they could just flip a coin!?!

So, on qualification, I figured the best way to find out about this coin flipping was to volunteer to correct exams. Having corrected exams for the last 5 years, I now wonder how we manage to do all that needs to be done in just ten weeks.

The day after the exam, I and the other Assistant Examiners (AE) receive a copy of the exam paper, the first draft of a "model" solution and the draft marking schedule. As you would expect, this "model" solution is just one possible solution and students could have used a variety of other equally valid methods or given any number of alternative answers.

Very soon after this, we each receive the same small "test" batch of actual papers. Using the draft marking schedule, we attempt to mark these and then, usually a week after the exam, the AE's for each subject will meet to discuss these papers and the marking schedule. At this meeting, all of the AE's will voice their views on the schedule, the model solution and the test batch with the aim of fully refining the schedule and solution and also standardising the correcting across the board.

The parcels of scripts will then start landing on our desks for correction. Depending on the subject and your ability to devote the time, this batch

could consist of anything between 40 and 100 papers (or more if you're really keen!). Clearly, for something like the Fellowship, the batches tend to be smaller, whereas for the communications exam, a standard batch would be 80 papers in total.

The first correction period will then take 3 weeks. So, during this time, I have to fit in all my usual work, table quizzes, socialising, Dublin's matches (probably no more than two in this year's Championship!) and the detailed correction of 40 papers. Again, the time taken for each paper will depend hugely on the subject and also on the quality of the paper. Clear passes and fails are easy – it's the borderline cases that take up the time.

These 40 papers are usually a good mixture, so I might get ten each from Manchester, London and Dublin as well as seven from Mumbai and one each from places like Malta, Ottawa and Lahore.

After this 3 week period, we have another 3 weeks for the second correction period. That is marking every paper again. Every paper is marked by two AE's, with the second AE not knowing how the first AE has scored the paper. So, I receive another 40 papers, again spread across the exam centres, that have already been marked by other AE's but I won't know how they have scored them. No AE is permitted to write on the actual papers themselves.

Throughout this 6-week period, the AE's regularly mail each other or the chief examiner to highlight difficulties, issues or just further comments on the sample solutions and the marking schedules.

At the end of this period, we send all the papers and our marks to the chief examiner for each subject. The chief examiner and their team will then spend about two weeks compiling all of the marks, comparing how the two separate AE's have scored each paper, re-checking all of the borderline cases or cases where AE's views differed and essentially giving each paper every opportunity to pass. So it's not really the flip a coin method!

Finally, the results of all exams are submitted to the Examiners' Board, who

will meet up in the week running up to results day to discuss any items of note and produce the examiners' report for each of the subjects.

So before that auspicious 8pm Thursday evening trawl through the website in the hope of finding your name, your paper has been looked at by, at the very least, two AE's and often the chief examiner's committee for each subject and possibly even the Examiners' Board.

Quite a busy ten weeks and not a flipped coin in sight.

Becoming an Assistant Examiner

Any qualified actuary can volunteer to correct exams. The Institute and Faculty are always delighted to hear from new potential correctors and, usually, you will be able to choose the subject you correct – though this will, of course, depend on the needs and numbers sitting certain subjects.

Yes, correcting papers does take a bit of time but, particularly for those who are recently qualified, it's a good way of getting involved in the Institute and Faculty and you can earn some very valuable CPD. An Assistant Examiner can earn up to ten hours CPD, for the meetings about the exam. Usually, I find I can claim about 5 hours CPD, 2.5 hours for each exam meeting in April and September.

So, if you thought passing CA3 was a doddle, why not help out in correcting it? Or, if you can't get enough of stochastic models, sign up for CT4. Or, if you just don't believe me about the coin flipping, join in and find out.

Also, speaking of coins, did I mention that you get paid for each paper you correct?

John Groarke

Towards One Nation

With the new pension levy for public servants, the government admits that pension policy can play a small role in curing the nation's malaise of budget imbalance and social injustice. They are wrong: pension policy can play a crucial role.

It is difficult to achieve a consensus around the inverted socialism of our times, when the wealthy are bailed out by the less wealthy. It rankles with the majority. But is there another way to raise the billions needed over the next few years while, at the same time, maintaining social cohesion?

