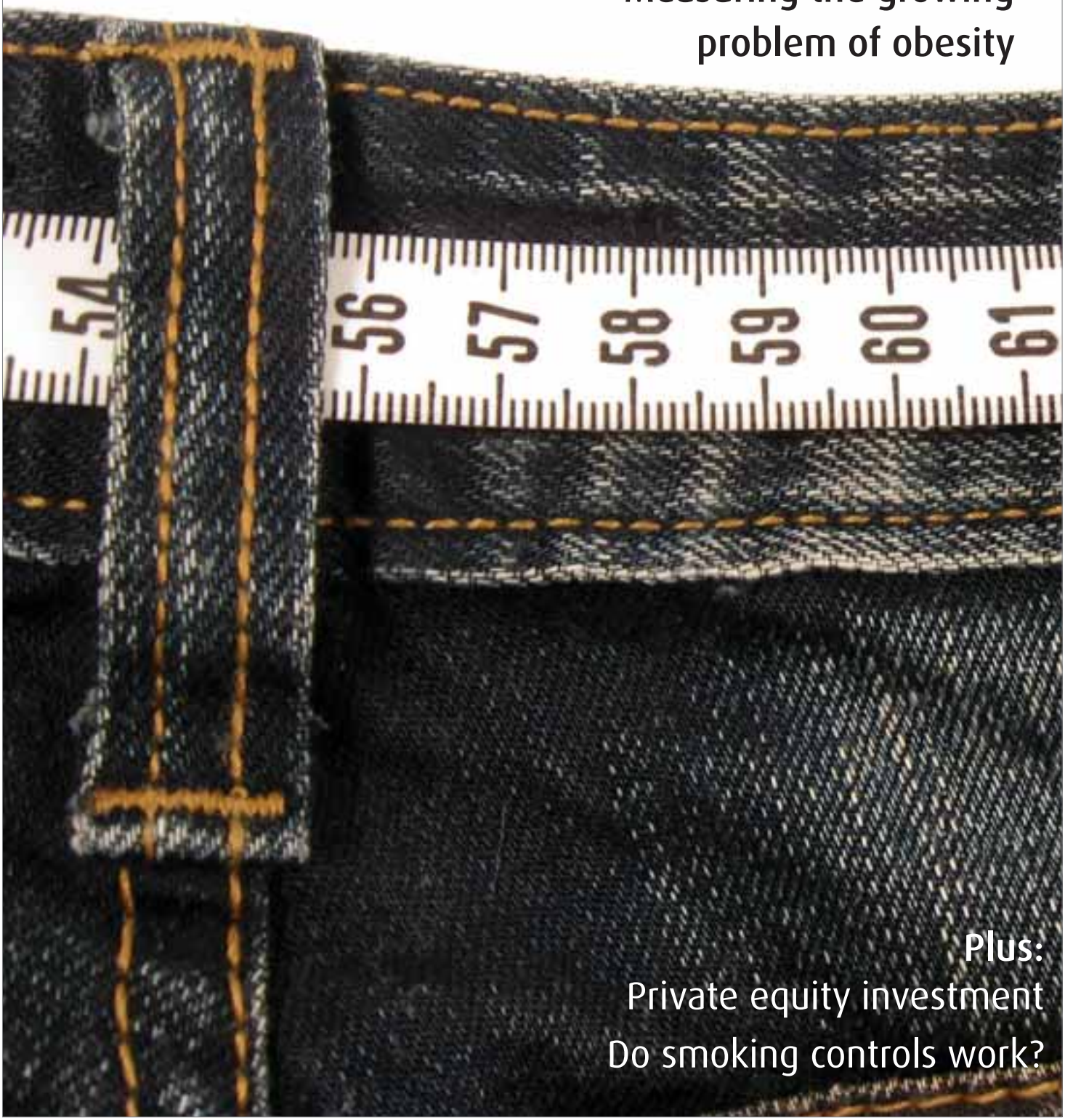
Published in London by the Staple Inn Actuarial Society

The Actuary

www.TheActuary.com THE MAGAZINE FOR THE ACTUARIAL PROFESSION May 2011

The big issue

Measuring the growing problem of obesity



Plus:
Private equity investment
Do smoking controls work?

Editorial

May 2011

See page 5 for the editorial team
Incisive Financial Publishing
32-34 Broadwick Street,
London W1A 2HG
T +44 (0)20 7316 9000

Publisher/display sales
Philip Harding
T +44 (0)20 7316 9393
E philip.harding@incisivemedia.com

Managing editor
Sharon Maguire
T +44 (0)20 7316 9016
E sharon.maguire@incisivemedia.com

Recruitment sales manager
Melanie Jacob
T +44 (0)20 7316 9618
E melanie.jacob@incisivemedia.com

Designer
Nicky Brown

Sub-editor
Sam Robson

Production manager
Matt Parle
T +44 (0)20 7316 9766
E matt.parle@incisivemedia.com

Group editor-in-chief
Jonathan Swift

Group publishing director
Mark Burton

Print and distribution
Benham Goodhead Print Ltd, Oxon

Subscriptions
For subscriptions from outside the actuarial profession: UK, Eire and Europe: £50 a year/£5 a copy. For the rest of the world: £75 a year/£7.50 a copy. Please contact:
Alison Jiggins
The Actuarial Profession,
Staple Inn, High Holborn,
London WC1V 2QT
T +44 (0)20 7632 2100
E alison.jiggins@actuaries.org.uk

Students on actuarial science courses at universities may join the Staple Inn Actuarial Society for £6 a year. They will receive *The Actuary* as part of their membership. Apply to: Membership Department, The Actuarial Profession, Maclaurin House, 18 Dublin Street, Edinburgh EH1 3PP.
T +44 (0)131 240 1325
E membership@actuaries.org.uk

Changes of address should be made known to the membership department as above.

For delivery queries please contact:
Manisha Khanduri
E manisha.khanduri@incisivemedia.com

Internet
The Actuary website:
www.TheActuary.com
SIAS website: *www.sias.org.uk*
Actuarial Profession website:
www.actuaries.org.uk

ABC
Circulation
20 888
(July 2009 to
June 2010)

recycle

What's in a name?

From this month, the name of Ngwenya that appears under this column officially becomes a pseudonym. Having tied the knot at the start of April, I am now in the process of changing surnames but, like many women in the workplace, I was faced with the difficult decision of whether to 'rebrand' and risk losing some of that hard-fought recognition. Ngwenya, which means crocodile in Zulu or Ndebele, and has travelled with my family from Lesotho, to South Africa, to Zimbabwe and beyond, is, in my view, a tough one to outshine. In the end I opted to keep it as a middle name, even though legally I will take my husband's surname.

On the issue of gender equality, the European Court of Justice's ruling on insurance provision has certainly got the industry in a spin. Our lead feature offers an insightful analysis of the implications of the Court's verdict. Elsewhere we cover themes of healthcare and regulation, and we hear from David Flitman, chief actuary of Flagstone Re, about the perils of global working and complex catastrophe deals.

Last year we launched an initiative with the Worshipful Company of Actuaries urging actuaries to get involved with charity fundraising activities. The Company aims to reach a target of £1m raised by actuaries. We will use the people and society news pages to update you on the good work being done so please write in if you have a story to share.

In July, we will be running our popular 'Working Overseas' supplement and we would like to feature members who are working in some of the lesser-known regions. Please contact our features editor, Tracey Brown (*features@the-actuary.org.uk*), if you would like to contribute.

Finally, join us online on Monday 9 May for a lively careers webinar, 'So you want to work in life consulting', sponsored by Deloitte. For details, see *www.TheActuary.com/875482*

Marjorie Ngwenya
Editor
editor@the-actuary.org.uk

The Actuary

Contents

May 2011

Editor
Marjorie Ngwenya
E editor@the-actuary.org.uk
T +44 (0)7794 031 225
Features editor
Tracey Brown
Lane Clark & Peacock LLP,
E features@the-actuary.org.uk
T +44 (0)20 7432 3071
Deputy features editors
Adam Jorna
Sonal Shah
E features@the-actuary.org.uk
Profession news editor
Alison Jiggins
E alison.jiggins@actuaries.org.uk
T +44 (0)20 7632 2172
Industry news editor
Terren Friend
E news@the-actuary.org.uk
People/society news editor
Kelvin Chamunorwa
Towers Watson
E social@the-actuary.org.uk
T +44 (0)7502 107 322
Student page editor
Stephen Paines
Government Actuary's Department
E studentpage@the-actuary.org.uk
T +44 (0)20 7211 2707
Arts page editor
Richard Elliott
Scottish Life
E arts@the-actuary.org.uk
T +44 (0)7814 509 081
Puzzles editor
Tom Bratcher
Towers Watson
E puzzles@the-actuary.org.uk

Published by the Staple Inn Actuarial Society.

ISSN 0960-457X

Features

MORE CONTENT ONLINE

Insurance: Small change, big reward
Agrotosh Mookerjee discusses the merits of various microfinance schemes around the globe and explains why actuaries should get involved
www.TheActuary.com/875584

News

Comment

Regulars

WRITERS OF THE MONTH

Alan Chalk and Tony Ward are the editorial team's choice for May for their article on text mining, and receive a £50 book token courtesy of:

Letters to the editor

In which actuaries discuss independence and insurers

Letter of the month

Subject to scrutiny — response to Stephen Paines, April 2011

As a student who has found certain subjects harder to pass than others, I was amused by the student article titled 'Subject to scrutiny' in the April 2011 edition. It was not the outcome that was amusing but evidence that the classic trap befalling those involved with statistics professionally has flummoxed another victim. I speak, of course, of independence.

It is a very nice assumption but sadly tends not to hold in the real world. In the case in point, two exams (CT5 and CT8) would tend to have a very different examinee profile: CT5 has prerequisites of CT4 and CT1, so would appear less difficult as students who would have failed CT4 would often not take CT5; CT8 is reputed to be hard (I can confirm from being oh-so-close-but-no-cigar last April that I think this true) and hence left until other exams have been passed, again changing the profile. The end result, after taking these into account, would still have CT8 as the most difficult (but by a larger, perhaps significant, margin), CT5 second and CT4 third.

James Beardwood
6 April 2011

The writer of the letter of the month receives a £25 Amazon voucher

The changing face of pension schemes

I recently attended an event sponsored by our profession in which one of the current issues highlighted was the tactic of employers incentivising members to leave their pension schemes by offering enhanced transfer values, which are then taken into a defined contribution (DC) environment. While I accept there can be a place for such exercises, like other attendees I was concerned that some practitioners may be significantly understating the risks associated with such exercises, which can be legion.

In the 1980s, our profession sat silently while there was a migration from defined benefit (DB) to DC, to the detriment of scheme members. As employers now seek to offload their DB commitments and avoid expensive buyout costs, I believe we now face a similar situation. While the Actuaries' Code makes clear that we have a general and core obligation to serve the public interest, it would be helpful if our profession could break its silence in this important area.

Gerry Devenney
30 March 2011

Learning from the past

I congratulate Richard Fitzherbert for his excellent article in the April issue of *The Actuary* on the necessity to make financial history studies a compulsory part of actuarial education. As Sir Winston Churchill so wisely observed: "The further back in history you look, the further forward you can see." There are also important lessons here for all those who either construct or apply financial models. The unthinking use of Black-Scholes, VaR and similar models calibrated over ridiculously short periods of essentially benign financial conditions greatly magnified first of all the enormity of the sub-prime and other speculative bubbles and then the ferocity of the consequential economic disaster.

Robert Clarkson
14 April 2011

Running on empty — response to G. Maher, A. Staudt and R. Warren, April 2011

I was pleased to read that "aggregators cost the industry £1bn last year in unnecessary price competition". This could be more positively stated as "aggregators saved consumers £1bn last year in unnecessary insurance premiums".

That insurers are losing 15p for every pound written is not great testimony to the sophisticated pricing software used by most of the market. Were firms so engrossed with heteroscedasticity and three-way interaction effects in their generalised linear models that they missed the advertisements for aggregator sites screaming from every billboard in the land?

Nobody is going to un-invent the internet or legalise cartels to bring reality into line with inadequate models. Instead, insurers should pay attention to gaming behaviour at point of sale. The Winner's curse working party, of which I was a member, reported in 2009 on the unmodelled impact of competition. Their report provides examples using game theory to construct Nash equilibria. The authors of last month's article would do better to incorporate game theory into their thinking rather than futile handwringing over "unnecessary competition".

Andrew D Smith
6 April 2011

Apostrophe catastrophe

I very much enjoyed Sonal Shah's article, putting the apostrophe in its rightful place.

By coincidence, I read it on 3 April, which was Mother's Day. Or was it Mothers' Day? I note that our retailers now pretty well universally use Mother's Day. I can see that the singular may be justified on the basis that we each have just one mum. But I rather favour the latter since the day is there for all mothers, is it not? Perhaps Sonal would be good enough to enlighten me? As an aside, my own mother favours Mothering Sunday, which is how I have personally side-stepped this particular apostrophe debate on an annual basis.

Neville McKay
4 April 2011

YOUR LETTERS

The editorial team welcomes readers' letters but reserves the right to edit them for publication. Please e-mail *actuaryletters@incisivemedia.com*. The deadline for receiving letters for the June issue is 16 May 2011.

MORE LETTERS ONLINE

More letters are available online at *www.TheActuary.com/875586*

Ronnie Bowie looks at how the Institute and Faculty of Actuaries can ease the risks generated by the rapid growth of the profession overseas

Growing pains

The actuarial profession is often described as being small by comparison with many others. Yet we have significant global coverage with actuaries in over 100 countries round the world. As nations enjoy increasing prosperity so their citizens look to manage their changing risks by protecting their health and wealth. Actuaries can and do play an important part in that process.

However, the role which actuaries play varies enormously according to the stage of development which their country is at. This has been brought home to me over the last three months during which I have met our members in India, China, Hong Kong and Australia. In each case the visit coincided with a major conference of the home actuarial association but I took the opportunity to present diplomas to new qualifiers, to meet with our members to discuss professional matters and to obtain feedback on how we can serve them best.

In each case I met actuaries bound together with their international counterparts by many common values and behaviours:

- A strong pride in their qualification
- A keen awareness of how rapidly their world is changing and the importance of keeping skills up to date
- Concerns about regulatory burdens and inconsistencies
- An awareness of the importance of practical business skills alongside technical skills
- A huge enthusiasm for the role they can play.

I also learned that another common bond is the overwhelming desire to correct punctuation and grammar before reviewing any text for quality. What is it about the actuarial mindset that finds the misuse of language so offensive?

» In India and China the profession has grown so rapidly that there are few senior role models for the young actuaries to emulate and to turn to for guidance «

There were also clear differences between the challenges in the developed markets of the UK and Australia and the less developed markets of India and China. In India and China the profession (and the insurance industry) has grown so rapidly that there are few senior role models for the young actuaries to emulate and to turn to for guidance when faced with difficult professional issues. In those countries actuaries are often also seen as technicians rather than business leaders. When combined with the relative inexperience of many of the actuaries, this makes it difficult for them to exercise the influence which would be in the interests of all stakeholders.

Inevitably in India and China the numbers are staggering. Competition for places in actuarial science undergraduate and postgraduate courses is massive. Those who succeed are both intellectually gifted and hugely committed. If the profession in these two countries can build its reputation and influence then our global profession will look very different in 20 years' time.

But success is by no means certain. These fledgling actuarial associations are exposed to several risks. Part of the reason for my trips was to see at first hand what would be the most productive relationship for the UK profession to have with these other countries and bodies.

I will not try to set out our emerging international policy here (it is being consulted on at *www.actuaries.org.uk/content/strategy-review*). However, a few things are clear:

- All other actuarial associations envy the breadth, depth and quality of the CPD we offer in the UK. Allowing them access to this in some way would make a big difference
- The UK qualification is highly regarded. We may be able to make it more easily accessible to those who aspire to its high standards
- The emerging countries would welcome some access to the wisdom of our experienced UK practitioners. We will try to find practical ways of delivering this
- The more developed countries look with admiration to the amount of research done in the UK and welcome our efforts to make it as widely available as possible.

Finally, I was made keenly aware just how welcome my visits were. Our members outside the UK have a strong pride in their membership of the Institute and Faculty. They have not, however, always felt that their professional body has reciprocated that pride. I was able to reassure them that Council is committed to serving all our members so that membership of the Institute and Faculty of Actuaries adds value wherever our members are practicing, and in whatever field of work they find themselves. Council's new strategy, due to be published at the beginning of June will set this out in clear and deliverable terms.

Ronnie Bowie is the president of the Institute and Faculty of Actuaries

The European Commission's Omnibus II Directive leaves a lot to be desired, says Shirley Beglinger

A little progress, slowly

On 19 January 2011, the European Commission published its Omnibus II Directive. This weighty document waved a Eurocratic wand and transformed the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) into EIOPA — the European Insurance and Operational Pensions Authority. EIOPA will oversee national regulators' implementation of Solvency II, combining central oversight with local expertise, thereby achieving consistent implementation across Europe. EIOPA's main goals are:

- To better protect consumers — *excuse me, we insurers didn't require gazillion dollar bail-outs from our governments!*
- Ensure consistent and effective supervision across member states, taking into account the different nature of financial institutions — *yeah, right…*
- Greater harmonisation — *wince* — and coherent application of rules — *chuckle*
- Strengthen oversight of cross-border groups
- Promote co-ordinated European supervisory response.

There is a six-member management board. The first chairman is Gabriel Bernadino, a Portuguese actuary with a strong pensions leaning. He chaired several of the groups drawing up Solvency II, so that may explain the heavy pensions bias in the legislation. His colleagues come from: Austria — *proud owner of a budget-busting government pension scheme and almost no private sector pensions or independent non-life insurers*; Denmark — *ditto*; Ireland — *whose financial sector is doing famously well*; Poland — *no comment*; Italy and the UK — *represented by Hector Sants of the FSA, who has never publicly strayed too close to insurance*.

To them will be entrusted the tasks of:

- Setting binding technical standards
- Mediating differences of opinion within colleges of local supervisors
- Setting stress parameters for the standard formula calculation of the Solvency Capital Requirement (SCR)
- Deciding what constitutes an 'exceptional fall in the markets' (insurers breaching the SCR after such a fall may be granted extra time to restore their SCR coverage)
- Publishing data on capital add-ons at member state and aggregate level.

The directive also moves implementation from October 2012 to January 2013. This sounds like merely three months, but since implementation won't be reviewed until the end of fiscal 2013, it is actually a 14-month extension.

Further still, Omnibus II goes on to propose transition periods for several fundamental pieces of Solvency II, including:

- Valuation of assets and liabilities — 10 years
- Ten years to make a choice of methods and assumptions to be applied for technical provisions, including the term structure for the relevant risk-free rate
- Ten years for companies to get their capital up to the level required under the standard formula SCR calculation (*tacit acknowledgement that standard formula SCR numbers are unrealistically high for many insurers within the EU*)
- Ten years to figure out how hybrid capital will be treated in the capital tiering
- Five years for EIOPA to identify which non-EU countries' supervisory regimes are 'equivalent' (*meaning that insurers from those jurisdictions may transact business within the EU without submitting to the full gamut of Solvency II*)
- Five years for insurers to understand what exactly their supervisor will expect in terms of disclosure under Pillar 3 (*this is welcome because, right now, the supervisors themselves don't seem to know*).

While these periods seem ridiculously long, the transition will likely go forward much faster. The Directive merely gives insurers breathing space — large swathes of the technical specifications won't be published until mid-2012, so they would otherwise struggle to implement in time for the 2013 deadline. The gradual phasing in of asset/liability valuation also minimises the risk of disruption to capital markets: the new rules require steep capital underpinning for equities and long-dated debt, and capital markets could seize up if insurers all hastened to rejig their huge investment portfolios.

Perhaps EIOPA will use some of that time to design a standard model for non-life insurance that bears some resemblance to the real world in which we conduct our business because the current version sets out calibrations and correlations that would require non-life insurers to hold substantially more capital than is now the case.

Leaving aside concerns about the spurious precision of the 99.5% confidence interval, the treatment of non-proportional reinsurance — which treats risk mitigation as a function of the premium spend rather than as a function of the protection purchased — is simply unworkable.

Statistics suggest that only the top 20% of earners in the EU can afford personal pensions. This contrasts with the 80% who purchase non-life insurance products. If the capital rules go forward in their current form, the simple cost of capital will push the price of non-life insurance beyond the financial reach of the 80%. So it is to be hoped that EIOPA will use that long transition period to design something affordable for the majority as well as protective of the minority.

Shirley Beglinger is a director of Shires Partnership Ltd, a consultancy that specialises in insurance, reinsurance and risk management.

When you can see what others can't, you enjoy a natural advantage.

See more of what could unfold with GEMS® Economic Scenario Generators, built on one of the most comprehensive simulation platforms on the market.