The purposeful complexity of our current pension system is hiding an outrageous redistribution of resources towards the better off. All that needs to be done is to lift the concealing veil, and a palatable solution will be obvious to all. The Society of Actuaries is perfectly cast to lift the veil and reveal all. Redirecting that inequitable redistribution would go a long way towards ending our current financial woes.

There are three nations in old age in Ireland: the majority who rely almost entirely on the state pension, the minority who have adequate supplementary pensions, and those others who misguidedly think that they have adequate supplementary pensions. A gentle tug at the veil reveals that all deficits in defined benefit schemes (c.€45 billion) are not real 'deficits', because nobody is there to make them up: there are only deficient pensions. And those other pensions savers, recently granted a couple of years longer to continue to court investment risk, are not acting appropriately for the risk aversion that comes with age.

Lift the veil higher and it reveals that the social injustice of our top-up pension structures comes, not primarily from the unrealistic expectations engendered, but from who bears the cost of the top-up. The higher the income of the pension saver the higher the percentage borne by the general taxpayer, with an effective subsidy of one-third of savings for someone on a salary of €100,000, reducing to one-fifth for someone on

the average industrial wage and nothing at all for someone with no or little income. The annual subsidy is a couple of billion and, of course, the vast majority of that sum goes to those in the highest income deciles.

Pull the veil off altogether and we understand why it was allowed settle for so long over such an important part of our society. Government ministers and their civil servants, charged with looking after the nation's interest, were looking after their own. There is another couple of billion implied subsidy to public servants' pensions per annum. Public sector pensions – indexed to wages, often payable from age 60, and state-guaranteed – are the most generous in the world, exceeding that of, say, UK civil servants. And wages in the public sector are not appropriately adjusted to reflect the value of pension benefits: the Report of the Public Benchmarking Body in December 2007 provides an appendix that shows, on a fair value basis, that the cost of the pension exceeds that finally imputed by the Benchmarking Body by more than the recent pension levy. That report at least gave the reader the numbers. The Review Body on Higher Remuneration in the Public Sector Report in September 2007, when looking at the extraordinarily higher pensions given to government ministers, secretaries general, judges, university presidents, etc., decided not to take it into account because "if the Review Body were to apply a greater discount to these groups than to groups in receipt of standard [public sector] pension terms, this would effectively cancel the value of the special terms by reducing salary to take account of them" (3.31)!

To reform this big complicated mess of a pension system, that allows such inequities and nonsense, requires a simple plan. Over the last five years, despite all the reports and investigations, nothing as innovative as Jim Kehoe's* original suggestion has been put forward. Prompted by his original idea, we suggest the following blueprint of a new pension system:

1) State pensions – contributory, non-contributory and retirement, should remain more or less as they are now, but made equal in value,

the qualifying terms significantly simplified, and a credible guarantee given that it will be indexed to average wage increases in the future. So, this pension will, accordingly, be set at one-third the average wage in Ireland, be universal or near-universal in coverage, be payable from age 65 and will not require retirement of the individual. This pension is the bronze pension.

- 2) The state will administer a voluntary top-up scheme, where each one-off contribution by the individual buys a pension from age 65 of one-fifteenth of that amount. That is, a €100 contribution from an individual buys a pension of €6.67 per annum from age 65, increasing in line with average earnings both pre- and post retirement. This requires a 40% subsidy by the state to make it cost neutral (properly costing for the state guarantee). Note that there is no employer contribution.
- 3) The top-up scheme has a limit to the pension payable of 2/3rds the average wage in Ireland, so (1) and (2) combined gives a maximum (state subsidised) pension equal to the average wage in Ireland. This maximum pension is the gold pension. Equivalently, the maximum voluntary pension savings (through the state subsidised scheme) over a working lifetime is ten times average annual earnings in Ireland (i.e., 10 times one-fifteenth equals two-thirds).
- 4) A silver pension is a pension of 2/3rds of the average wage in Ireland – half way between bronze and gold – and requires a total lifetime savings of 5 times the average annual wage in Ireland. The state will actively encourage workers to provide a silver pension for themselves and their families, through specially structured savings schemes.
- 5) To ensure the credibility and sustainability of the new system, the state will invest any top-up contributions until drawdown and, in addition, maintain a stability fund for the bronze pension so that contribution rates are immune to likely demographic shifts.

* Pension Provision in Ireland: the Shape of Things to Come? Presented 8th Oct 2003 to Society's Seminar, Aging Population: Facing the Challenge.

in Old Age

The costings of a lump sum of 25 units buying a wage-indexed pension of 1 unit from age 65 (with cost split 15 units for individual, 10 units for state) is estimated to be cost neutral if the contributions are invested in low risk investments.

- 6) Pension rights (including the rights to increases in line with increases in average wages) must become contractual rights, so they can be enforced through the courts.
- 7) The above is then the sole state-incentivised pension top-up structure and all the other structures and incentives are abolished so no tax relief for individuals or employers, no lump sum payments, no public sector pensions.

So how do we get from where we are now to the brave new world, where everyone is treated equally when it comes to providing for old age? Key transition arrangements are:

- a) Accrued moneys under existing pension arrangements can buy into the top-up scheme at the conversion rate of a wage-indexed pension of 1/20th of the sum transferred. This one-off conversion factor errs on the generous side, as this money already received tax-relief. However, once the maximum gold pension is purchased, the remainder of the pot, if any, is taxed and paid as income. Alternatively, the individual may wish to maintain the arrangement to date, but now it will be taxed as normal savings with no tax relief on future contributions.
- b) The above conditions apply to funded defined benefit schemes. As many will be unable to buy out accrued entitlements given their current funding position, the government will accept an unsecured corporate bond from the sponsoring employer equal to the deficit on a (revised) MFS standard, repayable in equal instalments over a term of 10 years. Employers should jump at this as, amongst other things, future benefit accruals cease – so helping them afford to make good the deficits.
- c) Pensions entitlements already accrued in the public sector are honoured up to the gold pension. Accrued entitlements above that are commuted at a rate of 15-1, and

repaid in instalments as a temporary allowance.

- d) Wage increases in lieu of previous accruing pension benefits, which will offset to a varying extent the future cost of silver or gold pensions, to be negotiated locally.

The above system is one based on social justice, not socialism. All it does is ensure that everyone is given an equal opportunity to save for a pension and, controversially, is given equal subsidies. The individual is responsible themselves for any top-up above the bronze pension. True, the scheme limits the amount of subsidised pension to the average wage in the economy – anything above that being considered an extravagant retirement. People can, of course, provide themselves with an extravagant retirement – but the rest of us should not be compelled to subsidise it.

A move to the new system involves an enormous flow of funds into the state pension scheme – about €100 billion. Only about €75 billion of that needs to be invested to ensure that the new system is financially sustainable. In future years, the annual inequitable redistribution of five billion or so euros within the economy will also cease, promoting social cohesion and could even help reduce budget imbalances.

The plan presumes only that the nation still has an appetite for social justice: to fight against the governors, who govern for themselves; to fight against the civil servants, who serve themselves; to fight against the peddlers of investment risk, who promise only investment rewards. The Old Age Pension introduced a hundred years ago gives hope: it overcame all those obstacles and even one more - it got the rich to pay for the pensions of the poor. Our proposal, to enable individuals to provide for themselves on an equal basis, is comparatively modest. Nor does it take much time or paper to move to the brave new world: the original Old Age Pensions Act ran to just a dozen straightforward clauses and, after enactment on 1st August 1908, pensions were paid from 1st January 1909.

Shane Whelan & Michael Moloney
Actuaries, UCD School of Mathematical
Sciences

Bill Hannan and Tony Gilhawley gave a presentation to the Society of Actuaries on 15th October 2008 entitled "Regulation of Financial Advice".

Overview

Bill began by outlining the 3 principal regulations governing the provision of financial advice in Ireland, namely the Insurance Mediation Regulations (IMR), the Investment Intermediaries Act 1995 and the MiFID Regulations 2007. Any firm or individual providing investment services to a third party on a professional basis is subject to regulation.

Investment services include investment advice, receipt and transmission of orders and portfolio management in connection with various financial instruments. Some of the financial instruments covered include PRSAs, insurance policies and money market instruments as well as transferable securities (such as equities and bonds) traded on the capital markets.