See more "what ifs" using the proven economic and financial modeling capabilities of GEMS. With more accurate tail-risk modeling, a broad set of asset classes and the ability to model at the security level, GEMS provides cutting-edge global economic simulations for managing your business. Whether you prefer **GEMS Scenario Master**, a general purpose ESG for MCEV, Solvency II or economic capital modeling, **GEMS Portfolio Analyzer** for asset and portfolio management including hedging strategies, or **GEMS Enterprise Modeler** for whole-company modeling and risk diversification, we offer the capabilities to meet the challenges of economic and financial modeling in the new economy. And GEMS is just one of the advantages you can expect from Conning, a premier insurance asset manager providing a complete spectrum of risk and capital management products and services to optimize your company's results. **Realize your natural advantage with Conning's GEMS products. For more information or for a free demo, please contact us at gems@conning.com.**

Hartford | New York | London | Dublin | Cologne

CONNING

Forthcoming events

Life insurer seminar
11 May, Staple Inn, London (registration) 09.30-17.15
The purpose of this seminar is to cover the major areas of UK life insurer taxation. Topics will be covered interactively through a mixture of presentations and case studies. This workshop would be suitable for actuaries and any other insurance professionals who are involved in life insurance and financial reporting. For further information, visit *http://tinyurl.com/5un36sj*

Sessional research event
11 May, Royal College of Physicians, Edinburgh
17.00 (registration) for 17.30-19.00
The UK Actuarial Profession's IFRS working party paper will be presented. The paper concentrates on issues relevant to life insurers, although much of the content is also relevant to non-life insurers. For further information, visit *http://tinyurl.com/65qy98r*

Open forum: Employer covenant
12 May, Staple Inn, London
Lincoln International, a leading independent provider of employer covenant advice, will share its views on covenant assessment and look forward to discussing how it needs to be better integrated with funding and investment advice. This event will be of interest to all pension and investment actuaries, as well as trustees and sponsors of defined benefit pension schemes.
For further information, visit *http://tinyurl.com/5r8eemo*

Health and care conference 2011
18-20 May, The Grand Hotel, Brighton
The Health and care conference is the leading market event for insurance practitioners with an interest in the health protection industry. The conference will take a fresh look at topical industry developments and outline the wide ranging implications that they will have on the critical illness, income protection, PMI and LTC markets. The sessions will cover a range of technical topics looking at all aspects such as risk selection, product design, pricing and claims management and Solvency II. The conference is designed to appeal to all professionals who are interested in the health and care sector and in particular those involved in the control cycle including, pricing, product design, monitoring experience and claims management.
For further information, visit *http://tinyurl.com/6g8rewb*

Philip Scott to become president-elect for 2011/12

The Council of the Institute and Faculty of Actuaries has elected Philip Scott to be its president-elect. His term runs for a year, prior to him becoming president the following year. Mr Scott's appointment takes effect from 27 June 2011, when Jane Curtis will become president, Ronnie Bowie becomes past-president and Nigel Masters steps down as past-president.

Mr Scott has extensive financial services experience and his responsibilities have covered finance, risk and actuarial functions, international operations, investment management and life and pensions businesses. He has been a non-executive director of Royal Bank of Scotland since November 2009 and is chair of its Board Risk Committee. He has also been a non-executive director of Diageo plc since 2006 and is chairman of its Audit Committee. During a distinguished career with Aviva, his roles included chief financial officer of Aviva plc, chairman of Aviva Investors and group executive director of both Aviva International and Norwich Union Life.

Philip Scott said: "I've been a fellow of the Institute of Actuaries since 1979 and I'm honoured to be asked to join the presidential team. I look forward to playing my part in helping to ensure that actuaries are increasingly recognised for the value they add to society. My ambition is that the profession is seen to be even more relevant in the world of 2020 than it is today."

Successful second SFRA Colloquium

The second Colloquium of the Scottish Financial Risk Academy took place on 17 March at the Infomatics Forum of Edinburgh University. Following the success of the inaugural colloquium on lessons from the banking crisis (see *The Actuary*, November 2010) the subject was absolute returns and hedge funds.

In the first session professor Eric Zivot, from the University of Washington, discussed risk management for funds-of-hedge-funds using a factor model. One of the problems was getting a reliable history of data to use for the model. Subhra Tripathy, of Aberdeen Asset presented customising hedge fund exposure for institutional portfolios. He highlighted that institutions have been the largest new investors in hedge funds in recent years whereas originally high-net-worth individuals had dominated.

The final technical session was on algorithmic trading and flash crashes, by Professor Philip Treleaven of the UK Centre for Financial Computing. He described the processes around algorithmic trading and focused on the flash crash on 6 May 2010 when some $600bn of value was lost and largely recovered over a 30-minute period.

The keynote address was given by professor Bill Fung, London Business School. He placed doubt on the validity of some previous research by noting that nearly 60% of hedge fund assets (though only 5% of firms) were excluded from the major hedge fund performance databases and made some interesting observations on correlation with other asset classes and on hedge fund consolidation.

A Q&A session followed with professor Fung joined on the panel by Subhra Tripathy, and Paul Hughes of Martin Currie Investment Management. Questions ranged from the degree of systemic risk caused by hedge funds to the value for fees charged and the future of the industry.

The third colloquium is planned to have a Solvency II theme and will take place in September. Further details on this and all sessions at *www.sfra.ac.uk*

Guide to completing your CPD requirements

The 30 June deadline is rapidly approaching when the current CPD reporting year will end.

Meeting your CPD requirement is straightforward. Sign up to one of the Profession's up-coming events, read one of the sessional papers or download and listen to an MP3 file.

If you have already met your requirement make sure you log in and list everything you have done, remembering to tick the verifiable box.

All fully regulated associates and fellows are required to comply with the CPD Scheme and an extract of how you can do this is shown below.

All members are reminded that unless you hold a practising certificate, have moved out of scope of the CPD requirements or have applied for exemption from the CPD Scheme, you will be required to complete sufficient CPD and record this in your online record.

Full details of how you can apply for exemption can be found in full at *http://tinyurl.com/68k48aq*

3.2 Category 2 requirements

■ *3.2.1 The CPD year for members in Category 2 will be 1 July until 30 June.*

■ *3.2.2 In each CPD year, members in Category 2 must undertake verifiable CPD activities comprising a mixture of private study and attendance at events in accordance with one of the options contained in the table below. Members must include at least five hours of attendance at events in their CPD activities.*

■ *3.2.3 The CPD undertaken must comprise learning on a mixture of skills which are technically and professionally relevant to the member's particular role. To ensure exposure to a wide range of views, some CPD must take the form of attendance at one or more external events. It is for the individual member to assess the appropriate mix for their role.*

■ *3.2.4 Members in Category 2 may claim up to eight hours for service to the Profession. Those hours shall be counted as attendance at events.*

Category 2 requirements

Hours of events	Hours of private study	Total number of hours to be completed
15	0	15
14	1	15
13	2	15
12	3	15
11	4	15
10	5	15
9	7	16
8	9	17
7	11	18
6	13	19
5	15	20

CPD categories

Last year, the Actuarial Profession announced changes to the regulations surrounding continuing professional development (CPD) requirements for members. Where previously there had been four categories of membership, there are now only two.

Category 1 members remain those who hold practising certificates and continue to follow a rigorous programme of CPD. **Category 2** members are defined as all other members of the Profession who are in paid work. A limited set of exemptions from compliance with Category 2 obligations are set out in paragraph 2.2.2 of the 2010/2011 CPD Scheme.

One of the effects of these changes is that some members who are largely retired but who nevertheless carry out in excess of 20 hours of paid work in the CPD year are now required to complete and record a minimum amount of CPD.

It is intended that carrying out and recording CPD activities should be a straightforward process. The Profession's website has a comprehensive guide to help. Visit *www.actuaries.org.uk/members/pages/guide-help-you-complete-your-cpd-requirements-0*

Council election

Members are reminded that nomination forms to stand for election to Council must be submitted by 16.00 on 23 May. Further details are available from Marion Young *marion.young@actuaries.org.uk* or at *www.actuaries.org.uk*

Scottish Board update

The terms of reference for the Scottish Board have now been approved by the Management Board. They identify the Board's purpose and key responsibilities, and are available at *http://tinyurl.com/scottishboard*. The Board has already been working within these Terms, meeting these key responsibilities and will be reporting in the summer on its first year of activities. Of particular interest to the Board will be members' feedback and ideas on using the endowment fund.

The Board have been experimenting with 'pre-sessional' meetings for students and recently qualified actuaries. Speakers have informally presented the ideas in the sessional paper to this group in the hour prior. Two have been conducted to date and a third is planned for 11 May. Students have welcomed this opportunity to listen and actively ask questions of the speakers.

Historically, there has usually been a current topics sessional but this year the Board are intending to widen the session to cover three topics, allowing members normally working in one area to listen to the issues on two alternative topics. A half-day session is being planned for this event, with three expert speakers. Details will follow shortly.

Open forum: Does diversification exist in a global market?
23 May, Staple Inn, London
Many commentators have suggested we are now in a new era where global markets, and to some extent economic growth, are so highly linked that diversity is no longer the valuable risk mitigant it once was and shorter and more correlated market cycles will be the norm. In contrast, regulation in the financial sector (for instance Solvency II) is increasingly incorporating the impact of diversification in the calculation of risk capital to reduce capital required — but is this assumption still valid? This event brings together two of the UK's most senior practitioners in the field of asset management and finance to present their thoughts on this key topic followed by an opportunity for the wider group to join the debate on whether diversification exists in a global market. For further information, visit *http://tinyurl.com/6zl4ag7*

Pensions conference 2011
1-3 June, Southport Theatre and Convention Centre, Southport
The Pensions conference is one of the premier professional events for pensions actuaries with UK qualifications. The programme includes a range of technical matters, softer skills and professionalism topics; it will also cover many wider issues affecting pensions. The agenda is focused on both the issues of today and those that might shape the future, covering ideas and insights across most aspects of pensions — all actuaries working in pensions should find plenty of food for thought and opportunity for lively debate. For further information, visit *http://tinyurl.com/6ek4oc2*

Networking: What keeps a CRO awake at night?
2 June, London
17.30 (registration) for 18.00-19.30
Known unknowns? Potentially missed growth opportunities? Competitor threats? Devolving responsibility/accountability for risk? Messages misunderstood? Dealing with the ever-growing information avalanche? Where does the buck stop and with whom? For further information, visit *http://tinyurl.com/6fac4x3*

Ronnie Bowie comments on the resignation of Louise Pryor


Louise Pryor

Ronnie Bowie, president of the Institute and Faculty of Actuaries, has offered his best wishes and thanks to Louise Pryor, director of Actuarial Standards at the Board for Actuarial Standards, who has announced her resignation from this role.

Mr Bowie said: "The Actuarial Profession enjoys a constructive partnership with the Board for Actuarial Standards and the spirit of co-operation which exists between our two organisations is thanks, in no small part, to the efforts of Louise. On behalf of the Profession, I wish her well for the future and we look forward to working with her successor."

Latest Sloan Prize winners announced

The Sloan Prize has been awarded to Nick Forrester of Hymans Robertson for what was judged to be the best contribution from the floor at the January sessional research meeting in Edinburgh: 'Developing a framework for the use of discount rates in actuarial work', and also to Donald Macleod from Hymans Robertson for his contribution to the Test-Achats Open Forum, held in Edinburgh in March.

The Sloan Prize is in recognition of the best spoken contribution at a sessional meeting or equivalent in Scotland by a student, an affiliate member (at the discretion of the Profession), or an actuary who has been qualified for less than 15 years. It aims to encourage actuaries of the future to contribute to discussion and debate within the professional body.

New online resources from the Profession's libraries

You can now access two new databases via the Athens online portal:

Business Source Corporate
Business Source Corporate, designed to meet the information needs of today's companies, contains full text from more than 2,700 quality magazines and journals. Information in this database dates from 1965 onwards. Additional sources include more than 1,400 country economic reports from the Economist Intelligence Unit, 10,150 company profiles and over 5,200 full text industry reports.

Risk Management Reference Centre
The Risk Management Reference Centre (RMRC) is a comprehensive risk management resource for corporate risk management professionals and strategic planners. Content includes hundreds of full text journals and periodicals, hundreds of thousands of selected articles, reports, summaries, books, blogs, FAQs and news wires that pertain to all types of risk (including credit, liquidity, operational, event, and market risk).

Contact *libraries@actuaries.org.uk* for a login.

Prize pupil named

Lucy Briggs, winner of the International Underwriting Association Prize for General Insurance for the April 2010 examination diet, received her certificate at the sessional meeting on 23 March. The certificate was presented by Stuart Shepley.

Bridging the gaps: Actuarial Teachers' and Researchers' Conference 2011, Oxford

The 2011 Actuarial Teachers' and Researchers' Conference (ATRC) will be hosted by The Department of Statistics at The University of Oxford on 14 and 15 July. This annual two-day event provides all those interested in actuarial research and education a great opportunity to share their ideas and catch up on the latest developments. The Actuarial Profession has identified 'bridging the gaps' between silos as one of its key themes for research and knowledge transfer for 2011/12. The ATRC is the only actuarial conference with a research and education focus in the UK which is truly cross-practice and open to all.

Who should attend?

This event is important to all those in both academia and industry with an interest in actuarial research and education, including those from outside the actuarial profession. The conference, with its relaxed and informal atmosphere, has often produced vigorous but open debates, and it is an excellent opportunity for all those interested in influencing the future direction on research and education to get involved. With the 'bridging the gaps' theme, the organising committee is especially keen to attract more practitioners this year.

For more information and to register, see *www.stats.ox.ac.uk/news_and_events/ATRC_2011*

The closing date for abstracts for presentations is 6 May. Please contact *maria.lyons@actuaries.org.uk* for further information.

Sessional research events — online survey

The volunteers and staff who organise the programme of sessional research events are looking at how the offerings at our traditional discussion meetings can be strengthened and, where appropriate, consider some new formats for the session beginning in September. Input is welcomed from any members interested in this area and, from 16 May, there will be an online survey on the Profession's website *www.actuaries.org.uk* seeking your views. Please take time to complete this.

Budget 2011 and the future of pensions

State pension age came under scrutiny in this year's budget

The 2011 Budget announced a consultation on possible changes to the way state pension age is determined and heralded new limits, from 6 April 2011, on pension contribution tax relief and new rules on income drawdown.

State pension age

The government will manage future changes in the state pension age automatically due to increasing longevity; it will regularly review the implications of longevity changes.

Over the last 30 years, male life expectancy beyond 65 has increased by 5.3 years, according to Office for National Statistics data. Under the new changes, assuming this rate of life expectancy continues, the state pension qualification age could increase by more than the planned one-year in 2020.

John Lawson, head of pensions policy at Standard Life, said that those who retired at age 60 — after 40-year working lives — are potentially the most fortunate generation. Their parents faced 50-year working lives and their children are likely to also face longer working lives in future.

Pension contributions and income tax

Taxpayers earning above £100,000 will lose the personal income tax allowance at a rate of £1 for every £2 earned above £100,000. This is in addition to the 40% income tax paid on earnings in this category, making the effective marginal tax rate much higher.

Standard Life points out that, for those in the affected band of earnings, a pension contribution can have an effective rate of tax relief of 65% in this band.

Income drawdown

The maximum income allowed from a pension fund will be reduced from 120% to 100% of the equivalent single life pension that could be purchased with the fund. New tables have also been issued by the GAD. Under the new arrangements, for a fund of £100,000 moving into drawdown, the maximum income allowed for a man aged 65 will fall from £8,160 to £6,600. The tax rate on funds in drawdown is now 55% upon death.

First-quarter growth in UK insurance sector

Apart from banking and finance houses, the UK financial services sector grew in the first quarter of 2011 for the third consecutive quarter. This is according to a new report from the Confederation of British Industry and PwC.

Life insurance

In the UK life insurance sector, the first three months of 2011 saw stable costs and increasing business volumes as well as increasing value of new business and premium income; this led to increased profitability and growth for the fifth consecutive quarter.

General insurance

General insurers reported moderate growth in business volumes, with costs remaining stable and profitability increasing moderately.

In both life and general insurance, competition has increased in the UK. Additionally, insurers' regulatory spending is increasing ahead of the introduction of Solvency II.

INDUSTRY NEWS

Please send newsworthy articles to Terren Friend at *news@the-actuary.org.uk*

EIOPA Europe-wide stress test underway

On 23 March, EIOPA launched the second Europe-wide stress test for the insurance sector. The selected participating companies make up at least 50% of each country's gross premium income. The test will conclude on 31 May.

The purpose of the test is to evaluate the stability of the insurance sector; additionally, it helps supervisors to understand the capital positions of insurers and insurance groups in adverse situations.

Whereas the test is conducted on QIS5 results recalculated as at the end of 2010, the exercise is not another QIS — it looks at the stability of the EU-wide insurance sector rather than the readiness of each participant for Solvency II. The exercise is expected to stretch resources within participating companies; however, in return it provides further information to the company on its readiness for Solvency II. The timescale for the exercise is tight, therefore EIOPA has requested that it is performed on a best-efforts basis.

The test contains three different stress scenarios: baseline, adverse and inflation, with each scenario comprising instantaneous market, credit and insurance shocks. The adverse scenario contains market and credit shocks at least twice as strong as those that make up the baseline scenario, whereas the inflation scenario assumes an increase in inflation that forces central banks to rapidly increase interest rates.

Lloyd's of London reports £2.2bn profit for 2010

Lloyd's has announced a pre-tax profit of £2.2bn in 2010, down from £3.9bn on the previous year.

The 2010 profits come despite catastrophes that made 2010 a challenging year for Lloyd's, including strong earthquakes in Chile and New Zealand, the floods in Australia and the loss of the Deepwater Horizon oil rig in the Gulf of Mexico.

The challenges facing the market this year include many catastrophes that have already taken place this year as well as the incoming Solvency II. To date in 2011, there have been earthquakes in Japan and New Zealand and floods in Australia; in addition, there is unrest in the Middle East. Meanwhile, Solvency II comes with cost and complexity to Lloyd's.

From the world of general insurance

Solvency II

KPMG has stated that QIS5 demonstrates that many insurers are not yet prepared for the implementation of Solvency II in January 2013, although the industry as a whole is well capitalised for the new regime. The firm has identified four key consequences likely from QIS5:

- Some insurers will seek to reduce their holdings of certain types of asset, such as corporate bonds, which will attract significantly higher capital charges than government bonds
- There will be further consolidation in the industry as companies seek to increase diversification, which gains benefits under Solvency II
- The use of fair values of assets and liabilities will bring volatility to traditional measures of financial strength and will probably increase the use of hedging and reinsurance to manage the capital position
- The problems of diversification for companies operating multiple subsidiaries across Europe are likely to lead to changes in corporate structure, in particular towards a branch structure to optimise capital efficiency and to have to deal with a smaller number of regulators.

The firm also noted that a significant number of insurers, particularly small ones, did not meet the requirements — these amounted to 20% in UK and 15% across Europe. Additionally, the use of internal models did not seem to result in a significant reduction in required capital, except in relation to group capital requirements.

Gender discrimination

Following the decision by the European Court of Justice regarding the impermissibility of differentiation between males and females in insurance pricing, there has been much comment from the industry, and the UK government has also expressed concerns about the judgement. The principal points made include:

- The fact that this decision forces insurers to cross-subsidise between men and women, and that this requires a stable mix of policyholders by gender — this is not entirely within the control of the insurer, so could seriously threaten profitability
- The lack of clarity as to what happens to contracts in force as at the effective date of the ruling (21 December 2012)
- The possibility of finding rating factors which may prove to be a reasonable proxy for gender
- The risk that, at some later date, the same principle will be applied to outlaw age discrimination
- The impact on competition, given that some insurers who currently underwrite young drivers may withdraw from the market rather than risk being selected against by young men, or alternatively price themselves out of the market by charging young female drivers the same premium as is currently paid by young males
- The possible use of driver-tracking technology to assist in the assessment of risk
- The cost of the change, which has been estimated at £1bn.

Regulatory and legal developments

At the end of March, the Supreme Court in the UK ruled on a case involving the immunity of expert witnesses from civil action. In a five to two majority ruling, in Jones vs Kaney, the Court held that expert witnesses will no longer be immune from civil action relating to their statements — previously they have had general immunity.

Experts, like other witnesses will, however, continue to be immune from claims in defamation arising from their evidence. It is now likely that experts will need to consider securing indemnity cover appropriate to the work they undertake, and this may result in an increase in the fees they charge. However, a partner at commercial law firm Beachcroft said that insurers and experts alike may take comfort that the abolition of advocates' immunity ten years ago has not led to a major rush of civil claims, and it is far from clear that the situation will be greatly different with experts.

Large losses

Earthquake, Christchurch, New Zealand — 22 February

By early March, the New Zealand Earthquake Commission had received over 40,000 claims from this event, but further losses are likely to continue to be raised until the 23 May reporting deadline. Rating agency AM Best has stated that they expect all insurers and reinsurers exposed to this quake to be able to meet their commitments.

Earthquake and tsunami, northern Japan — 11 March

The ultimate death toll from these events is now likely to be between 25,000 to 30,000, although it is taking longer than usual to determine an actual number with many of the bodies believed to have been washed out to sea. Over 200,000 buildings are confirmed as destroyed or seriously damaged. The damage to the nuclear power plant at Fukushima resulted in a fairly significant radioactive leak, which caused unacceptably high levels of radioactive iodine in various farm products and drinking water, although the situation tended to fluctuate as repairs were carried out.

The nature of the Japanese nuclear insurance pool means that none of the international insurance or reinsurance players should be impacted by the nuclear problems. Both the Japanese government and catastrophe modelling firm RMS have predicted that the economic loss from the Japan earthquake, could exceed US$300bn, although only a small proportion of the losses will be covered by insurers.

The World Bank issued a range of US$14-33bn for estimated insured losses, while rival risk modelling firms EQECAT and AIR Worldwide produced early predictions of insured losses of between US$12bn and US$25bn and between US$20bn and US$30bn respectively. EQECAT estimated that between US$2bn and US$4bn would be ceded to Japan Earthquake Reinsurance Pool which will reduce the losses to the non-life property insurers in the country. They expected losses of US$8-15bn from property, up to US$1bn from motor, US$1-2bn from personal accident, $1-3bn from marine and US$2-3bn from life. More recent overall estimates tend towards the higher end of these ranges.

FOR MORE GENERAL INSURANCE NEWS

More news on the following items can be found on the website:

- Asbestos and pollution
- Solvency II
- Regulatory and legal
- Lloyd's
- Employers' Liability Tracing Office (ELTO)
- Deepwater Horizon
- Space insurance earned premiums
- Unrest in North Africa and the Middle East
- Swiss Re and Munich Re catastrophe 2011
- Quinn Insurance
- More large losses

Visit *www.TheActuary.com/875581*

For people moves, see page 44

Full house for SIAS expert witness event

More than 100 people attended the SIAS programme event 'The Actuary as Expert Witness' on 1 February.

In what is an ever-more litigious world, the role of the actuary as an expert witness is receiving increasing attention. Thanks to their analytical skills and ability to communicate succinctly complex ideas, actuaries are very much in demand to provide reputable and balanced opinions in what can often be high-profile legal cases of a financial nature. The paper presented provides a well-timed addition to the body of knowledge currently available to anyone seeking general guidance before accepting an invitation to act as an expert witness.

Distilling a combined professional career spanning over 400 legal cases, the authors covered key areas for consideration for any actuary considering such a role. The paper provides an overview of the relevant legal background, addresses the duty of the expert witness to their client and the court, and discusses the practical issues involved when entering the field.

The courtroom experience of the authors ensured that the material was delivered with polish to the audience at Staple Inn. Drawing on the first-hand experience present among the authors and members of the wider audience, the follow-up questions provided the opportunity to highlight the rewards and challenges presented to the actuary acting as an expert witness. The role is a demanding one, requiring not only mastery of the subject matter of a case but also the ability to think quickly and clearly in the adversarial atmosphere of a courtroom against the changing background of a developing case.

For those prepared to take on the challenges involved, however, expert witness work provides the opportunity to experience and influence the judicial process and strengthen the understanding of the wider public of the contribution made by the actuarial profession.

The full paper is available at *www.sias.org.uk/siaspapers*

Review by Aoife Monaghan

Actuaries cycling for charity

Stephen Wilcox, chief risk officer, and Adam Fysh-Foskett, commercial actuarial analyst at Allianz Insurance, will cycle from Guildford to Cardiff on 3 to 6 June. They will join a group of 25 colleagues, raising money for Allianz's corporate charity, Help the Hospices. The ride of about 220 miles takes in the Berkshire Downs, the Cotswolds and a corner of the Brecon Beacons.

This event follows a 1150-mile ride the length of France that Stephen did with his wife Rachel in June 2010. NAtMed tandem (yes, they were both on the same bike) took them from the North Sea coast in Belgium to the Atlantic coast of France to the Mediterranean, arriving at the Spanish border in brilliant sunshine and gale-force winds. They raised over £1,100 for both Help the Hospices and the University College London Hospital charity.

Births


Maxine Murishe

■ Tendai (Centre for Actuarial Research, University of Cape Town, South Africa) and Cynthia Gotora are delighted to welcome their first child, Maxine Murishe, born a bouncy 5lbs and 15oz. (2.7kg) on the morning of 22 March 2011.

■ Neil (Prudential) and Donna Watson have announced the birth of Penny French, on 25 March 2011. She is a little sister for Gregor.

Deaths

■ **Ainslie Ray Taylor** died on 3 March 2011, aged 63. He became a fellow of the Institute in 1981.

PEOPLE/SOCIETY NEWS

If you have any newsworthy items for these pages, e-mail Kelvin Chamunorwa at *social@the-actuary.org.uk*

Oxford and the Actuarial Profession — supporting actuarial science

The University of Oxford's appeal to the Actuarial Profession for support of the new Mathematical Institute building continues to gain momentum. We have been delighted with the positive response that our flyer in *The Actuary* received and we appreciate the support of alumni and non-alumni alike who have contributed towards the effort. We are also very grateful to those actuarial employers who have already contributed to the project, whether through employer matching schemes or through a corporate donation. Support to date is as shown below and we are hoping to see the list grow.

■ **Employers offering a matching scheme**
Barnett Waddingham, Prudential, Hymans Robertson and Friends Provident

■ **Employer making a corporate donation**
Towers Watson.

All gifts received are being counted towards a joint naming opportunity for the Actuarial Profession within the new building, which will provide an enhanced student environment and extend the provision for teaching in actuarial science. It is hoped that this naming for the undergraduate common room will recognise the close relationship between the actuarial profession and Oxford as course offerings for actuarial science continue to increase in popularity and the programme continues to grow and flourish.

Alumni are offered the opportunity to become a multi-billionaire and name a seat in the lecture theatre by donating £10bn in binary notation (or £1,024 to you and me). To support this initiative, please visit the Oxford Giving website at *www.giving.ox.ac.uk/maths*

By Paul Thornton

Obituary — Dick Squires

Dick Squires, who died on 14 January, will be remembered by many actuaries not just for the considerable contribution that he made to the profession, but also for his sense of humour and enthusiasm for life.

Dick was brought up in Peckham in South London during World War II and would occasionally reminisce about the joys of roaming the streets following a previous night's air raid, returning home with an impressive haul of shrapnel. As a child, he contracted polio and thereafter walked with a slight limp but he did not allow this to stand in the way of his becoming captain of athletics at Alleyns School.

From his earliest schooldays, Dick was passionately interested in all numerical matters and it was no surprise when, on leaving school, he chose to start work as an actuarial student at the then North British and Mercantile. From there he moved to the UK branch of Imperial Life of Canada, where he met Val, to whom he was married for nearly 50 years. In 1962, the year in which he qualified, Dick and Val moved to Toronto with Imperial Life.

On returning to the UK in 1965, Dick moved for a short while to Canada Life and then to Clifford Hymans and co, where one of his duties was to light the office coal fire if he should by chance be the first member of the junior actuarial staff to arrive in the morning. No doubt tiring of this manual labour, in 1967 Dick moved to Save & Prosper and remained there for the next 25 years. After leaving Save & Prosper, he joined Watson Wyatt's insurance practice before finally retiring in 1999.

Unit-linked assurance was quite a new phenomenon in the UK during the '60s and '70s, with very little of any practical use in contemporary actuarial literature, so it fell to Dick and his peers in other linked offices to identify the key issues and develop appropriate methodology. Dick then went on to write a textbook on linked assurance as well as several Institute papers as either sole or joint author. In this, he was undoubtedly motivated by the desire to share his expertise with other actuaries and by an awareness that several important issues were widely misunderstood.

Dick played a full part in the affairs of the Worshipful Company of Actuaries, serving as a trustee of its Charitable Trust for many years and as the Trust's chairman for five of those years.

Dick was a gifted raconteur with a fund of anecdotes and jokes, the latter almost always corny and rarely in the best of taste. This made him an ideal neighbour during the ennuis of lengthy actuarial meetings and dinners. Whether he was discussing the trip that he and Val made to Lapland with their grandchildren one Christmas, or the latest actuarial developments and gossip, his enthusiasm for the topic under discussion always shone through.

Dick had an active mind and was always able to offer an original view but was equally ready to listen to others and take account of their views. There are many within the Profession with reason to be grateful for his advice and encouragement.

To his wife Val, children Fiona and Paul, and four grandchildren, we offer our deepest sympathies.

By Roger Laker

SIAS
Staple Inn Actuarial Society

Tuesday 17 May — Programme event

Practical challenges for GI actuaries under Solvency II

Staple Inn,
High Holborn,
London
5:30pm for 6pm

Do you find Solvency II requirements for internal model approval unclear? How high is the hurdle firms need to clear? How can you apply the requirements in a way that adds, rather than detracts, value from the capital modelling process?

Melinda Strudwick and Gabriela Chavez-Lopez will talk on the GIRO working party's continuing research into how firms are responding to specific, practical modelling challenges under the internal model approval process. In particular, they will look at model validation, use of third-party catastrophe models and embedding models in the business.

Thursday 19 May — Social event

Race night

Steam Wine Bar,
1 St. George's Lane,
London EC3R 8DJ
6pm

Bored of studying? Well, now there's something to look forward to!

SIAS is hosting a race night for the post-exam social. Come and test your actuarial forecasting techniques, and bet £1,000s with no risk at all. The evening includes six thrilling races with each person receiving £3,000 play money to bet, with form guides for all horses, including great odds and, full running commentary. All this and more in the comfort of a classy wine bar.

Tickets are £8 per member, or £11 for non-members, and this includes food. Venue capacity is limited to a maximum of 100, so it's first-come, first-served (don't leave it until after the exams). Email *social@sias.org.uk* with your name, company and membership status. We will confirm your entry and advise payment details at the time.

All the best to those sitting for the exams, and looking forward to a good time after.

Thursday 16 June — Social event

Bowling tournament

Palace Superbowl
Elephant & Castle Shopping Centre
London SE1 6TE
Time TBC

The SIAS ten pin bowling tournament is back by popular demand.

It is that time of the year for a chance to show off your bowling skills and strike out the competition to claim the title of 'SIAS Bowling Champions of 2011'!

Teams should consist of three players. Prizes will be awarded for the highest and lowest scoring teams, highest and lowest individual scores over both games and for the best team name. Don't worry if you don't have a team — we will assign you to one.

Food and drink will be served and are included in the ticket price of £18 for SIAS members and £20 for non-SIAS members. Places are limited and will be offered on a first-come, first-served basis.

Please email *social@sias.org.uk* to reserve your place.

For details of events, visit www.sias.org.uk

Weighing up the gender factor

Peter Banthorpe and Eli Friedwald look at recent gender-neutral legislation and the knock-on effects on the insurance industry

Peter Banthorpe is head of actuarial research at RGA UK and a member of the Profession's Life Gender Discrimination working party

Eli Friedwald is senior research actuary at RGA, concentrating on European and South African markets

As was reported in the last edition of *The Actuary,* the European Court of Justice (ECJ) has ruled that the use of gender in determining prices for, and benefits from, insurance contracts will not be permitted from 21 December 2012. This article provides an overview of current issues arising from this ruling on the UK's protection and annuity markets, although many of the issues will be common across other lines of insurance and other EU member states.

Background to the case

The European Charter of Fundamental Rights states that men and women must be treated equally. The EU Commission sought to incorporate this, regarding the supply of goods and services, from 21 December 2007 through the EU Gender Directive of 2004. This directive included a derogation clause, Article 5(2), to allow insurance premium rates to differ between men and women where differentiation was already used by the industry.

The Belgian consumers' association (Test-Achats) challenged whether the derogation was legal in Belgium. This challenge was passed from the Belgian Constitutional Court to the ECJ. An initial Opinion by Advocate General Kokott was published on 30 September 2010, although only the final judgment by the ECJ is legally binding.

The judgment

The final ECJ judgment states that the derogation is invalid with effect from 21 December 2012, the fifth anniversary of the date on which the requirements of the directive had to be implemented. This means that from 21 December 2012 all forms of private insurance in the EU will need to be provided on gender-neutral terms.

The ECJ's decision was based on technical grounds rather than the substantive issues discussed in the initial opinion. The ECJ argument was that the 2004 directive was flawed because it could have allowed member states to persist in the unequal treatment of men and women indefinitely, whereas the intention of the derogation was to provide a transition period for member states to phase out the practice of gender differentiation themselves. By focusing on a technical legal argument the ruling leaves many practical uncertainties that will need to be dealt with as the ECJ's decision is incorporated into EU and national legislation. These uncertainties are considered later in this article.

Interestingly, the judgment passes no comment on whether males and females are indeed comparable in terms of insurance risk and hence whether identical treatment is justified under the ECJ's own principles of equal treatment, which are considerably more practical than the position held by the European Charter of Fundamental Rights with regards to gender equality:

"The court has consistently held that the principle of equal treatment requires that comparable situations must not be treated differently, and different situations must not be treated in the same way, unless such treatment is objectively justified."

We consider the actuarial arguments for separate treatment of men and women in the next section.

Is separate treatment of men and women appropriate for protection and annuity business?

There are a number of theories as to why female mortality is lighter than male mortality. Indeed, Richards (2004) has previously presented some of these theories in this magazine. (*www.TheActuary.com/697279*)

It is interesting to note that some of these are currently allowed separately in the underwriting process (they are included as rating factors along with gender) for protecting a business, the main ones being:

- Smoking habits — men start smoking earlier and more heavily than females
- Women generally drink less than men.

And there are those that are not used in the underwriting process because they are too subjective to be viable rating factors, such as:

- Men tend to have poorer diets and fitness
- Women tend to access healthcare more readily.

Rogers et al (2010) conducted an analysis which tried to control a range of behavioural factors, as well as existing medical

conditions, and was still unable to eliminate gender differentials in mortality. This points to underlying biological theories as suggested by a range of academic studies as to why females live longer than men, for example:

- The main biological causes of death are gender-specific — prostate and breast cancers being the main examples for males and females respectively
- Men have a greater propensity to develop heart disease in early life
- The female hormones oestrogen and progesterone are thought to have positive health benefits whereas testosterone is thought to be detrimental to health
- Having two X chromosomes may provide some level of 'redundancy' to females and, in particular, substantially reduce the risk of females developing recessive inherited diseases.

We believe these arguments need to be made to ensure that gender is recognised as a socially acceptable and valuable factor necessary for properly managing insurance risk even in the environment where gender cannot be used to determine price or benefits.

Key areas of uncertainty

By far the greatest uncertainty for the protection and annuity markets at the time of the ruling was whether the ruling would have any degree of retrospective effect on policies written prior to 21 December 2012. The consensus of legal opinion appears to be that no retrospective action will be required and the industry is hopeful that forthcoming national legislation will reflect this view. We do not consider retrospection in this article given that the risk of this seems relatively small at the present time.

The other main areas of uncertainty are:

Can insurers still collect the gender of an applicant? This may seem trivial given the importance of gender in understanding the risk inherent in an insurance book, but it will be important to safeguard this right in eventual legislation to protect against any potential challenge, perhaps brought under the Data Protection Act.

How granular can insurance companies be in setting a unisex rate? For example, in the pricing of group annuity contracts purchased by scheme trustees it is unclear whether annuity providers could price to reflect the gender mix in any one scheme. Even though this would not constitute gender discrimination between members of the scheme, it would result in different prices for schemes with different gender mixes. A similar indirect discrimination issue applies to similar protection products aimed at different sectors of the market which may attract different gender mixes.

To what extent can insurers (and distribution channels) act to mitigate the business mix risk without being deemed guilty of indirect discrimination, even if the price paid by the consumer is gender-neutral? For instance, are gender-distinct commission rates permissible?

How sophisticated can medical underwriting be? This is important in the protection market but also in the growing impaired life annuity market. For example, it is currently the norm to apply gender-specific loadings in the event of disclosed cardio-vascular conditions. Will this practice be allowed to continue?

What changes to existing contracts would constitute a new contract and therefore fall under the new legislation? In particular, reviewable premium business is relatively common for critical illness business and it is not clear whether a premium review constitutes a new contract. For the annuity market, deferred annuity contracts may be deemed to become a new contract at the point at which an annuity is purchased.

Next steps

At present, insurance pricing has remained unchanged in the UK but insurers will be preparing themselves for the necessary price and procedural changes in the lead up to 21 December 2012, while being mindful of possible market distortion in the second half of 2012 as disadvantaged groups exercise their last chance to obtain current terms.

In particular, insurers' approach to communications will have to be carefully reviewed to ensure accurate and fair information is provided over the next two years, as is consistent with 'Treating Customers Fairly' principles. In particular, pension illustrations for those people approaching retirement in the next few years will need to carefully consider the use of gender-neutral terms in their projections.

In the UK, the insurance industry is working with HM Treasury towards detailed guidance and draft legislation.

The EU Commission is also expected to consider whether to amend the 2004 Directive. Indeed, a review of the use of gender-specific pricing in insurance to be published by 21 December 2010 was specified in Article 16 of the 2004 directive; this is now overdue but is expected to be completed.

We hope that the industry will be effective in gaining clarity through the appropriate lobbying and consultation processes to avoid any future uncertainty and potential for further legal challenge. ■

Thank you for not smoking

Adele Groyer considers whether tobacco control policies are making a difference and why it should matter to actuaries

Adele Groyer is an actuary on Gen Re UK's technical team

On 31 May each year, the World Health Organisation (WHO) marks World No Tobacco Day, highlighting the health risks associated with tobacco use and advocating effective policies to reduce consumption[1]. The theme for 2011 is The WHO Framework Convention on Tobacco Control (FCTC).

The FCTC is a treaty that was negotiated under the auspices of the WHO. Currently, 172 countries are parties to this treaty. The UK ratified the treaty in 2003 — the same year that it was first open for signature[2]. Some of the obligations arising out of the treaty are:

- Adoption of price and tax measures to reduce consumption
- Prevention of illicit trade in tobacco
- Regulation and restriction of tobacco product disclosures, packaging and advertising
- Reduction of exposure to tobacco smoke
- Provision of support for smoking cessation
- Prevention of tobacco sales to minors
- Promotion of public awareness of tobacco-related health risks.

Timeline of tobacco control measures

Long before the FCTC, the UK introduced measures aimed at tobacco control and has since continued to introduce measures that support its treaty commitments. Figure 1 shows some of the noteworthy tobacco control initiatives and smoking prevalence over time. Prevalence for ages 16 to 19 is shown to indicate the effect of policies on smoking initiation as over 80% of smokers start before age 20[3].

Smoking prevalence has generally been falling over time but at different rates in different periods. The most significant reductions in prevalence occurred between the mid-1970s and 1980s when smoking decreased by around 1% per annum. During this time, a large volume of evidence of the health risks associated with smoking was published and the price of cigarettes was rising[4].

The pace of the reduction slowed to around 0.5% p.a. between the mid-1980s and 1990s and then stalled, despite continuing real rises in the retail price of cigarettes.

In the late 1990s there was even an increase in smoking initiation, which was reversed at a similar time to the publication of 'Smoking Kills', the UK Government's first White Paper on tobacco control in 1998.

The researchers sent periodic questionnaires to study subjects and published follow-up reports every 10 years until 2001[5]. Table 1 shows some results where risk of death for smokers and ex-smokers is compared with the risk presented by a non-smoker.

The results consistently show elevated risk for ex-smokers and even higher risks for current smokers. The risk reduces with increasing duration since smoking cessation. The relative risks for lung cancer death are particularly pronounced.

This is just one study among many. The US Surgeon General's 1990 report into the health benefits of smoking cessation provides a comprehensive overview of the evidence available at the time[6].

» The results consistently show elevated risk for ex-smokers and even higher risks for current smokers «

The raft of tobacco control legislation introduced in the last decade may have renewed the impetus for reductions in smoking prevalence. This reduction may be difficult to maintain in light of the apparent increase in smoking initiation since 2006 which, ironically, coincided with the increase in the minimum legal age for tobacco sales.

The ban on smoking in enclosed public spaces appears to have had limited positive effect on smoking prevalence in addition to gains that stemmed from earlier measures, however, reduction in exposure to second-hand smoke was one of its primary aims.

The observed changes suggest that the public has responded to dissemination of information on the harms associated with smoking. The introductions of advertising restrictions have coincided with the start of periods of faster reductions in prevalence and it will be interesting to see whether the recently announced proposals to ban retailers from displaying cigarettes will trigger similar changes.

Smoking and health risk evidence

One of the major epidemiological studies that has shown the link between smoking and increased health risk is the British doctors study. This was a cohort study of physicians who were registered in the UK in 1951.

The Actuarial Profession, via the Continuous Mortality Investigation (CMI), has gathered its own data. Smoker differentials for different term assurance benefits and at different ages are shown in Table 2. The smoker group consists of current and ex-smokers, while the non-smoker group consists of non- and ex-smokers and possibly a few current smokers, too.