Investment advice in the above context is defined as a personal recommendation given to a third party in their capacity as an investor or potential investor to sell, buy, redeem or hold a particular financial instrument. Investment advice should be suitable to the circumstances of the person to whom the advice is being given. Bill noted that there are a number of exemptions from the regulations including:

- pension scheme trustees, provided the primary objective of the trust is not to provide investment services to the public.
- generic investment advice on asset classes, provided there isn't a personal recommendation related to a particular financial instrument.
- persons providing investment advice in the course of another professional activity, provided the provision of the advice is not specifically remunerated, e.g. tax advisors and lawyers.

Exempt Unit Trusts are not regulated as they are not 'promoted' to the public.

Insurance Mediation

Bill defined Insurance Mediation as any activity involved in proposing or

undertaking preparatory work for entering into insurance contracts or of assisting in the administration and performance of insurance contracts that have been entered into.

Specific situations covered by the IMD regulations include the handling of insurance proposal forms and insurance claims.

The Consumer Protection Code

Tony opened his part of the presentation by observing that the main focus of the Consumer Protection Code 9 (CPC) was on the individuals providing the advice rather than the regulated firms.

The CPC consists of 12 general principles and 178 detailed rules. There are 2 broad themes underlying the general principles.

Requirements in relation to sales/advice processes

The underlying principle is to act in the best interests of customers, to make full disclosure of all relevant material information and to seek to avoid conflicts of interest. The interests of the client must be put in a primary position and the advisor should not put undue pressure on the customer.

Requirements in relation to skills and resources

The key requirements in this instance are to act with due skill, care and diligence and to have the resources necessary to comply with the Code and to correct errors and handle complaints speedily, efficiently and fairly. Tony emphasised that The Consumer Protection Code has set precise and demanding standards in relation to each of the above areas.

Minimum Competency Requirements

The Insurance Mediation Directive created a requirement to introduce competency requirements for insurance intermediaries. The Financial Regulator indicated its intention at the time to extend minimum competency standards to all relevant employees of supervised financial institutions.

The Minimum Competency Requirements were introduced in July

Regulation of

2006 following consultation with the financial sector, consumer interest groups and educators.

The Minimum Competency Requirements apply to individuals who in regulated firms:

- provide advice to consumers on retail financial products;
- sell to consumers retail financial products;
- undertake certain specified activities.

Firms are expected to interpret the Minimum Competency Requirements in a reasonable and practical manner. The requirements apply to Accredited Individuals and Specified Accredited Individuals.

Accredited Individuals must meet the requirements for the retail financial products in respect of which they are acting. Specified Accredited Individuals, on the other hand, must meet the requirements for the retail financial products in respect of which the specified is carried out, or hold a qualification recognised by the Financial Regulator in relation to that specified activity.

Retail financial products covered by the Code include Life Assurance Products, General Insurance Policies, Equities, Bonds and Housing Loans and associated insurances. Other products such as ordinary deposits and prize bonds are excluded.

The definition of a consumer is:

- a natural person acting outside their business, trade or profession.
- a person or group of persons, but not an incorporated body with an annual turnover in excess of €3m.
- incorporated bodies having an annual turnover of €3m or less
- a member of a credit union.

Tony noted that advice in the above context is defined as a "recommendation or opinion provided to a consumer to enter into or become entitled to benefit under, terminate, exercise any right or option under, or take any benefit from a retail financial product". He also noted a number of situations that would not be considered to be financial advice. For example,

Financial Advice

information given in a newspaper, journal or broadcast on television, where the principal purpose of the publication taken as a whole is not to lead consumers to use any specific financial product or any specific provider.

Knowledge Requirements

The final part of the presentation focussed on the knowledge requirements of those providing advice. Accredited Individuals must demonstrate their knowledge by achieving a recognised qualification. There are different recognized qualifications for each of the six types of retail financial products. The most well known of these qualifications, the Qualified Financial Advisor (QFA) is now the benchmark qualification for anyone advising on any retail financial products such as pensions, life policies and mortgages.

Actuarial qualifications are not recognised in their own right as they don't focus on the sales and advice process and don't meet all of the specific competencies for the categories of retail financial product. Actuaries may however get an exemption from 3 of the 6 exams required for the QFA qualification.

Grandfathering arrangements exist for those with sufficient experience who did not hold a recognised qualification in respect of the categories of retail financial product for which he or she was acting; however, such individuals must comply with the CPD requirements.