The smoker differentials for mortality products are in a similar range to the results seen in the British doctors study, although the smoker status classifications are not directly comparable. For females the critical illness differentials are lower than those seen for mortality. This is possibly because breast cancer, which does not have a strong link with smoking and has a high survival rate, is a major cause of critical illness claim.

The CMI has not published any income protection results by smoker status. On The Exchange, a premium comparison tool, insurers' smoker rates are roughly 40% higher than non-smoker rates.

Why actuaries should be interested

In our role as pricing and valuation actuaries working on life and health insurance benefits, we have limited immediate financial interest in changes in smoking prevalence where smoker-distinct premium rates have been charged. Increased cessation

rates may temporarily introduce more recent ex-smokers to the non-smoker pool, thereby increasing non-smoker claim rates. If ex-smokers continue to pay smoker rates, smoker claim rates could reduce.

An important component for pricing and reserving is allowance for trends. Due to low volumes and problems with consistent contributions, insured lives data is difficult to use for trend projections. Where population trends are used, adjustments need to be made for improvements resulting from smoking cessation that will not be seen in smoker-status distinct pools.

Where premiums are not smoker-differentiated, for example on large employer schemes where a unit rate is charged, reduced smoking prevalence could translate into lower claim rates, possibly creating an incentive for insurers to encourage smoking cessation.

The cost of annuities has been rising because of increased proportions of non- and ex-smokers in the population. Smoking prevalence changes are believed to have been a major driver of past improvements and should continue to have an effect for some time. Any major changes that happen at younger ages today will have an effect many years from now.

Lastly, as members of society who happen to have additional access to information on the health risks associated with smoking, we will each have our own thoughts on how we wish to respond to the WHO call for a reduction in tobacco consumption on World No Tobacco Day 2011 and beyond. ■

1 *www.who.int/tobacco/wntd/2011/announcement/en/index.html*

2 *www.who.int/fctc/en/*

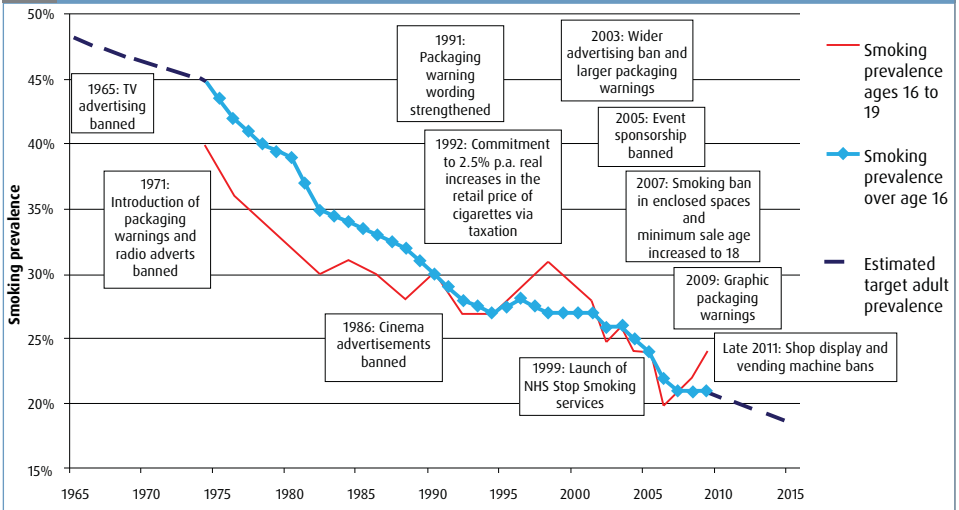
3 General Lifestyle Survey 2009

4 Townsend J, Price and consumption of tobacco, British Medical Bulletin 1996; 52 (No. 1): 132-142

5 Doll R et al. Mortality in relation to smoking: 50 years' observations on male British doctors, BMJ 2004; 328;1519

6 US Department of Health and Human Services, The Health Benefits of Smoking Cessation: a report of the Surgeon General 1990

Figure 1 — Smoking prevalence in England and key events



Townsend J, Price and consumption of tobacco, British Medical Bulletin 1996; 52 (No. 1): 132-142; General Household Survey 1998; General Lifestyle Survey 2009; 6 BBC article "Timeline: Smoking and disease" *http://news.bbc.co.uk/2/hi/health/4377928.stm*; HM Government White Paper, "Healthy lives, healthy people: a tobacco control plan for England" published 9 March 2011; Statistics on NHS Stop Smoking Services in England *www.dh.gov.uk/en/Publicationsandstatistics/Statistics/StatisticalWorkAreas/Statisticalpublichealth/DH_4080048*

Table 1 — Results from the British doctors study

Risk	Age range at death	Current smoker relative risk	Ex-smoker relative risk
Death	35-44	1.6	Not available
	45-54	2.3	1.4
	55-64	2.5	1.1 if cease age <45, 2.0 if cease age >45
Lung cancer death	35-44	2	Not available
	45-54	10	Not available
	55-64	14	Not available
	All ages	16	2 to 7.5 (cease age dependent)
Coronary heart disease death	30-54	3.5	1.3 to 1.9 (depends on duration since cessation)
	55-64	1.7	1.3 to 1.9 (depends on duration since cessation)

Table 2 — Smoker differentials implied by CMI insured lives data

Insured benefit	Calendar years	Source	Smoker as ratio of non-smoker rate					
			Males			Females		
Age			40	50	60	40	50	60
Mortality	1999-2002	T00 mortality table ultimate rates	1.8	2.0	2.2	1.5	2.1	2.5
Critical illness	2003-2006	Working paper 50 ultimate rates	1.5	2.2	1.8	1.4	1.7	1.7

Private investigations

André Freiis and Michael Studer consider the optimal allocation to private equity in line with modern portfolio theory

André Freiis is the chief risk officer at Partners Group

Dr Michael Studer is head of investment risk management at Partners Group

Modern portfolio theory strives to optimise an investor's allocation across asset classes and the investor's risk tolerance. The parameters of risk (measured as volatility), returns and correlations are the input variables to optimise the return for a given risk. Figure 1 illustrates the efficient frontier for a traditional portfolio consisting of stocks and bonds. All portfolios along the curve are 'efficient' in the sense that investors cannot create a non-levered portfolio with the same return but a lower risk, or the same risk but a higher return.

Herein we will focus on the minimum variance portfolio (such as the portfolio with the lowest risk) and the maximum Sharpe portfolio (such as the portfolio that maximises the Sharpe ratio)[1]. Calculating these optimal allocations for portfolios containing only public stocks and bonds results in a bond allocation of around 80% (minimum variance portfolio) and 75% (maximum Sharpe portfolio) based on historical data[2].

While modern portfolio theory is still one of the major tools for portfolio construction, it is hotly debated among both practitioners and researchers. People question to what extent the assumptions of standard portfolio optimisation are justified or violated. In addition, the composition of optimal portfolios might not always seem feasible.

When moving along an efficient frontier (for example, in varying risk tolerances), the portfolio composition can change substantially with just a small move of the target risk and the portfolio composition often neglects entire asset classes. This sensitivity makes portfolio optimisation more of an art than a science and the results should often be considered as general guidance rather than a strict directive.

The recent financial crisis painfully demonstrated that asset allocation should not depend solely on quantitative models and historical time series. Additional parameters such as duration and liquidity must be taken into consideration. Last but not least, investors need to carefully analyse the availability and characteristics of input data.

Optimising for private equity

Private company valuations typically reflect fair asset values rather than actual transaction values. Although similar tools are used to value public and private companies, the frequency and focus of valuations varies significantly. As a consequence of private equity valuation mechanics, return series exhibit auto-correlation, which, if not corrected for, may distort the results of portfolio optimisation.

The fact that quarterly returns are, to some extent, dependent on the returns observed in previous quarters, smoothes time series and reduces the measured volatility and the correlation with other asset classes. Since volatility and correlation are the input variables for portfolio optimisation, auto-correlation in time series would naturally impact the result of portfolio optimisation.

There are techniques that allow for the 'un-smoothing' of time series (see Conner, for example[3]). Using these methods, one can determine an adjusted volatility and an adjusted correlation of the underlying economic process and use these underlying parameters as input variables for portfolio optimisation rather than original private market return series.

Even based on adjusted parameters, modern portfolio theory suggests an 11% allocation to private equity for the minimum variance portfolio and a 27% allocation for the maximum Sharpe portfolio (see table 1) based on adjusted historical data.

Interestingly, public equities do not receive any allocation in these two portfolios and private equity basically takes the place of public equity. For long-term investors with corresponding risk profiles and a high tolerance vis-à-vis illiquidity, such a move may actually make sense. As initially discussed, investors will need to base their portfolio allocation not only on historical data but also on their outlook of expected future returns.

It's not the end of the story

As mentioned before, modern portfolio theory focuses on volatility, returns and correlations as input parameters. In our opinion, there are various dimensions not covered in this framework that are very important in the actual asset allocation decision.

Portfolio optimisation is typically based on long-term, broadly diversified industry data. This does not take into account a potential positive/negative selection bias. As a matter of fact, private equity exhibits a large dispersion between top and bottom performers. The data from Thomson Reuters illustrated in Figure 2 underlines the importance of this investment selection.

Comparing North American buyout industry returns with the S&P 500 shows that the broad buyout market outperforms the S&P 500 by around 3%. An investor that is able to identify and avoid bottom-quartile investment opportunities is able to increase the outperformance to nearly 5%. If such outperformance is factored in, the investor would naturally increase the allocation to private equity in a maximum Sharpe portfolio. On the other hand, an investor that is not able to identify and access top quartile opportunities is likely to underperform a public market portfolio. If such underperformance is factored in, there would consequently be no private equity allocation in the optimal portfolio.

The uncertainty of cash flows of private market investments adds another dimension in our portfolio optimisation effort. Using sophisticated modelling, investors need to estimate their future cash flows based on their prevailing portfolio and their unfunded liabilities; actual cash flows

will depend on many exogenous factors. The input data used for the optimisation implicitly assumes that the investor is always fully invested. Given the uncertainty of future cash flows, investors face the difficulty of achieving and maintaining their target investment level over time.

Opportunity costs from being under or overinvested can be significant due to the illiquidity of the asset class and the substantial discounts possible in the case of forced secondary sales, which may erase the entire return benefits. It is clear that portfolio optimisation of industry data does not take these opportunity costs into account.

Further important factors to be considered for portfolio optimisation include liquidity considerations and regulations. Regulators worldwide are imposing new rules for insurance companies that shift the focus from asset-based capital requirements to risk-based capital requirements. Similarly, banks are facing additional capital requirements from Basel III and the Volcker rule. These regulations will further restrict degrees of freedom in asset allocation.

Conclusion

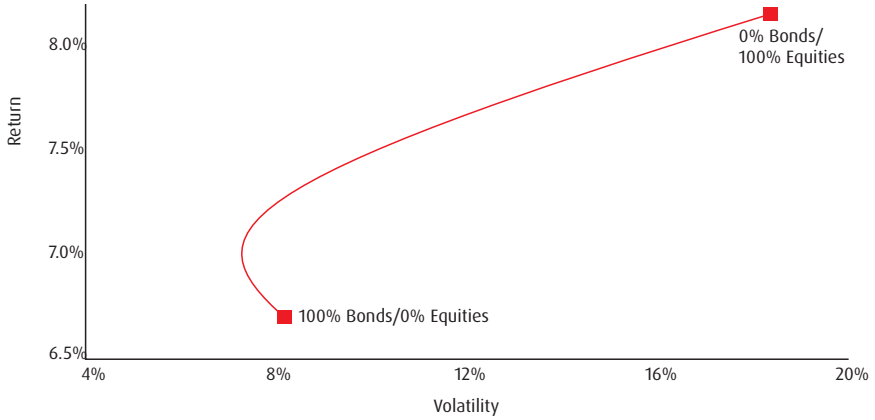
What is the optimal allocation to private equity? From a standard portfolio optimisation point of view, an unconstrained investor may allocate 10% or even up to 30% of overall assets to private equity. Individual investors' preferences, different levels of investor sophistication and regulations will, however, continue to yield very different answers to this question in practice. ■

1 The Sharpe ratio is a measure for risk-adjusted performance and is defined as the expected excess return of an asset over the risk-free rate divided by the asset's volatility

2 Mutual Fund Performance, William F. Sharpe, Journal of Business, January 1966, p. 119-138

3 Asset Allocation Effects of Adjusting Alternative Assets for Stale Pricing, A. Conner, The Journal of Alternative Investments, Winter 2003, p. 42-52

Figure 1 — Standard efficient frontier for a simple public market portfolio



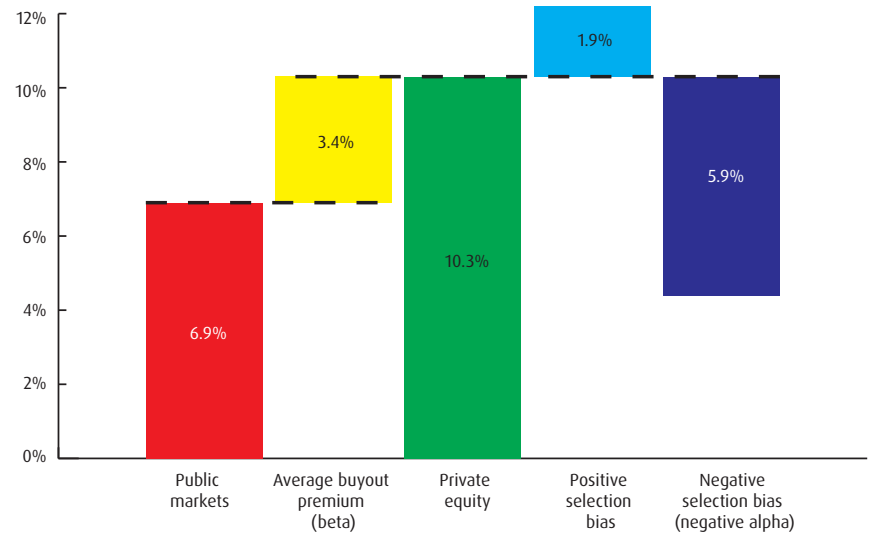
Source: Bloomberg (MSCI World Total Return, Citigroup World Government Bond Index) using data for the time period 31/12/1993 – 30/09/2010

Table 1 — Optimal allocations for portfolio with traditional and alternative assets

	Maximum Sharpe portfolio	Maximum variance portfolio
Citigroup World Government Bonds	56%	64%
MSCI World Total Return	0%	0%
CS/Tremont Hedge Fund Index	17%	25%
Private Equity	27%	11%

Private equity figures denote broad pooled average buyout industry returns with North America and Western Europe being equally weighted. Series are corrected for auto-correlation.
Source: Bloomberg (quarterly returns in local currencies), Thomson Reuters (Cash flow summary report), period 1/1/1994 – 30/06/2010

Figure 2 — Industry data does not account for an investment selection bias



Positive selection bias refers to the pooled performance of funds that are not in the bottom quartile. Negative selection bias refers to the pooled performance of funds that are not in the top quartile.
Source: Thomson Reuters (NAM BO fund performance report as of 30/06/2010) and Bloomberg (S&P 500 TR since 1994) for public markets

Centre of attention

Marjorie Ngwenya talks to Flagstone Re's chief actuary David Flitman about making the right move at the right time, which, in his case, took him from New York City to Bermuda

What events led to you following an actuarial career?

I had heard about the actuarial field from my calculus teacher and liked the concept of a fusion of maths and business. To be honest, I wasn't much of a student, but I was good at maths. I come from a professional family, mostly of physicians — my mother, father, brothers, sisters, cousins — so maybe becoming an actuary was my form of rebellion.

I went to the State University of New York, Albany, then switched to the College of Insurance, which is now part of St John's University. I had a bit of a misspent youth there taking a lot of exams for a life designation, before I figured out that property casualty was much more interesting. In the US you have to choose between life and property and casualty. In the US there were a lot of actuaries in casualty, whereas in Lloyd's there were not as many non-life actuaries.

My first job was with ISO, a US rating bureau. It was a great place to start as we were using large data sets and I got to see a lot of different lines of business. I then moved to WR Berkley Insurance in the casualty field.

What has been your greatest professional challenge to date?

The biggest challenge has been my new role. Flagstone is a global company and I have to co-ordinate a global team. You need to make sure that you are using your resources correctly and connecting with your team. My team consists of one third actuaries, one third catastrophe modellers and one third claims people. You also have to make sure that people are engaged and learning while they are working.

You spent a number of years working in North America before taking your career offshore into Bermuda. How did that come about?

I had a couple of different positions, firstly in primary insurance with WR Berkley and then in reinsurance at XL. I then moved to ACE Tempest, and was asked to come to Bermuda as chief actuary. That was in 2004.

I then saw a dynamic opportunity at Flagstone. Working hard and being good at your job are important in a career, but making the right move at the right time is key. I moved to Flagstone, a start-up formed in the wake of a lack of reinsurance capacity following hurricanes Katrina, Rita and Wilma in 2005, just as the market was turning. It was a great opportunity — serendipity is important in life.

How does working in Bermuda compare with working in the US?

The pace is very similar in Bermuda to the US, but has a really international feel to it. I work with a combination of Bermudians, Canadians, British and, of course, people from the US. It may not sound very international to you, but compared to working in New York where diversity is New Jersey vs Long Islander, it feels very international. Bermuda is a fusion of Caribbean, American, British and Canadian influences.

In terms of work, we have a more international book of business — my knowledge of geography has certainly got a lot stronger since working here.

How do you measure your success?

What I personally look for is to stay engaged. This involves learning new things and exploring different areas. The job I do now certainly ticks all the boxes. Some of the new things I've had to learn to do in Bermuda have allowed me to do this — being exposed to international markets, going to Lloyd's of London and meeting different cedants, working on business in Japan and Australia. I've been working in aviation, marine and energy and satellite, which are traditionally lines that are very common to Lloyd's of London, and I have loved all of that. I like to work hard, and if you are going to work as hard as we do, you need to love what you are doing.

David Flitman joined Flagstone as chief actuary in early 2006. Mr Flitman has worked in the reinsurance industry for over 15 years offering a depth of experience in risk management. He is an associate of the Society of Actuaries, a member of the American Academy of Actuaries and a fellow of the Casualty Actuarial Society.

What is your top tip for a fruitful career?

You have to be interested and stay interested to work in this industry. It is not just a processing task until you leave at 5pm. If we treat it like a process — for instance, ten steps in order to get an answer — then we lose out on a great deal. Some people are very capable and go through all the steps, but don't think abstractly. If all one is interested in is getting to the answer, then a more precise field like accounting will be more gratifying. In our job we have to make assumptions, so we have to rely upon our judgment. We are the sum of our experiences, and it is building upon this knowledge base that makes us good at what we do.

Another thing is to be open to new roles and experiences. When I moved to Bermuda, I was recently married and it could have been quite challenging, but we found out it worked out well. Doing the safe job and doing what is in front of you is easier. I know it sounds corny, but taking the proverbial path less well travelled has made all the difference.

What do you believe are the opportunities for actuaries in the risk management field?

Actuaries have a unique skill-set. Social sciences, economics and many other fields have large error probabilities, and you can't set up a controlled environment in a lab. That is where we come in — you have to use experience and judgment.

For underwriting satellite risk, say, there is a very small set of data, and you have to make assumptions. You can mitigate the risk by making demands on product design,

but in the end you have to draw on your experience, and sometimes you have to guess. I can't go and tell an underwriter 3%, plus or minus 2%, when he wants to know if he can sell it at 4%.

There is a scientific aspect to being an actuary, but judgment is important. It is a softer concept, bridging the gap between the cold realities of science and having to make a business decision. No matter how precise the model, there will be problems with it. Think of the riots in Egypt or someone flying a plane into the World Trade Centre, these kinds of things cannot be factored in to any model. So you have to think about what else could happen, keep a bag of tricks, so to speak, when assessing the risk.

Structured financial products are a case in point. Our one-in-10,000 or one-in-50,000-year events are all based on an assumption that our view of risk is correct. But what about global contagion (what if the mouse eats the wrong piece of cheese)? The financial crisis was not factored into those models. As actuaries we have to look at other factors, look at more than statistical performance, because we know we never have everything in front of us. We have to have our eyes wide open for the things that are missing from the model.

What three issues should insurers have in mind for 2011 and beyond?

The soft market is significant. The challenge is to work out how much a product costs, and work with what is being charged for it. There is a problem in thinking we can continue this way, working with constantly falling prices. How much longer can prices go down? In years gone by the market has relied on investment income, but with the global financial crisis of 2008, companies' investment rates are lower and spreads are compressing. The economy is still not that healthy and already we are seeing people taking more investment risk on that side of the balance sheet.

Another issue is the 'known unknowns', such as energy risk and catastrophic risk. We have to evaluate the weather we have seen — the activity in Australia, Brazil, Pakistan and Russia, and try to see what is happening with natural catastrophes.

Then there are the changes in our world with the BRIC (Brazil, Russia, India, China) or non-Organisation for Economic Co-operation and Development (OECD) countries growing and possible political instability. ■

More questions online at *www.TheActuary.com/875587*

Keeping the peace

Peter Smith outlines the measures put in place by the FSA to ensure the fair treatment of with-profits policyholders

Peter Smith is the head of Investments Policy at the FSA

Effective governance and management of the conflicts of interest inherent in with-profits funds are vital in ensuring that all classes of with-profits policyholders are treated fairly. This is one of the major themes of the FSA's new consultation paper, 'CP11/5 Protecting with-profits policyholders'.

One of the main findings of last year's With-Profits Regime Review (the Review) was that governance of with-profits funds is often weak, and does not ensure that all with-profits policyholders' interests are always taken into account by firms operating with-profits funds. This criticism applies equally to shareholder-owned firms as it does to mutually owned ones.

Actuaries have always been central to the operation and decision-making process of with-profits funds. Whether it is the creation and implementation of an effective smoothing strategy, which allows for the fair treatment of all policyholders — or in some cases declaring unsustainably high bonuses and offering guarantees that have ultimately forced a fund to close — actuaries have always played a leading role.

CP11/5 contains far more than proposals for strengthening governance (see boxout). The issues being consulted on here have been generated primarily from the Review. But they also include matters relating to mutuals arising out of Project Chrysalis (which considered the fair treatment of with-profits policyholders in mutually owned with-profits funds) and to existing concerns we have had over the effectiveness of some of our rules. Arching over all of the individual proposals is the need to ensure that the rules and guidance are applied properly and the need to strengthen the governance requirements to make sure this happens.

Governance

We make several proposals in relation to governance. Our intention here is to make sure that firms give appropriate weight to the interests of with-profits policyholders during their decision-making processes. Many funds are consolidating and moving into run-off and difficult decisions will have to be made about surpluses and the way in which they are distributed. We want to make firms do more to ensure their decisions affect with-profits policyholders in a fair manner.

The key proposals are to strengthen governance in with-profits funds by requiring all funds with assets of more than £500m to have a with-profits committee (WPC). Funds under that size can continue to have an independent person instead. In requiring this we have set out two options in relation to the composition of WPCs — either all members are independent and completely external to the with-profits fund or funds they oversee, or we allow directors and non-executives of the firm to sit on WPCs, but there must be an independent majority.

» Actuaries have always been central to the operation and decision-making process of with-profits funds «

A number of WPCs and independent persons see their remit as being narrowly confined to considering whether a firm has complied with its PPFM (principles and practices of financial management). We take the view that WPCs or independent persons should be taking a much broader view of their responsibilities. So we would not accept, for example, that WPCs or the independent person should confine their attention to that part of the fund backing asset shares only. The estate is an integral part of the fund in which with-profits policyholders have a contingent interest. It follows that WPCs or independent persons must also monitor the uses of any estate in a fund.

We propose that, in addition to monitoring compliance with PPFMs, WPCs or independent persons will also have their terms of reference published and that they can make reasonable requests for external advice if they believe that will help their decision-making. Firms will have to tell us if they do not follow advice given to them by WPCs or their independent person, and record why they chose not to do so.

One of the most obvious conflicts of interest currently allowed within our exisiting rules on governance is that the with-profits actuary, whose job it is to advise firms on the use of discretion and report on this annually to with-profits policyholders, is either a paid employee of the firm or a consultant retained by the firm. We propose that with-profits actuaries do not have reporting lines, or have their remuneration

determined in a way that may create a conflict of interest over the advice he or she gives.

Other issues

We propose that the current guidance on the need to manage conflicts of interest between policyholders and shareholders becomes a rule and that we expand it to make it clear that our rules relate to all types of conflicts of interest. These can be between with-profits and non-profits policyholders, different classes of with-profits policyholders, with-profits policyholders and managers and with-profits policyholders and other members of mutually owned firms.

The continuing fall in new with-profits business poses particular challenges to mutually owned firms who wish to continue to write new non-profit business. In particular, there can be a tension between the interests of with-profits policyholders in the fund, the desire for firms' management to hold back money to fund new non-profit business and, in some cases, other members who also have an interest in the long-term fund.

We propose to amend our rules relating to distributions to with-profits policyholders so that the required percentage reflects a firm's established practice. We expect this will give the clarity that mutually owned firms running with-profits funds have been seeking.

Currently, new business can be written into with-profits funds provided it is unlikely to have a material adverse effect on existing with-profits policyholders. We no longer accept that this is appropriate, so we propose to require it to be likely that there will be no adverse effect on them. By 'likely' we mean any new business plan has to be properly costed and deliver a credible analysis. We are making a similar change so that strategic investments can only be made if there is no likely adverse effect on existing with-profits policyholders.

We want to move away from the stark 'open or closed' distinction under the current rules. Instead, firms will have to tailor their operational and financial planning, including distribution plans, to reflect the level of new business they are writing and expect to write.

In addition, with-profits funds that closed before the current rules took effect in 2005 will be required to have run-off plans.

Firms will no longer be able to apply market value reductions (MVRs) if there is a high volume of surrenders alone. MVRs will only be applicable if the market value of the with-profits assets is lower than the face value of the policy and their amount will be limited to the extent of the shortfall.

We are making it clear that our rule, which sets a limit on the expenses firms can charge to a with-profits fund, applies equally to in-house management services arrangements. An arrangement under which amounts in excess of cost are charged subverts the stated distribution ratio by a back-door leakage of value.

We propose to rectify the position under the existing rules where a reattribution of any excess surplus might be used as an alternative to a distribution. In future, only a distribution can be used for this purpose. We see reattributions and distributions as entirely different events that take place for entirely different reasons.

Finally, we are tightening our rules on reattributions to strengthen the role of the policyholder advocate and to speed up the process.

This is a brief overview of the issues we are consulting on in CP11/5, all of which are of interest to the actuarial profession. If you have not already done so then I urge you to read the paper and send in your response to us. Consultation closes on 24 May. ■

Issues consulted on in CP11/5

- Governance
- Conflicts of interest
- The fair treatment of with-profits policyholders in with-profits funds
- The terms on which new business is written
- Material reductions in new business
- Market value reductions
- Strategic investments
- Charges made to with-profits funds
- Excess surplus
- Reattribution of inherited estates.

Moving in the right direction

Bart Patrick explores how insurers are driving operational efficiency across the claims value chain

Bart Patrick is a director of European Insurance at Pegasystems

Underwriting and claims settlement are the two most important aspects in the functioning of an insurance company. In the present highly competitive and economically challenging environment, claims settlement can serve as a market differentiator that puts insurance companies at the forefront of industry leadership and innovation. To be successful, insurers need to improve the operational efficiency of their claim organisations and build an operating model that can minimise claim costs as well as eliminate the unnecessary expenses associated with claims handling.

Many insurers have distinct claim operations, personnel and units that focus on the products (non-life and life) they offer to individuals or on different business sectors. This model often results in massive and siloed claim organisations with unique unit configurations, systems infrastructures and processes for each market segment or line of business. Moreover, in high-volume or highly complex operations, inefficient or sub-optimal process steps can be replicated, often with costly implications to insurers. Consequently, insurers struggle to maintain control over these organisations and implement consistent models for managing claim operations.

So, what options should be considered to best drive claim transformation? Implementing effective supporting technology to improve claims management across the organisation is an important step in this direction. However, supporting technology is only one part of a total claim improvement initiative. Often overlooked are the people and process components of a more holistic improvement initiative, something that packaged solutions aren't necessarily positioned to address.

Business process management (BPM) is an effective option for insurers looking to advance transformational or improvement initiatives. BPM technology goes deeper than a package solution by delivering improved claim-processing technology that automatically aligns adjusters and resources under an optimised end-to-end claim process. It also provides a strategic platform that enables more efficient claim operations and an enhanced claimant service experience.

Focus on best practices

There is a common misconception that all claim processes are unique. While final execution of the process may be highly customised, most process elements — first notice of loss (FNOL), segmentation and assignment, adjudication, investigation, subrogation and so on — are actually very similar when you break them down to their core processes.

With a BPM platform, insurers can reuse this commonality to quickly transform claim operations for competitive advantage. BPM technology provides insurers with the ability to leverage a core best practice claim process by storing those elements in a common repository of policy and procedures, which can be applied across products and/or lines of business. Applying the best core business practices across the organisation ensures the optimal claim process is available and can be invoked by any adjuster within any area of an organisation. This model can be readily specialised and extended based on which markets or segments insurers serve.

Moreover, insurers can use BPM to add 'specialised' layers of instruction to baseline processes and rules by specifying just what will be different in specific situations. Rather than having to build the process from scratch every time, insurers can focus on those specialised layers alone, thereby reducing expenses and dramatically improving time to market.

This approach greatly enhances agility. By focusing on opportunities to optimise and reuse best practice business processes, insurers can break the manual or exception claim processing that they have grown accustomed to supporting. Insurers that do this successfully create competitive advantages. They benefit from increased customer satisfaction and higher market share by enforcing best practice processes that help insurers reduce loss adjustment expense and claim leakage.

Automated case management

Claim best practices look fantastic when they're mapped on whiteboards, but often fall short when insurers don't have the ability to execute them. Moreover, each claim settlement process requires

a customised approach that takes into consideration the specific characteristics of the claim.

A strong case management platform helps insurers integrate legacy improvement assets into claim improvement strategies. Insurers can use BPM technology to unlock these static tools and achieve functionality that previously was not possible.

In addition, an efficient case management platform allows insurers to begin automating subsets or entire portions of end-to-end claim processes. To contain costs insurers need to automate work that is of little value to the organisation, and let an intelligent system manage the claim process steps that require little or no human intervention. Insurers can realise efficiency, expense and productivity gains by using work automation to manage simple claims.

To do that, insurers should eliminate paper-intensive, inefficient and error-prone file processes. Adjusters need intuitive business tools that can automatically take action based on claim information. A BPM-enabled case management approach supports an optimised claim process by providing a work engine that can organise and manage complex pieces of work across operational silos. It also provides end-to-end visibility into a claim event or a claim operation — something all claim managers love, but are often forced to do without.

The right case management solution can break down claim processes into an infinite number of sub-claim units, each of which is able to be routed, managed and monitored individually, while still providing insight and control. Adjusters and managers can leverage real-time analytics to get comprehensive views of claim operations any time. They have the ability to view and re-route work as needed, enabling a dynamic response to complex claims or shifts in work volume. Insurers can use this insight to drill down into specific tasks to understand which processes are working well, and which are not.

Insurers can apply these concepts to track, measure, and report on an infinite number of subunits under the primary claim event. This further drives best practice processes and can be extended to other lines of business; it also gives insurers the flexibility to systematically integrate claim processes that are historically segregated or require manual intervention — a must for insurers trying to contain overall claim costs or bundle new product offerings.

Grow through the customer experience

General insurers rely heavily on claim organisations to maintain high customer satisfaction, minimise risk and loss exposure, as well as delivering strong operating results. These are no small tasks, especially when one considers the unique challenge that a claim organisation faces: when customers need its services the organisation has only one chance to deliver.

One negative experience reaches well beyond a complaint to a neighbour nowadays. An insurer can now face scrutiny from an entire social network. Increasingly, insurers are striving to achieve better operational efficiencies while simultaneously maintaining or improving claimants' experience. While this tenet holds true for most insurers, back-office claim units are not necessarily equipped with systems they need to ensure satisfaction. Claim management functions have a direct impact on an insurer's expense and combined ratio; they must balance costs against service carefully and still deliver every time. More and more, the strategy to attract and retain customers includes tactical plans for tailoring the claimant's experience.

An effective BPM platform allows claim operations to control and manage customer interactions and better align customer service with business objectives. This is where the application of the best practices transitions from theory to a catalyst that insurers can use to differentiate themselves from the competition.

Insurers can eliminate misinterpretation and manual workarounds by using intent-driven service experience that dynamically applies best practices at each interaction. This approach can be leveraged to anticipate a policyholder's needs, while addressing concerns raised via web, phone or email.

Imagine the power of being able to anticipate and respond to a claimant's needs before they ask the question (or to dynamically assign work to a glazier when the customer provides notice of loss). By automating low-value work activities, adjusters can focus on claim activities that they know will help deliver a better service experience. Insurers are then able to take a more holistic approach and focus on high-touch items to differentiate themselves.

» Let an intelligent system manage the claim process steps that require little or no human intervention. Insurers can realise efficiency, expense and productivity gains by using work automation to manage simple claims «

By combining best practices and efficient case management, insurers will be able to minimise claims costs, improve efficiency and enhance customer satisfaction. Adopting a BPM-led approach to claim management will provide insurers with the flexibility to offer tailored solutions to their customers and better align customer needs with business objectives. These improvements will ultimately boost key performance indicators, which will undoubtedly impact operating results in a positive way. ■

Text mining made simple

Alan Chalk and Tony Ward show how text mining techniques using R can offer useful insights for insurance claims and pricing

Alan Chalk is the group pricing manager at RSA

Tony Ward is a chartered statistician, specialising in general insurance pricing and marketing

Harry nodded slowly. "Would you mind if I had a look round the house?"

"Why's that?"

"Sometimes you don't know what you're looking for until you find it," Harry answered. "It's a methodology."

"By all means," Becker said. "Go ahead."

As actuaries we like to make predictions. We often do this by looking at the past and seeing how things being a certain way in the past, lead to certain outcomes. We work out a relationship between the past things and the past outcomes. We then make a (rather huge) assumption that there will be a similar relationship between how certain things will be in the future and future outcomes.

'Things being a certain way in the past' may include the state of various things shortly before insurance was taken out: the age of an insured, the colour of their car or the amount of rainfall in the previous month.

This is all fairly easy. The problem starts when we start thinking about data that is more unstructured, such as text data.

Many of the most interesting things about people cannot be described by numbers (unless maybe if you are an actuary). For instance, the way they feel about your company, as described by their comments in a survey you have carried out.

Other very useful things can be described in simple short categories but often are not. For example, although the cause of an accident could be described by some simple categories, you may have available to you only text descriptions of the accident.

Beyond this, the way to categorise how people feel about your company or key things that cause accidents may not be known to you in advance. In this case, you are looking at the data, because it is your methodology to look. But you do not know what you are looking for. (Beware of the snowman[1].)

In the past we have either ignored such information because it is too difficult to know what to do with it. Or we have manually read through great swathes of text and somehow categorised it ourselves.

There is a simple solution: text data mining. Text mining is the process of extracting interesting information from unstructured text. There are various approaches to this.

Let's have a look at one way this is done in practice. Using, of course, our favourite tool — R.

R is a free statistical software package. It provides free cutting-edge statistical tools for data analysis and visualisation. To get started see *www.r-project.org*

You will need to download the 'tm' library. RToolkit

In our example we have claims information for commercial insurance sold to shops and hotels. A large number of claims have been categorised as 'Other' claims. Each claim has a description in free form text. We'd like to understand the key causes of these claims without reading through them all.

Examples of the claims

1 Stolen vehicle crashed into premises and damaged stock

2 Insd were laying carpets in tp home when they toppled a cabinet over which damaged a fire surround and glass bowl

And so on… would you fancy reading through all of these?

In practice there are a few simple steps. First, import the data and turn it in to something called a Corpus[2]. Here is the R code…

```
library(tm)
txt.csv <- read.csv("claims_other.csv")
txt <- Corpus(DataframeSource(txt.csv))
```

Next comes 'parsing the data'. This means tidying up the text and extracting the key words that we are going to analyse. Not all words carry the same level of information. Articles (the, a, this), conjunctions (and, but, or) and prepositions (of, from, by) will be repeated many times in different claims, but they don't really distinguish between claims. We need to remove these words. We can also remove unneeded punctuation.

In R this is easy.

```
txt <- tm_map(txt, tolower)
for (j in 1:length(txt)) txt[[j]]
<- gsub("[|&|-|/|\\|()|\\.-]", " ",txt[[j]])
txt <- tm_map(txt, removeNumbers)
txt <- tm_map(txt, removePunctuation)
stopwords <-c("and", "for", "the", "to",
"in", "when", .....)
txt <- tm_map(txt, removeWords,
stopwords)
```

Part of parsing the data is called 'stemming'. Our claims descriptions contain multiple variations on the same noun or verb, such as 'damage' and 'damaged'. These variations can be due to the use of tense (past, present, future), reference to singular or plural objects, or in languages such as French and Spanish, whether the word is masculine or feminine. With stemming, we recognise that these words are all related in some way, and replace the variations with a single root word:

- **REACH:** reach, reaches, reached, reaching
- **PERRO:** perro, perra (Spanish, male and female dog)

Parsing can be done in R and we leave it for you to try.

Now we need to represent our text data in matrix form, which we can then analyse using a variety of techniques. This matrix is called the 'document term matrix'. For our data, the rows represent the individual claims and the columns (terms) refer to the words used in the claim description.

It is convenient to reduce the size of the

matrix — this is called dimension reduction. The easiest way to do this is simply to remove the infrequently occurring words from the document term matrix altogether. Each claim is then represented by a subset of the original terms. A simple example is shown in Table 1, where only four terms are used to represent the four claims.

The code speaks for itself (hopefully).

```
dtm <- DocumentTermMatrix(txt)
dtm3 <- removeSparseTerms(dtm, 0.95)
```

Finally we are ready for analysis. Typically, in order to get a first idea of emerging themes, one would now carry out a frequency analysis of the remaining words. We leave the coding to the intrepid reader.

Various analyses can now be carried out. Clustering is particularly useful. Clustering will create groups of words which are often seen together in claims descriptions. These are recognised as similar, and are grouped together. See Figure 1.

R gives the output to us in a picture called a dendrogram. The dendrogram allows us to visualise those terms that occur together, enabling us to understand the common themes present in our data.

The code, as ever, is fairly easy...

```
table<-as.matrix(dtm3)
table2<-data.frame(table)
table3<-t(table2)
table4<-dist(table3)
h<-hclust(table4)
plot(h)
```

The results are shown in Figure 2.

Cutting the tree at a given height gives clusters of various details. For example, at the highest level we have a two cluster solution — 'impact damage' and everything else. In fact, there appear to be four common themes: impact damage; an event such as power failure, which leads to a loss of stock; damage to the premises (not impact); and those involving a vehicle.

Not bad for a few lines of code, and the R code needed is straightforward.

The greatest setback for pricing actuaries in the last decade was the success of the generalised linear model. This has, until recently, discouraged us from seeking new, powerful statistical techniques.

Table 1 — Dimension reduction of infrequent terms

Claim description	Damage	Impact	Shop	Water
Impact damage to shop canopy - TP unknown	1	1	1	0
Water leak from bath	0	0	0	1
Impact damage	1	1	0	0
Leakage of water on laminate floor	0	0	0	1

Figure 1 — Frequency of terms

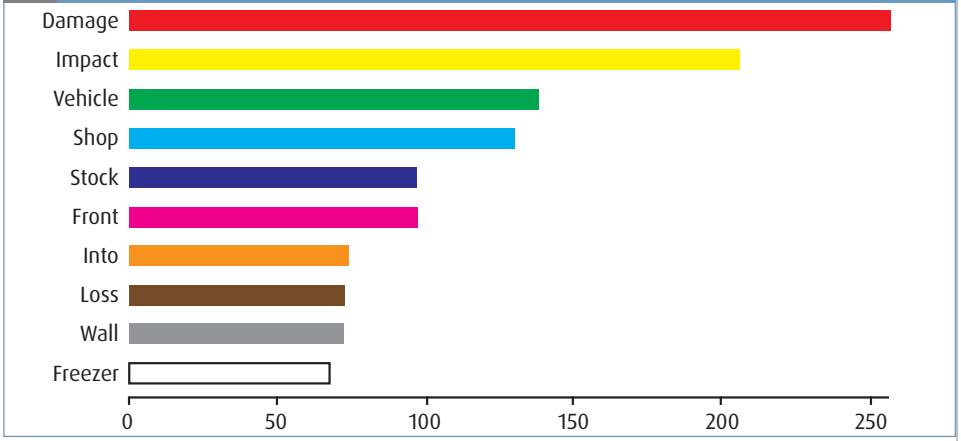
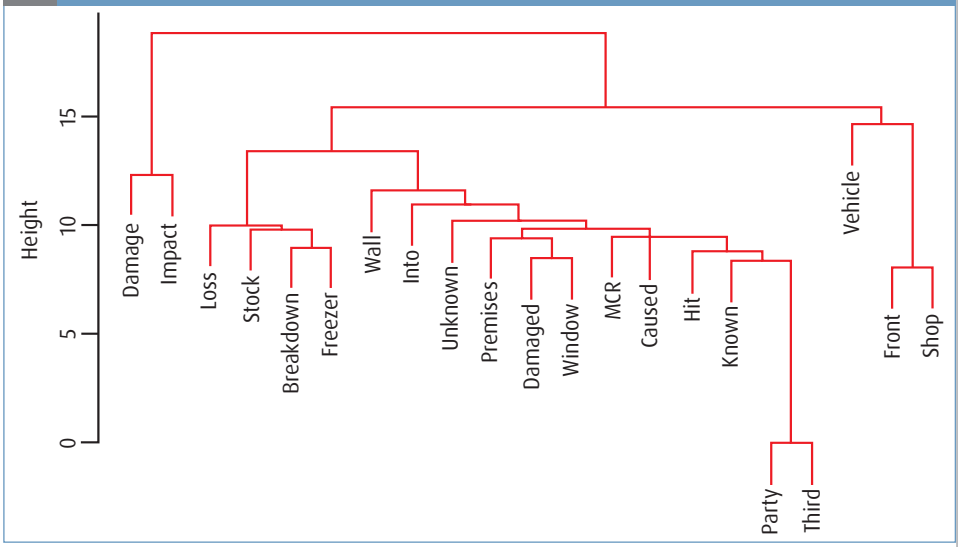


Figure 2 — Cluster dendrogram



Yet as you have seen it's easy, highly beneficial and free.