One can commence working as an Accredited Individual provided one completes an internal training programme and commences work towards obtaining a recognised qualification under the supervision of another Accredited Individual. Regulated firms must keep a register of all Accredited Individuals which must be available to the public.

There are ongoing CPD requirements for holders of recognised qualifications. The minimum requirement is 60 hours over a three year cycle of which 40 hours must be formal CPD. Formal CPD may be obtained by attending seminars, lectures or courses dealing with a

directly relevant topic. Tony emphasised that the content of the CPD must be directly relevant to the activities undertaken by the Accredited Individuals.

Interestingly, a number of Society Events have been awarded formal CPD credit by the QFA Board.

Following the presentation, there was an opportunity for questions and answers. One attendee noted that the QFA exams were extremely practical in nature and a good bet for anyone considering a career change!

Niall Gallagher

Feedback from Student Consultative Forum

A meeting of the Student Consultative Forum took place on November 14th in Staple Inn to discuss student issues relating to last September's exam sittings. I attended this meeting as the Society of Actuaries in Ireland student representative, highlighting the concerns of Irish students. The main concerns raised by Irish students were in relation to

- DCU exam room in the Helix not being up to standard
- A lack of CA2 course places available at the time

These issues were taken on board by the committee and the exams team committed to contacting DCU in relation to the exam room. The issue of the CA2 courses was discussed and dates for 2009 courses were subsequently announced. These dates can be found on the Institute's website, http://www.actuaries.org.uk/students/qualifications/CA2_Module.

Two courses for GCAS re-takers were also announced.

Other issues discussed included a review of exam contents issues. A number of questions in specific exams were mentioned as being too detailed, long or outside the syllabus. The examiners agreed to take these issues into consideration.

Full details of these issues and also points raised on planned future syllabus changes to CT7- Economics, ST3 - General Insurance and CA3- Communications can be found in the minutes from the meeting. I have posted the minutes on the new General Discussion Forum for Students on the SAI website. Follow the link: <https://www.actuaries.ie/member/forum/index.php>

If there are any other student issues that you would like to raise or highlight, please contact me at Sinead.Carty@HibernianAviva.ie

On the Move

Fellows

Paul Victory has moved to **Mercer** from **Watson Wyatt**

Donal Casey has joined **AON Consulting**

Elaine Walsh has moved from **Hibernian** to **Hannover Re**

Maeve Fleming (nee Regan) has joined **Partner Re** from **Mercer**

Ian Geary has joined **Willis** from **Quintas Wealth Management**

Mark McCormick has moved from **Imagine Reinsurance** to **AmTrust Financial**

Student

Robert Carruthers had joined **AmTrust Financial** from **Imagine Reinsurance**

New Qualifiers

Congratulations to those who qualified in December 2008

Sinead Ahearn,
Mark Collins,
Jenny Fee,
John Judge,
Sarah Kearns,
Brendan Nordon,
Michael O'Byrne,
Peter Ryan,
Thomas Synnott,
Louise Thomas,
Emma Townley,
Gerard Walls,

Prudential International Assurance Ltd
Canada Life
Hibernian Aviva
Irish Life
Mercer
Mercer
Lane Clarke & Peacock Ireland
PricewaterhouseCoopers
Eagle Star Life
AXA Ireland
Mercer
PricewaterhouseCoopers

Christmas Quiz

Our annual Christmas charity table quiz held on 1st December attracted a great attendance. We had 29 tables of four. Prior to the quiz, members and guests enjoyed Christmas drinks before quizmaster, Kevin Manning, put them to the test. The winning team had the honour of choosing a charity of their choice. So the proceeds from the evening, i.e. €3,000 was donated to the Samaritans. The Society was once again ever so grateful to Kevin Manning for his superb running of this event.



The winning team Left to Right; Paul Torsley Donal Keating, Paul Victory, Joseph O'Dea with quizmaster, Kevin Manning.

Actuarial Discussion Forum

If you have not yet registered for the Society's online Actuarial Discussion Forum, we encourage you to do so, so that you can view and participate in discussions among members on current topics. From the Members' Section of the website; (<https://www.actuaries.ie/web/index.php>), choose "Discussion Forum".



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