This article has demonstrated only a tiny fraction of the techniques available in text data mining. And text data mining is only a small area of the huge vista of statistical analysis now open to us.

We hope you are encouraged to try your hand at exploring this landscape. And when you do succeed — which undoubtedly you will — let us know. Good luck. ■

1 *The Snowman* by Jo Nesbo

2 *The Text Mining Handbook* by Louise Francis and Matt Flynn

The big issue

Greg Becker and Yunus Piperdy continue their quirky review of statistics vital to actuaries. This month they look at obesity and its impact on health and life expectancy

Greg Becker is a product development actuary at RGA

Yunus Piperdy is underwriting research and development manager at RGA

Whether it's the obesity epidemic, a diabetes time-bomb or a public health crisis, there is no shortage of stories and statistics warning us about the risks of being overweight. But how much significance should you attach to build? Can we really rely on weight to predict health and life expectancy?

The evidence is not as clear-cut as you might think and weight is probably irrelevant for the vast majority of people classified as 'overweight'.

Am I overweight? Am I obese?

The Body Mass Index (BMI) is a simple measure of weight in relation to height, calculated as weight in kilograms divided by height in metres squared.

The World Health Organisation (WHO) uses BMI to categorise people, and a BMI over 25 implies that one is 'overweight', and a BMI over 30 implies one is 'obese'. See Table 1 and Figure 1.

What proportion of the English population is overweight?

Males 66% and females 57%. Obviously the proportion of the population that is overweight varies by age and is different in other countries, but being overweight is undoubtedly prevalent in most parts of the world.

Is BMI 22 the ideal level?

No. Although a BMI of 22 is often quoted as 'the ideal' by the mass media, there is no statistical or medical support for the concept of an 'ideal' BMI level.

Is the BMI classification reliable for everybody?

No. As we age, height diminishes and body fat redistributes, so higher BMI cut-off points are more appropriate in older age groups. BMI cut-off points should also be adjusted to take into account ethnic origin. For example, although the WHO uses the above BMI cut-off limits for international classification, they recommend lower cut-off points for public health action in Asian populations.

Is shape important?

Probably. Body shape is generally accepted as being relevant. An apple-shaped body — where excess weight is around the abdomen and chest — is strongly associated with hypertension, diabetes and metabolic syndrome. A pear-shaped body, which 'carries' excess weight around the hips, buttocks and thighs, is believed to be less risky. More and more medical professionals and insurers use fat distribution to fine-tune their approach to obesity. Body shape is classified in several way, as shown in Table 2.

Can size and shape be used together?

Yes. Risk may be classified using a combination of BMI and waist circumference, with an example detailed in Table 3.

Can you be fit and fat?

Yes but obesity is a common sign of a lack of fitness. Cardio-respiratory fitness can reduce the impact of being overweight, supporting the importance of shape and the 'fit but fat' concept.

Active and fit overweight individuals can have lower morbidity and mortality rates than their unfit-but-normal-weight counterparts. Although, fitness is less prevalent with increasing overweight levels.

What is the mortality risk of being overweight?

A rule of thumb is that for each 5kg/m2 of BMI, mortality risk is increased by about 30%. There is a huge volume of data to show obesity kills. For those with a BMI of 30 to 35, median survival reduces by two to four years, while a BMI of 40 to 45 reduces median survival by eight to ten years (which is comparable to the effects of smoking).

It should be remembered that population mortality studies overstate the impact

Figure 1 — Height/weight map using WHO BMI classifications

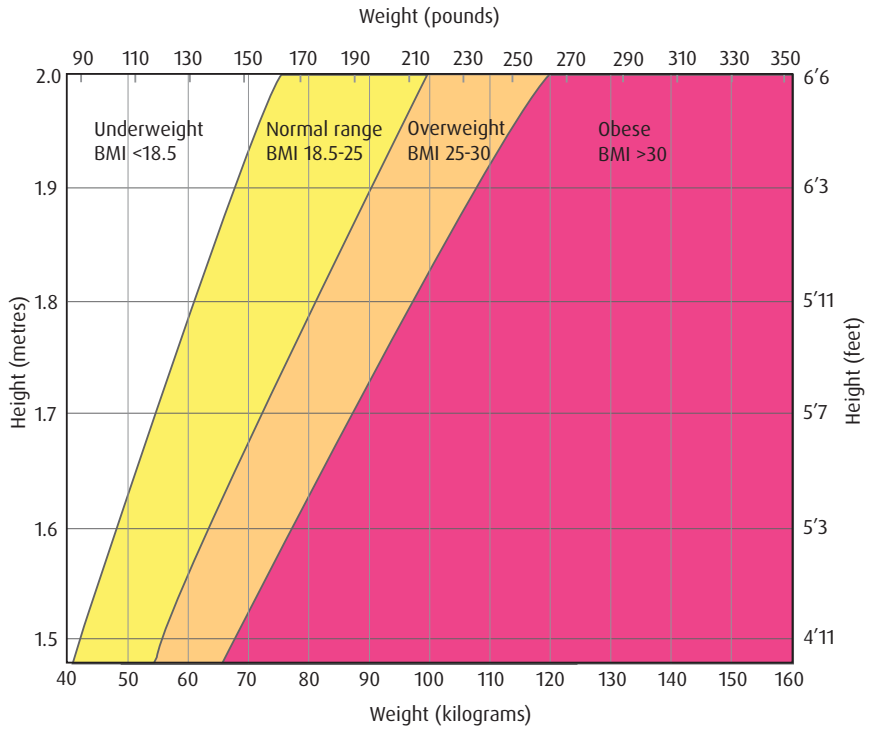


Table 1 — WHO BMI classification

WHO Classification	BMI (kg/m²)
Underweight	<18.5
Normal range	18.5 – 24.99
Overweight	>25
Obese class I	30 – 34.99
Obese class II	35 – 39.99
Obese class III	>40

Table 2 — Body shape

Classification	'Ideal' range
Waist circumference	Male <94cm (37″), Female <80cm (31″)
Waist-to-hip ratio	Male <0.90, Female <0.85
Waist-to-height ratio	<50%

Table 3 — Increasing risk combining BMI and waist circumference factors

		Waist circumference		
	Male	<94cm	94-102cm	>102cm
BMI	Female	<80cm	80-88cm	>88cm
18.5 to <25		None	None	Increased
25 to <30		None	Increased	High
30 to <35		Increased	High	Very high

Source: National Institute for Health and Clinical Excellence

» Some weight increase is due to smoking cessation and improvements in socio-economic status. Medical and surgical treatment of obesity also continues to improve «

in an insured population. While people with known major illnesses such as heart disease, stroke and cancer are excluded, they do not usually adjust for diabetes, hypertension, cholesterol and other related risks.

Such conditions are common among those who are obese, and this is likely to skew mortality data. Many studies include data from before 1980, and this analysis should be adjusted to reflect improved treatments for diabetes and cardiovascular diseases.

Taking this all into account, mortality data is far from definitive, and there is likely to be a minimal impact on mortality for a BMI up to 30. Even a BMI up to 35 may be unimportant for risk assessment in the absence of other cardiovascular risk factors.

At BMI over 35, what is the risk of developing type 2 diabetes?

The risk is increased by 20 times. For BMI levels over 30, the hazard ratio for type 2 diabetes is 4.15 in males and 10.58 in females. A BMI over 30 is significantly associated with other medical conditions, including coronary artery disease, stroke, hypertension and digestive disorders.

What is the outlook for obesity?

While the obvious answer is that it is a 'growing problem' that is 'getting bigger', it should be noted that, despite increases in average weight in recent decades, the trend is slowing and the vast majority of those overweight are still just above the normal range for BMI. Some weight increase is due to smoking cessation and improvements in socio-economic status. Medical and surgical treatment of obesity also continues to improve.

So maybe there is cause for optimism?

We leave you to decide if the glass is half empty or half full, although we suspect it depends on the size and shape of the glass, and whether it was full to start with!

All sources for this article can be viewed at *www.TheActuary.com/875588*

INTERESTED IN SHAPING A DYNAMIC FUTURE?

If you are building a career in general insurance pricing, RSA offers a unique combination of advantages. This is a company with pricing and underwriting at the very heart of its business model. Employing more than 130 people in its pricing team, RSA is recognised for the outstanding quality of its technical people.

RSA is one of the world's leading insurance groups, underwriting in 130 countries, with operations in the UK, Scandinavia, Canada, Ireland, Asia, the Middle East, Latin America and Central and Eastern Europe. Its 23,000 employees last year generated £7.5bn in gross written premium, insuring everything from cars and houses to the Eurotunnel.

RSA writes a spread of business that takes in everything from household, motor, travel and pet insurance, through offices, shops and small commercial, to large commercial, international and London Market business. Where else could you be pricing an advertising agency in Soho one month and a renewable energy plant in Kazakhstan the next?

Technical mastery

In a rapidly evolving world of risk, RSA believes in generating competitive advantage through technical excellence. That means offering competitive salaries and career opportunities required to attract the best technical people in the market, investing heavily in developing their skills and capabilities, and backing them with the best available technology and data.

One example of RSA's investment in technical mastery is the Advanced Development Programme which enables technical staff to extend and develop their professional capabilities. Through RSA's Training Development Programme experienced members of the pricing team help build more recent joiners' knowledge of particular market segments. The Technical Academy provides access to skills training, professional qualifications, technical resources and knowledge sharing on a global basis – with an emphasis on nurturing exceptional talent - and runs a twice-yearly conference with the Group CEO presiding. RSA's Global Pricing Academy shares expertise and benchmarks pricing around the world.

Advanced technology

RSA is investing heavily in pricing technology. We believe technical people should spend their time wrestling with issues of pricing - not with the technology that is supposed to help them. Hence its multi-million pound investment in state of the art Price Optimisation Software which enables pricing team members to efficiently build models and develop scenarious, all in one package.

RSA is also developing its Commercial Quote Engine which will enable actuaries to communicate benchmark pricings to underwriters. This highly sophisticated tool lets underwriters perform an incredible array of comparative analysis on pricing and has a Windows-style interface that does in one click what might take twenty with market-standard technology.

RSA is also at the forefront of developing new approaches to pricing, going beyond already advanced techniques such as spatial smoothing to new techniques that are market leading. If you want to be part of developing the next generation of general insurance pricing tools, RSA is the place to be.

Working with the best

RSA is known for the high calibre of its technical staff. A career with RSA offers the chance to work with some of the very best people in the industry. It is a challenging and technically demanding place to work – but also a stimulating and rewarding environment in which to develop and test your skills across a broad set of pricing challenges.

There are excellent opportunities for career development within the group's large technical team, and the chance to participate in the work of market bodies like GIRO and the ABI, on whose working groups RSA people are well represented. As well as being the UK's largest commercial insurer, RSA is home to one of the most successful and dynamic brands in the direct insurance sector, MORE TH>N.

Here pricing people have the opportunity to work closely with award winning marketeers like Pete Markey, the man behind the current MORE TH>N FREEMAN campaign, which attracted an unprecedented 500,000 hits on YouTube.

A technical role with RSA offers a unique combination of market leading remuneration and career development potential; the opportunity to work with the best people and a unique breadth of sector and geographical experience. Something worth considering!

To find out more, please visit www.greatcombinations.co.uk

(Don't) look back

Richard Elliott examines a music legend's increasing preoccupation with the past

It seems it is difficult to discuss Bob Dylan, who turns 70 later this month, without slipping into hyperbole. To many music enthusiasts, he is the greatest artist of the 20th century. To many others, he is the most overrated. Last April, in an interview with the *LA Times*, Joni Mitchell provided a strong hint as to which group she belonged to when she claimed that Dylan was a "fake" and a "plagiarist".

I suspect he might not put it in quite those terms, but Dylan has previously displayed candour regarding the source of much of his material. His last truly great album, released in 2001, was called *"Love and Theft"*. The quotations are Dylan's — even the title was stolen. Apparently, it comes from historian Eric Lott's book *Love & Theft: Blackface Minstrelsy and the American Working Class*.

Arguably, it was time spent plundering the past that helped return Dylan to critical favour, a position he presently enjoys. The 1980s — *Empire Burlesque* (1985), in particular — found Dylan courting contemporary production techniques; the pounding 'When The Night Comes Falling From The Sky' could easily have found a place on the *Top Gun* soundtrack. In 1992, however, he changed tack, recording *Good as I Been to You*, an acoustic album of traditional songs and covers. It was well received, with the follow-up *World Gone Wrong* earning Dylan a Grammy. When he eventually returned to writing his own material on *Time Out of Mind* (1997), he sounded like a man from a distant era, his ravaged voice belying his then 56 years. On the aforementioned *"Love and Theft"* the music harks back to the pre-rock of the 1930s and '40s, the type of thing that Dylan might have grown up listening to.

© Alberto Cabello

Just what exactly Dylan did grow up listening to was soon to be revealed. Famously reclusive, he surprised his fans in 2006 by making his debut as a radio DJ. His Theme Time Radio Hour ran for three seasons with Dylan interspersing the songs with anecdotes and wry observations. When a listener emailed him to ask why he played so many old songs, he delivered his answer with a straight bat: "There's a lot more old songs than there are new songs".

Dylan's concept of new songs appeared to be at odds with that of several critics when he released *Modern Times* (2006). Though all ten songs were credited to Dylan, the musical — and sometimes lyrical — similarities to much earlier material were soon pointed out. Most critics, though, were satisfied that Dylan's particular treatment of these old songs justified the "theft". On *Together Through Life* (2009), it was perhaps less clear what the track 'My Wife's Home Town' added to the Muddy Waters version of 'I Just Want to Make Love to You'.

If Dylan's musical output over the last ten years has suggested an eagerness to reclaim America's past, his other activities have often focused on his own history. Martin Scorsese's documentary film *No Direction Home* (2005) saw Dylan reflecting on his most celebrated period: 1961-66. The film arrived a year after *Chronicles: Volume One*, the first part of his autobiography. The book delighted fans, with the rich lyrical quality of Dylan's songwriting transferring to his prose as he recounted arriving in New York, early inspirations, and artistic recession and recovery. In January 2011, he finally signed a deal with his publisher to write two more volumes. As he enters his eighth decade, it appears we can look forward to more of Dylan looking back.

Seriously, you've never read... *Adventures of Huckleberry Finn*?

This month Sasha Lee, actuarial trainee at Aegon, looks at Mark Twain's best-known work, first published in 1884.

Did it live up to its reputation?

In his praise of *Adventures of Huckleberry Finn*, Ernest Hemingway said: "All American writing comes from that. There was nothing before. There has been nothing as good since". I felt the book certainly justified its reputation as a great American novel.

The story follows Huck's escape from the abuse of his drunkard father and the Widow Douglas's well-meaning attempts at 'sivilizing' him. He sails down the Mississippi on a raft with Jim, a runaway slave, to whom he promises to help gain his freedom by reaching the free states. Along the way, they meet a pair of unscrupulous members of royalty and an old friend.

Why read it?

Twain's sense of humour translates so well it is hard to believe the book was written over a century ago. He weaves his trademark satire through a brilliant narrative in Huck's Southwestern dialect in order to highlight the hypocrisy of the white Christian slave-owners.

Who would you recommend it to?

Absolutely everyone.

OVER TO YOU

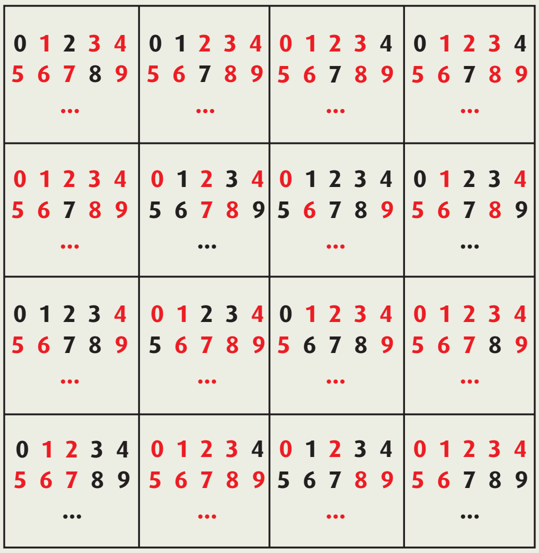
If you would like to contribute a book review or main article, please email Richard at *arts@the-actuary.org.uk*

May prize puzzle

The prime of your life

Each of these 16 boxes contains every natural number (0, 1, 2, 3, and so on), although only the numbers from 0 to 9 are shown. Aside from the colouring of the zeroes there is one consistent rule, covering all of the boxes, determining which numbers are red and which are black.

What is the highest red number to appear in any of the boxes?



0 1 2 3 4 5 6 7 8 9 ...	0 1 2 3 4 5 6 7 8 9 ...	0 1 2 3 4 5 6 7 8 9 ...	0 1 2 3 4 5 6 7 8 9 ...
0 1 2 3 4 5 6 7 8 9 ...	0 1 2 3 4 5 6 7 8 9 ...	0 1 2 3 4 5 6 7 8 9 ...	0 1 2 3 4 5 6 7 8 9 ...
0 1 2 3 4 5 6 7 8 9 ...	0 1 2 3 4 5 6 7 8 9 ...	0 1 2 3 4 5 6 7 8 9 ...	0 1 2 3 4 5 6 7 8 9 ...
0 1 2 3 4 5 6 7 8 9 ...	0 1 2 3 4 5 6 7 8 9 ...	0 1 2 3 4 5 6 7 8 9 ...	0 1 2 3 4 5 6 7 8 9 ...

For a chance to win a £50 Amazon voucher, please send your answer to *puzzles@the-actuary.org.uk* by 16 May.

Terms and conditions

The prize will be awarded to a correct answer received before the closing date picked at random by the puzzles editor. The winner's name will be announced in the next edition. Please note that the puzzles editor's decision is final and no correspondence will be entered into. We reserve the right to feature the winner's name and a photo (if supplied) in *The Actuary*. Your details will not be passed to any third party in connection with this draw.

Puzzle 471

Light entertainment

Retired actuary May Riddle is the proud owner of an antique traction engine. She is driving it to the village fete at a fast walking pace down a long straight road towards a busy T-junction controlled by some traffic lights. Her light shows green.

A short time later, May has driven up to the stop line before the junction and the lights are showing solid amber, but she continues slowly on through the junction. She is not normally a dangerous driver, so what is going on?

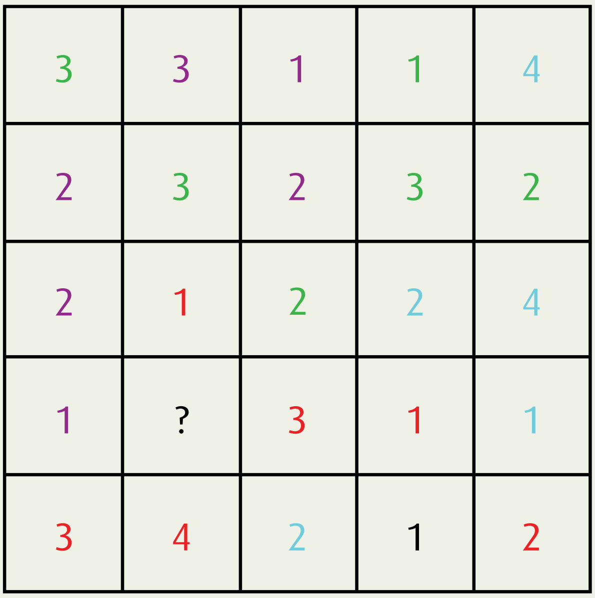
MORE PUZZLES ONLINE

To access the puzzles archive, visit *www.TheActuary.com/puzzles*. The puzzles editor is pleased to receive ideas for new puzzles from readers at *puzzles@the-actuary.org.uk*

Puzzle 472

Rational grid

With what number, and in what colour, should the question mark be replaced?



3	3	1	1	4
2	3	2	3	2
2	1	2	2	4
1	?	3	1	1
3	4	2	1	2

Puzzle 473

Sequential study

What is missing from the sequence below?

4 off
4 on, 1 off
1 on, 1 off
??
2 on, 1 off
1 on
1 on, 4 off
4 on
1 off, 1 on

Bridge challenge 15 — How bad can it get?

A useful beginners' guide to playing bridge can be found at *www.ebu.co.uk/education/learning/default.htm*. Please send any comments you have to Tom Bratcher at *puzzles@the-actuary.org.uk*

♠KQ985
♥AKQ862
♦4
♣3

N
W E
S

♠A632
♥7
♦AJ932
♣A42

The bidding:

S	N
1♦	1♥
1♠	4NT(1)
5♠(1)	7♠

(1) Asking for Aces on the 'Blackwood' scale — response implies three Aces

Lead K♣

Holding a reasonable but not exceptional hand, you, as South, are surprised to find Partner pushing you to 7♠. All you have to do is make it.

Two questions:

1. After you win with A♣, which card do you play next?
2. How bad can the spade and heart breaks be such that you can still make your contract?

Solutions for April 2011

April prize winner

Congratulations to this month's winner,
Christopher Vanston-Rumney of Lloyds Banking Group

April prize puzzle — April fuel

The race finishes at 20 past three.

Consider the race as observed from the Doughnut van (D) and suppose it continues at the same speed out of Fife until race end. At 10 o'clock the race starts and Arthur initially approaches the van at speed v, Bertie at v-5 and Colin at v-10.

If a cyclist reaches D he must then drop back and away (otherwise Arthur wins). Therefore the cyclists start distance x behind D in Edinburgh and end up y behind when they reach Fife, then the race takes x / v + y / (20 –v) for Arthur to complete.

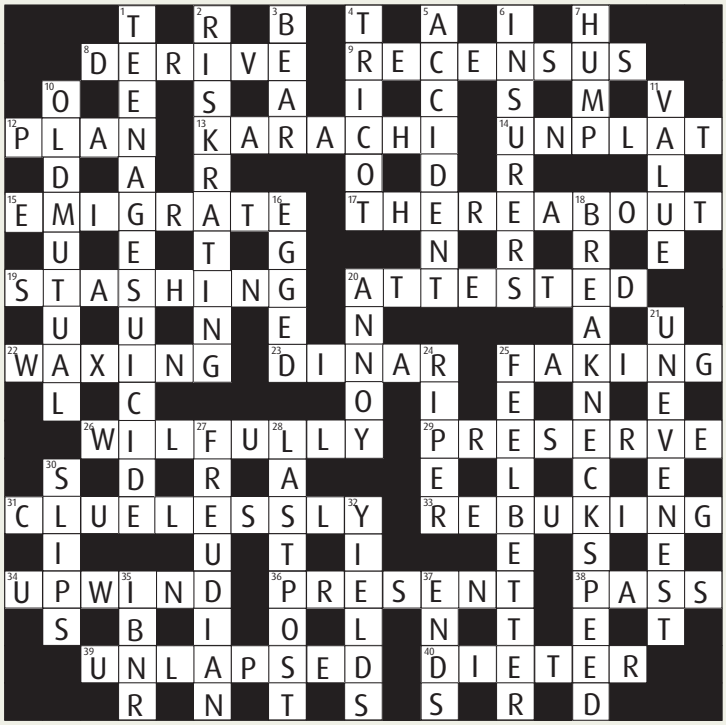
This is convex as a function of v and so only two of the cyclists actually meet D (otherwise the three must take different times). Setting z = x/y this leaves three equal equations for the race times:

1) 1/v + z/(20-v)
2) 1/(v-5) + z/ (25-v)
3) (1-z) / (v-10) (ie Colin does not actually reach the van and so travels at constant speed)

considering 1) and 3) and multiplying up to remove the denominators, and then considering 2) and 3) in a similar manner, produces two more tractable equations in z and v. These can be combined to leave a quadratic equation 3z2 – 4z + 1 = 0: only one solution of this (z = 1/3, implying v=15) produces a viable solution.

Therefore at the end of the race the cyclists are one third of the distance behind the van than the distance they started behind, ie one third the distance D travels in one hour. Therefore they must arrive in Fife 20 minutes behind D.

Puzzle 470 solution — Gilty pleasure



This month Matthew Welsh looks across the exam room battlefield to find an army of unexpected allies

Know your enemy

"Can you please check that the last three digits of your registration number match the number on your desk?" Words that ring around the near silent hall in an actuarial exam sitting. On all sides there are people just like you trying to pass the same exam.

The Institute and Faculty explain that there are no quotas for passing, but old pass rates tell us that a certain percentage will fail the exam you are sitting. There is a cut-off score somewhere between 0 and 100 and this is partly informed by the performance of students in that exam. Achieving a better result than the people around you vastly improves your chance of passing it — it's them or you. They are *the enemy*!

So what gives you the edge? All things being equal, being better prepared than the next person offers an immediate advantage. Daley Thompson, the legendary decathlete, claimed to train on Christmas Day, saying that this was because he knew that his rivals would not be.

Knowing what the typical study package is like, it shouldn't be hard to go the extra mile. Isolate and push yourself beyond the norm and you can be sure you go into the exam hall with an edge.

Of course, all things are seldom equal and therein lies the greatest flaw in this approach. The scenario is familiar but the experience of the individual is always different. How you've prepared, your aptitude for a particular exam, how you have slept, eaten, how early you turn up to the exam room and all the little idiosyncrasies that give you 'your exam routine' — each will dictate how you perform on the day.

I doubt the most successful candidates can transplant their recipe for success onto others, as this is wrapped up in the kind of person that they are. But fellow students should have a lot to offer one and another. In my experience, student actuaries rarely study cooperatively. Most people point to their preference to study alone, as this has sufficed through school and, in most cases, university, or they claim that study styles are too different to make them compatible.

However, there are compelling arguments to work with fellow students taking the same exam as you as much as possible, casting off the shackles of a 'me or them' mentality.

By discussing topics with other students, misconceptions can be suitably challenged. By definition, you don't know your misconceptions until they are pointed out, and the Core Reading is not going to challenge your preconception of it. It can't talk back. People can.

ActEd claims that those who take their tutorials enjoy double the pass rate of those that don't. You could infer from this that there is likely to be a benefit to shared learning in general.

It is suggested that memory and accuracy of recall is improved through active rather than passive experience. Discussing a part of the notes with another person gives you a mental hook to hang your learning on that is far more effective than simply reading another indistinct piece of bold text. Even if you understand something well, the simple act of explaining it can deepen your own understanding.

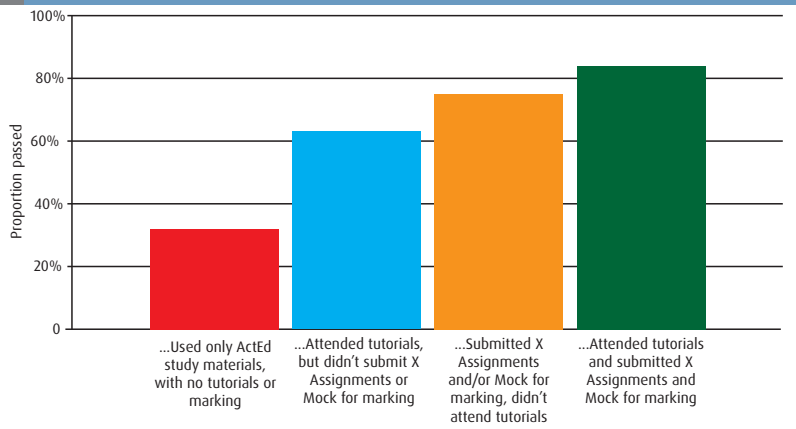
By marking other students' exam papers alongside the examiner's report you can see where they did things differently (maybe even better). It is not so important if answers are right or wrong. Indeed, often top sportsmen will say that a defeat (read: the wrong answer) has been more valuable in the long run than a victory, as the lessons learnt are often more clear-cut.

The nature of the actuarial exams and the challenge they offer will make those who wish to pass them determined. This is bound to lead to competitiveness between students, no matter how well natured their relationship. To overlook the benefit that students offer each other can only make the struggle more difficult.

Journeys are always more fun when we share them with others and having a shared goal makes the feeling of achievement together at the end all the more sweet.

Matthew Welsh is the incoming student editor and will take over from Stephen Paines in July

Figure 1 — Estimated pass rates for various study methods

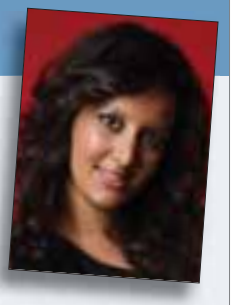


Source: ActEd

For the full set of statistics with all caveats, please read page 3 of the PDF *www.acted.co.uk/Docs/2011/Product guide.pdf*

Actuary of the future

Meera Rajoo



Employer and area of work

Grant Thornton UK LLP — general insurance consulting.

How would your best friend describe you?

I emailed her to ask and she hasn't replied… hmm.

What would be your personal motto?

I'm not sure I have one, but a friend has one that I quite like: 'things take time'.

What's your most 'actuarial' habit?

I really enjoy making a list and then ticking it off as I get things done. Is that actuarial? In fact, I have put completing this Q&A on my list, so I'm looking forward to ticking that off now.

How do you relax away from the office?

I work hard in the gym to relax my mind, although I often turn this into a competition with myself, so it becomes less relaxing.

Alternative career choice?

Wedding planner — this would involve making lists too so that's a bonus!

Greatest risk you have ever taken?

I'm very risk-averse, so this is pretty tame, but I'd say skiing without a helmet. I am so clumsy, it really is a miracle I haven't hurt myself yet.

What's your most treasured possession?

A pair of old jeans that I bought with my sister the Christmas before she passed away. They don't really fit and are a bit ratty, but I still have them. Or my DKNY handbag I bought in celebration of passing CT1 and CT3 on my first exam sitting — that was a good day!

WHO WOULD YOU LIKE TO SEE FEATURED HERE?

If you would like to nominate someone for Actuary of the Future, please email *AOTF@the-actuary.org.uk*

Book review

Matthew Edwards reviews *Extreme Events* by Malcolm Kemp

Extreme Events is published by John Wiley & Sons. RRP £45

My earliest childhood memory of something conceptually subtle: I was perhaps ten years old and my father was explaining what he was working on. He had been asked, in his capacity as a geneticist, to estimate the expected health cost of a nuclear power plant explosion. He explained how essentially meaningless the exercise was because it involved estimating an unquantifiable but tiny probability of occurrence, estimating an unquantifiable but enormous cost, and multiplying those estimates together. Of what use would such a number be?

Some 35 years later, it seems that half of Europe's insurance actuaries are engaged in a somewhat similar exercise: Solvency II. The concern about quantifying extreme probabilities and costs is not, of course, the exclusive province of such actuaries — it is an increasing concern of those working in investment management. *Extreme Events*, by the actuary Malcolm Kemp, looks at the subject of tail modelling from that perspective. For many insurers, market risk is the dominant risk factor and often the only risk factor that is sufficiently 'information rich' to lend itself to non-spurious stochastic modelling in the tail; as such, this book is likely to be of immediate interest to many actuaries working in the Solvency II field, in addition to the investment practitioners for whom it is primarily written.

Kemp starts with a discussion of fat tails, prompting consideration of why fat tails exist at all, for instance, why the Central Limit Theorem, like central heating during harsh winters, always breaks down when we need it most.

The chapter identifying factors that significantly influence markets is of great interest to those keen to understand market risk. Easier said than done and the tour through various curve-fitting techniques, from the basics of component analysis up to regime-switching models, leaves one with equal amounts of desire and anxiety.

The central chapters cover traditional portfolio construction, with a view to how the classic risk-reward conundrum posed by extreme events can be quantified.

Kemp closes the book with more conceptual chapters on stress-testing and 'really extreme events'. These chapters are fascinating, and bring together themes of uncertainty.

The author writes about technical and often dry material in a clear and generally engaging way. The book is structured so that readers who do not want to go through every single formula can still derive value and understanding from the text. One negative point was the paucity of examples: even where the theory is clear, examples help to put the matter in context.

Ford Maddox Ford's approach to deciding on the merit of a book was to judge it by its 99th page: "Open the book to page 99 and the quality of the whole will be revealed to you." If we apply that approach to *Extreme Events*, we find ourselves treated on the page in question to a clear tour through principal components analysis (PCA) — that simplistic perspective of reality that seems to lure many actuaries to an overly orthogonalised fate. What book on extreme event modelling would be complete without giving us the lowdown on PCA?

Matthew Edwards is a former editor of The Actuary

CRITICALLY CHALLENGED

We welcome readers' suggestions of relevant books for our contributors to review or, alternatively, if you would like to submit your own reviews, then please email *sharon.maguire@incisivemedia.com*

At the Privy Council on 16 March 2011, Her Majesty the Queen 'pricked' the name of Alan J. Frost DL, who has now been appointed as the next High Sheriff of Dorset.

Mr Frost has had long-term involvement in a variety of local organisations, including roles as managing director at Abbey Life Assurance Company, chairman at Bournemouth University, chairman at Teachers Building Society in Wimborne and as non-executive director at Hamworthy. Since 2004, he has been chairman at Dorset Opera and is also a vice-president at Bournemouth Chamber Music Society. Mr Frost has also edited and contributed to *The Actuary*'s arts page over a number of years.

Forward features in *The Actuary*

The Actuary's team welcomes contributions from members or contacts in and around the profession.

Below is a list of themes for the next few months along with the deadline for submission. If you would like to contribute, please contact Tracey Brown at *features@the-actuary.org.uk* with suggestions.

For a full list of 2011 issue themes, visit *www.TheActuary.com/875190*

July 2011 (Published 30 June, editorial deadline 13 May, advertising deadline 14 June)

- Careers: working overseas
- General insurance
- Pensions

August 2011 (Published 28 July, editorial deadline 17 June, advertising deadline 12 July)

- Investment
- Life
- Careers: work-life balance

September 2011 (Published 25 August, editorial deadline 15 July, advertising deadline 9 August)

- Reinsurance
- Environment
- Modelling and software

Towers Watson has appointed **Oliver Rowlands** as a senior consultant in its pensions consulting business.

Mr Rowlands joins after 25 years at Aon Hewitt, the last three years of which he spent as a main board director and EMEA retirement practice leader. During this time, he also had responsibility for a number of major clients, including several scheme actuary appointments. He was formerly a partner at Clay & Partners.

RGA has taken on **Ken Hogg** as chief actuary and financial officer for its UK operations, with effect from 1 June.

Mr Hogg joins from the Financial Services Authority, where he led the FSA's work on insurance sector issues and represented the FSA in its dealings with external stakeholders including trade associations, professional bodies and international regulators. During his career in life insurance, he has held a range of financial reporting, strategy and business development roles with companies such as Aegon, AIG Life and MGM Advantage.

Adrian Baskir has recently joined *Bupa Health and Wellbeing UK* as head of pricing and actuarial. Mr Baskir joins from Old Mutual after 25 years, where he was most recently manager (financial strategy). He is currently a Member of Council of the Institute and Faculty and is past president of the Actuarial Society of South Africa.

Bluefin Corporate Consulting has appointed **John Branford** to join its actuarial team. Mr Branford joins from HamishWilson where he was a scheme actuary.

KPMG has welcomed four employees to its insurance actuarial team. In the Edinburgh office, **Harvard Lee** (principal adviser) and **Maynard Kuona** (executive adviser) have joined from Standard Life, bringing the size of the team to 12. Mr Lee is a qualified actuary with seven years' experience across Solvency II, variable annuities, modelling and model validation. Maynard Kuona is a qualified actuary with experience in Moses modelling and validation and financial risk management. In its London life insurance actuarial team, two executive advisers, **Saroop Rooprai** and **Nivan Reddy** have recently joined. Saroop Rooprai has previously worked for KPMG in the pensions actuarial team, joining this time from Jardine Lloyd Thompson. Nivan Reddy brings significant Prophet modelling experience and joins the team from Deloitte in South Africa.

Have you moved?

Please send news of moves, promotions, retirements and appointments to *peoplemoves@the-actuary.org.uk*.

Change of address

Please remember to update your details on the Profession's website at *www.actuaries.org.uk/members/transactions*

Appointments

www.theactuaryjobs.com

To advertise your vacancies in the magazine and online please contact:
Melanie Jacob, Tel: +44 (0)20 7316 9618, E-mail: melanie.jacob@incisivemedia.com

A refreshingly different service for contractors

As an award-winning actuarial and financial services consultancy we pride ourselves on being different to other interim resourcing agencies.

OAC supports its contractors by providing them with PII cover and offering important supplementary benefits such as paid release for CPD, advice from OAC actuaries at any time, and free trial access to Mo.net® financial modelling software.

As an actuarial firm we fully understand the changing needs and requirements of our contractors. We are committed to working with them so that they can achieve their personal and business objectives.

Contractors are quickly realising that OAC is the preferred choice for benefits and winning contracts. Experience the difference yourself and register your interest on our website today.

Business Support (Life)

Experience: Student Actuary.
Location: Manchester (UK).
Daily rate: £550-£600.
Description: To work in Business Support Team. Needs with-profits, Prophet and claims method experience.

Reserving and Capital (Life)

Experience: Student Actuary.
Location: Manchester (UK).
Daily rate: £550-£600.
Description: To work in Reserving and Capital Team. Needs experience in Excel and Prophet, modelling of dynamic management actions in DFA, Peak 2 valuation or ICA, and regular solvency monitoring.

Head of Data Governance

Experience: Degree level, or equivalent.
Location: Bristol (UK).
Daily rate: Excellent, market rate.
Description: To establish data governance and monitor data quality for Life business.

Prophet Tester

Experience: Senior Student Actuary.
Location: Bristol (UK).
Daily rate: £700-£800.
Description: Needs Prophet experience - MoSes desirable. Useful to have knowledge of testing/baselining actuarial models, ICA, SII, and differences between SII and ICA.

Solvency II Actuarial Analyst

Experience: Qualified Actuary.
Location: South East (UK).
Daily rate: £900.
Duration: Initial contract is for 6 months.
Description: Internal model development role.

Unit Linked Product Pricing Actuary

Experience: Qualified Actuary.
Location: South (UK).
Daily rate: £900.
Duration: 3 months.
Description: Knowledge of Prophet and investment and savings products.

Investment Team Manager

Experience: Near Qualified Actuary / Qualified Actuary.
Location: Basingstoke (UK).
Daily rate: Excellent, dependent on experience.
Description: To manage an investment administration team.

Opportunities in WP and NP Reporting, Modelling, Actuarial Systems Development and Actuarial Data

Experience: Newly Qualified Actuary / Qualified Actuary.
Location: Midlands (UK).
Daily rate: Market rate.
Duration: Initial contract is for 3 months.
Description: Preferably with 1-5 years' post-qualification experience and with-profits experience.

For more information

Colette Lurshay | +44 (0)20 7278 9500
interimresourcing@oacplc.com | oacplc.com/interimresourcing

OAC

IPS GROUP ACTUARIAL

www.ipsgroup.co.uk/actuarial

Pensions Fund Investment Strategist

c £80,000 + Bonus & Benefits ***– London***

This FTSE 100 pension fund is looking to hire an investment specialist to join the pension team to work with the board of trustees, management and investment advisers on the investment strategy looking at both the asset and liability strategy and also the asset allocation across a range of asset classes. Candidates will either work in another corporate pension fund, an asset management house or an advisory firm with broad asset class experience. An actuarial or CFA qualification is important.

Contact: Anthony.Chitnis@ipsgroup.co.uk – London Office Ref: AG473384

Client Investment Analyst

£ Competitive ***– London***

This is an excellent opportunity for an analyst to join this niche provider. My client could be best described as a cross between an asset manager and an investment consultancy, so if you have had at least two years experience of working within one of the larger institutional investment consultancies then please call me ASAP. You will either be studying for the FIA/or CFA and have a sound academic record, complimented by excellent communication skills.

Contact: Simon.Arthur@ipsgroup.co.uk – Leeds Office Ref: SA472784

Policy Manager

£45,000 - £60,000 approx ***– London***

A unique position has been created within a governing body that is looking for an actuary of any discipline to inform debate on key issues and topics facing the profession. Part qualified actuaries who are not convinced by their career path may also be of interest. For further information on this rare opportunity please contact me to arrange a confidential discussion.

Contact: Simon.Arthur@ipsgroup.co.uk – Leeds Office Ref: SA473454

Pensions Student & Actuaries

£ Excellent Package ***– London***

There are a number of openings for students and qualified pensions actuaries to join an expanding team as it enters a new stage in it's development. The nature of the work will be a hybrid between an accountancy practice and an employee benefits consultancy, so really the best of both worlds. If you have UK pensions consulting experience and you feel you are ready for something different, then please contact me to discuss further.

Contact: Simon.Arthur@ipsgroup.co.uk – Leeds Office Ref: SA470236

International Analyst

£30,000 - £45,000 ***– London***

A leading global consulting firm is offering the chance for a part qualified actuary to take their first step into international benefits. The work will be varied and interesting. Please only apply if you are a part qualified actuary with at least one years experience in a UK consultancy, obtained a 2:1 or above and have passed a number of actuarial exams. Candidates with exposure to corporate defined benefit plans will be of particular interest.

Contact: Simon.Arthur@ipsgroup.co.uk – Leeds Office Ref: SA471230

Senior Actuary

£ Competitive ***– Berkshire***

If you are a pensions actuary (with between three and ten years PQE) who can demonstrate an ability to spot opportunities to broaden and develop an existing client relationship, but feel frustrated at the lack of scope to progress to an influential level in your current set-up, then this could be the role for you. For a confidential discussion please call me ASAP.

Contact: Simon.Arthur@ipsgroup.co.uk – Leeds Office Ref: SA471230

Specialty Line Actuary

RMB500,000-800,000/annum ***– Shanghai***

One of the leading Lloyd's syndicates is looking for an excellent Specialty line modeler to assist the syndicate underwriters to quantify risk profiles for their portfolio. You should be from a statistical background with both training and experience in building economic and statistical models. Dynamic Financial Analysis experience in insurance and reinsurance would be useful. Both fluent Chinese Mandarin and English are essential.

Contact: Jimmy.Ping@ipsgroupasia.com - Shanghai Office Ref: JP470588

Motor Pricing Actuary/Student

RMB300,000-600,000/annum ***– Shanghai or Beijing***

Our client is a leading global actuarial consultancy . Due to their recent expansion in China, they are looking to recruit experienced pricing actuaries specialising in Motor products. You should have over 4 years experience in commercial fleet or domestic portfolio pricing and be familiar with the relevant software package knowledge. Candidates should speak Chinese Mandarin fluently, have a confident personality and expect to travel throughout Asia frequently.

Contact: Jimmy.Ping@ipsgroupasia.com - Shanghai Office Ref: JP472709

London Office: IPS Group, Lloyd's Avenue House, 6 Lloyd's Avenue, London, EC3N 3ES
Tel: 020 7481 8686 **Fax:** 020 7481 8660 **Email:** actuarial@ipsgroup.co.uk

Leeds Office: IPS Group, 8 St Paul's Street, Leeds, LS1 2LE
Tel: 0113 202 1577 **Fax:** 0113 202 1598 **Email:** actuarial@ipsgroup.co.uk

HYMANS ROBERTSON

Actuarial Systems – model development opportunities

£Highly Competitive

Ronnie Bowie
Senior Partner

Welcome aboard
the Spirit of Independence

Hymans Robertson LLP is one of the leading independent providers of actuarial and consultancy services to the occupational pensions market, across both the private and public sectors.

People lie at the heart of our business; our unique culture has helped us create a pool of highly talented, experienced and enthusiastic individuals. The result has been strong continued growth with significant investment in both people and technology. As a result, exciting opportunities are available for talented individuals to join our Actuarial Systems team.

Actuarial Modeller – Glasgow or London

With responsibility for the development of pension liability models and the integration of these with our risk models, the successful candidate will focus on analysis, design and programming models in collaboration with key stakeholders Previous actuarial modelling experience required.

Analyst Programmer – Glasgow or London

With responsibility to design, develop and support financial modelling applications, the successful candidate will have in-depth experience with the latest Microsoft technologies. Programmers with interest in functional programming techniques particularly welcome.

Actuarial Systems Support Analyst – Glasgow or London

With responsibility for providing end user support for financial modelling applications, the successful candidate will focus on the testing of modelling systems, providing helpdesk support, and documentation.

We are keen to hear from individuals who are highly motivated, proactive and who possess excellent communication skills. If you would like to find out more please go to **www.hymans.co.uk/careers**

Real people Real skills Real results Real people Real skills Real results Real people Real skills Real results Real people Real skills Real results Real people Real skills Real results Real people Real skills Real results Real people Real skills Real results Real people Real skills Real results Real people Real skills Real results Real people Real skills Real results Real people Real skills

Derivatives Fund Manager

Asset Management Company, London
Managing a portfolio of funds with an LDI objective

circa £80k + bonus + benefits

Due to increased business resulting from pension scheme de-risking, a great opportunity has risen for an Actuary to move into a Fund Management role.

In this role you will manage a portfolio of derivative funds whose objectives are designed to manage clients' ALM risks, with particular emphasis on equity derivative overlays.

You will work with key members of other teams within Structuring, LDI, Insurance, Risk and Portfolio Management, and provide a key input to the design and implementation of complex client mandates. This includes designing and expanding the equity overlay offering to the market and developing ideas that specifically meet the risk/ return needs of pension fund clients.

For this role you need to be familiar with option pricing models, understand how market parameters affect pricing strategies and have used equity index futures, exchange traded OTC equity options and option strategies.

Contact **Parvinder Matharu**
Newton Recruitment
t +44(0)1689 862937
e parvinder@newtonrecruitment.com
w www.newtonrecruitment.com

Newton recruitment

UNIVERSITY OF Southampton

School of Mathematics

Lectureship/Senior Lectureship/ Readership in Actuarial Mathematics/ Financial Mathematics

Ref: 5467-11-J

We are seeking to appoint an outstanding individual with a track record of research in Actuarial Mathematics or Statistics and/or Financial Mathematics and the ability to deliver excellent teaching in a range of topics in Actuarial Science, at both undergraduate and postgraduate level.

Duties, as determined by the Head of School, will include conducting research of international status in Actuarial Mathematics or Statistics and/or Financial Mathematics and teaching undergraduate and postgraduate Actuarial Science. As part of the role you will also be expected to support effective management and administration of the School.

The position is available from 1 September 2011 or as soon as possible thereafter.

For an informal discussion about this role please contact
Professor Jon Forster, tel: +44 (0)23 8059 5130, email: J.J.Forster@soton.ac.uk
or Dr Gerard Kennedy, tel: +44 (0)23 8059 3656, email: G.Kennedy@soton.ac.uk

To apply online visit www.jobs.soton.ac.uk Alternatively telephone 023 8059 2750. Please quote the reference number 5467-11-J on all correspondence. The closing date for this position is 24 May 2011 at 12 noon. It is expected that interviews will be held in June 2011. As part of the interview process, you will be invited to give a research presentation.

At the University of Southampton we promote equality and value diversity.

www.jobs.soton.ac.uk

POSITIVE ABOUT DISABLED PEOPLE

The Actuary presents:
'So, you want a career in life consulting?'

A live and interactive careers webinar

Monday 9 May 2011, 19:00 BST

Life consultancy offers a dynamic, diverse and demanding environment for actuaries, with the opportunity to progress and develop quickly and gain invaluable experience on challenging projects including capital restructuring, mergers and acquisitions, finance transformation, ERM and Solvency II. Through strong relationships and an ability to solve clients' most important issues, consultancy can offer a varied and highly rewarding career for actuaries at all levels.

So what does it take to work for a top consultancy? What sort of work is available? And how can you make the most of the opportunities?

The Actuary's third live careers webinar, produced in association with Deloitte, will explore the challenging world of life actuarial consulting. This is your chance to find out more and to put your questions to our expert panel, chaired by editor Marjorie Ngwenya.

How to register

For further details and to register, visit

TheActuary.com/875482

The panel

Marjorie Ngwenya, Editor, The Actuary (chair)
Roger Simler – Partner, Deloitte
Andrew Smith – Partner, Deloitte
Naomi Burger – Senior Manager, Deloitte

In association with:

Deloitte.

UK I Europe I Asia Pacific

Eames Consulting Group

Current assignments include:

- Head of UK Analytics, Brokerage, £150,000
- Head of Pricing, Insurer, £200,000
- Syndicate Actuary, Syndicate, £160,000
- Derivatives Portfolio Manager, Asset Manager, £250,000
- Director, Investment Consulting, £120,000
- Institutional Sales, Asset Manager, £200,000
- Senior Partner, Consultancy, £350,000
- Financial Director, Insurer, £150,000

"...one of the best recruitment and search firms I have worked with..."
HR Manager, Amlin

Rob Bulpitt,
Manager
Tel +44 (0)20 7092 3237
rob.bulpitt@eamesconsulting.com

Rupert Rickard,
Managing Consultant
Tel +44 (0)20 7092 3219
rupert.rickard@eamesconsulting.com

Zoe Campbell,
Senior Consultant
Tel +44 (0)20 7092 3208
zoe.campbell@eamesconsulting.com

Dennis Ball,
Senior Consultant
Tel +44 (0)20 7092 3286
dennis.ball@eamesconsulting.com

Mansi Koshy,
Senior Consultant
Tel +44 (0)20 7092 3283
mansi.koshy@eamesconsulting.com

Alistair Allan,
Senior Consultant
Tel +44 (0)20 7092 3262
alistair.allan@eamesconsulting.com

Investment Consultancy roles

first

Location: Leeds preferred, but any of our 5 office locations possible.

Remuneration: Dependent upon experience.

Hours of work: 37.5 hours per week, flexible workingwith core hours 10am to 4pm, minimum 7.5 hours per day

Senior Investment Consultant (applications invited to practice leader level)

We are looking for a senior consultant, ideally with leadership skills and proven ALM expertise. This role carries the possibility of partnership, depending on the attributes of the applicant.

The final details of the role will depend to some extent on the experience and the skills of the individual concerned, but will be expected to focus on the following:

- To further develop First Actuarial's investment consulting proposition, with the emphasis on ALM and "flightpath" based dynamic derisking strategies;
- Overseeing the delivery of investment advice to First Actuarial's clients (typical client is DB with assets of £5m to £50m, some smaller, some larger) and working directly with key clients, supported by more junior team members;
- Developing new business opportunities;
- Recruiting additional investment consultancy team members in line with growing demand for services.

Overall, we are looking for an individual with the ambition to drive the development of our investment consulting business in a manner commensurate with our wider business growth, which has seen First Actuarial grow from 23 people and revenues of £1.4m in 2004 to 130 people and revenues of £10m.

Investment consultant

We are looking for an experienced investment consultant, proficient in dealing directly with clients in meeting situations, to help deliver First Actuarial's investment services. This role will involve:

- Supporting the practice leader in further developing First Actuarial's investment consultancy services, with the opportunity for real input;
- Delivering services to new and existing clients in First Actuarial's portfolio of over 200 schemes, including:
  - Strategic investment advice via traditional and LDI models
  - Manager structure and fund recommendations
  - Dynamic derisking plans
  - Asset transition
  - Ongoing monitoring and governance work
- Supporting new business initiatives, including participation in pitches.

If you are interested in hearing more about either of these opportunities, please send your CV to michael.vickerstaff@firstactuarial.co.uk or contact Michael for a confidential discussion on 0113 393 3002.

first actuarial

"We are all pleased to have had Sophie's assistance and keep in touch with her over the occasional pint or two!"

...is your future bright?

ORANGE MALONE LTD
ACTUARIAL SEARCH & SELECTION

sophie@orangemalone.com www.orangemalone.com
0771 363 7998 / 01932 782 119

SABRE
Insurance Company Limited

Assistant Actuary

Dorking, Surrey

£35,000 - £50,000 depending on experience Plus benefits, including 29 days holiday.

Actuarial assistance to chief actuary to study towards qualification.

Seeking an Assistant Actuary to provide and assist with all aspects of the work of the Actuarial Services Department. In this challenging and varied role, you will work across varied areas including Pricing Analysis, Profitability Modelling, Relativity Rating and Modelling. An excellent opportunity to work within a dynamic environment with frequent opportunities to learn new skills and widen experience.

Key Responsibilities

- Market Pricing Analysis
- Profitability Modelling
- Relativity Rating
- Reserving Techniques
- Assisting in the development and maintenance of effective statistical models and analyses of the Company's underwriting performance and pricing strength
- Assisting in the development and maintenance of effective analyses of competitors' results and activities, market trends etc
- Modelling, extrapolating, interpreting and monitoring statistical data to identify and confirm market trends, business/niche opportunities, new/changing rating factors, recommending appropriate strategies and actions.
- Interpreting results of statistical analyses in order to determine premium rate
- Undertaking specific actuarial/statistical/analytical projects to deadlines as directed.
- Reporting progress and problems to the Chief Actuary and seeking direction and guidance where necessary.

Qualifications:

Mathematics degree
Part Qualification of CT examinations

Skills / Knowledge:

Actuarial content in degree
High level of accuracy and attention to detail and figures
Logical approach to work methods and ability to work to strict deadlines.

To apply for this role please go to: www.sabre.co.uk/careers.html

Accountancy and Actuarial Discipline Board

ACTUARY TRIBUNAL PANEL MEMBERS "Life"

The AADB seeks to appoint five actuaries to join its Tribunal Panel from which members of Disciplinary and Appeal Tribunals are drawn.

The AADB is the independent investigative and disciplinary body for accountants and actuaries in the UK. Since 2007 the AADB, which is an operating body of the Financial Reporting Council, has been responsible for the disciplinary scheme of the actuarial profession in relation to important issues of public interest.

AADB Tribunals are lay-dominated and consist of a legal chair, at least one actuary and at least one lay person. They are appointed from a Tribunal Panel by an independent Convener. They consider complaints of alleged misconduct and, where the allegations are proved, decide what sanctions should be imposed. Where leave to appeal is given, an Appeal Tribunal is convened.

Skills and experience

Actuary members of the Tribunal Panel must have current or recent experience of practice in the UK and be Fellows of the Institute and Faculty of Actuaries.

The AADB is seeking a mix of skills and would like to appoint two actuaries with a life insurance background.

Panel members will be appointed for a minimum of three years, renewable upon mutual agreement. The work of the Tribunals is demand led. A daily attendance fee and daily reading fees of £400 plus expenses are paid to actuarial members. Hearings usually take place in London but may take place outside London if required.

Further information about the AADB can be found on its website at www.frc.org.uk/aadb. Interested candidates should e-mail their CV and a covering letter to Human Resources at recruitment@frc.org.uk. For specific questions about the role please call the Convener, Ann Darling, on 0191 536 2089.

The FRC values diversity in all appointments and welcomes applicants of any age or from any background.

The closing date for applications is Friday 27th May 2011.
Interviews will take place early July.

FRC

Policy Manager

The Actuarial Profession
making financial sense of the future

The Actuarial Profession represents the Institute and Faculty of Actuaries, the UK based chartered body for actuaries. Our members work in insurance, pensions, healthcare, investment, banking and, indeed, all sectors where risk management plays an important role. As the chartered professional body for actuaries, we provide a rigorous examination system supported by a programme of continuous professional development. Our professional code of conduct supports high standards, reflecting the significant role of the Profession in society.

In the public affairs arena, we aim to speak out and facilitate debate on relevant matters of public interest where our expertise can add value. We hope to inform public policy development, with contributions based on evidence and our expertise, working in a collaborative approach with Government and other stakeholders.

The Role

To support an increased focus on public affairs, the Profession is looking to recruit a Policy Manager who will be a key member of an expanded public affairs executive team. In this newly created role, the job holder will provide dedicated support to the Profession's members in this area by monitoring key policy areas and contributing to the development of the Profession's public statements and consultation responses, ensuring that they are based on research, clear analysis and cogent arguments.

The Policy Manager role will require technical knowledge and some public affairs experience or aptitude. The Policy Manager will ideally hold an actuarial qualification or another professional qualification in finance. He or she will be required to use this expertise in liaising with senior members of the Profession to gain technical input on policy and research questions and to work with this material to create effective policy communication programmes aimed at wider public audiences.

The successful applicant will be able to demonstrate strong communications skills and an active interest in the public affairs environment affecting the actuarial market place.

The Profession is an Investor in People. We are committed to supporting the learning and development needs of our employees and we offer a competitive range of benefits and flexible working arrangements. Our offices are based in London, Oxford and Edinburgh.

To apply, or to discuss this further, please contact Miranda on 0207 337 8815 or email miranda@highfinancegroup.co.uk

The closing date for applications is Wednesday 18th May.

hfg High Finance Group Specialist Recruiters

High Finance Group is working in partnership with The Actuarial Profession for this role. Any CV's sent directly to The Actuarial Profession will be forwarded to HFG for initial assessment.

TESCO Bank

The Miles Partnership

Tesco Bank – General Insurance

Head of Finance and Actuarial
Attractive compensation package

This is an important new position , for a highly qualified Actuary– this role will sit within the Bank Finance function. The individual should be an established reserving actuary within a General Insurance business, with strong first hand experience of UK personal lines insurance markets. The successful individual will play a key role in the management of the Bank's insurance business working closely with the Bank's commercial team to ensure the successful performance of this business.

A keen business acumen able to influence others and convey all aspects of financial risk management this individual will also play a key role in the short and long term planning for the business and, working with underwriting partners, will support the process to optimise the use of the Bank's capital in this business.

A strong character with proven leadership skills, consultative approach, able to challenge, probe and analyse.

Replies please to response@miles-partnership.com quoting reference 1S13

Our client is a BERMUDA based, Class 4 multi-line reinsurance company writing a global book of insurance and reinsurance business. In order to support continued growth our client seeks applicants for the position of Assistant Vice President, Actuary. Working within the Actuarial department (mainly on individual account pricing and quarterly reinsurance company reserving work) this is a dynamic opportunity to work in a truly collegiate environment within a successful reinsurance operation. The role will report to the senior Actuary.

Our Client utilises all the latest available technology and recent global catastrophes have demonstrated how well the team of underwriting, actuarial and risk experts have worked together, with results showing they have outperformed many of their peers. The successful candidate will need at least 5 years experience working in a property/casualty reinsurance company, preferably in individual account pricing and with exposure to lines of business, such as Property Catastrophe and Marine & Energy.

Other requirements include having an undergraduate or graduate degree in Mathematics or Statistics and successful completion of at least 5 CAS exams (or a similar exam level in a recognized actuarial professional body such as the Institute of Actuaries) with a strong commitment towards attaining the Fellowship qualification. A working knowledge and some experience of property catastrophe modeling software (such as AIR and RMS) is also required.

If you are interested to review the full job description or would like to confidentially discuss this opportunity, please contact Colum Lovett at colum.lovett@insurance-synergy.com enclosing your latest cv and covering letter.

www.insurance-synergy.co.uk

hfg High Finance Group
Specialist Recruiters

High Finance Group is a specialist consultancy, providing Finance, Actuarial, Audit, Risk Management, Compliance and IT Recruitment solutions to major Insurers and Asset Managers, professional services firms and SMEs. We aim to provide a market leading recruitment service, bridging the gap between large agencies and executive search.

Commercial Actuary — Life

Salary: £90k + Bonus + Profit Share
Location: South West

A fantastic opportunity has arisen for a Life Actuary to be the Commercial lead for this high profile global insurer. Managing a team of Actuaries & product specialists you will take ownership from the start, liaising with teams across Europe to deliver profitability on a range of Life Assurance products. This role will offer long term career progression, clear visibility with senior decision makers in the Group and shape the proposition going forward. CB7591

Insurance Risk Manager — Life

Salary: £75k - £95k + Bonus + Benefits
Location: London

Great opportunity to move from a traditional Actuarial role into a Risk based role. Join the European Risk team of this global insurer in their London headquarters. Working with the Head of Insurance Risk, the role requires a qualified Actuary with an understanding of Life Insurance risk, looking to transition their economic capital and/or financial reporting background into managing & embedding the risk framework for their European operations. CB7565

Business Start Up Actuary — Life

Salary: £60k - £85k + Bonus + Benefits
Location: London

Opportunity to join a financial services firm providing innovative capital markets and insurance / reinsurance de-risking solutions. You will join a growing team, working alongside market leading professionals to develop, grow and diversify the business in a highly supportive and collegic environment. You will be nearly / newly qualified with a proven track record of delivery and well rounded Actuarial experience from a Life office or consultancy. GB1611

Pricing Manager — Life

Salary: £55k - £85k + Bonus + Benefits
Location: Londond or South West

A fantastic role within the International Wealth Management division of a leading UK based Life Insurer. You will oversee the pricing and development of new products, ensure products lines are market consistent and communicate across the proposition and business development teams. The right candidate will have an in depth product knowledge as well as understanding the broader implications of existing and future product lines. GB1612

International Pricing Opportunity — Life

Salary: £30k - £40k + Bonus +Benefits
Location: London

An excellent opportunity at a leading global life insurer seeking a dynamic part qualified student Actuary to join their product pricing team. The role involves planning strategic approaches to developing and pricing new product lines working directly with senior management. You will be offered responsibility quickly, and be expected to use your own initiative. JE1002

Senior Life Reinsurance Analyst — Life

Salary: Up to £130k + Bonus + Benefits
Location: Zurich, Switzerland

In this role you will be responsible for the reporting requirements to Group Finance, Global Life, Group Re Management and other Stakeholders. You will be accountable for delivery of EV, IFRS, local Swiss stat, and for actual closing as well as Plan/Forecast for internal Life re's. This is a challenging position for a senior Life Actuary looking to enhance their international career. DB6416

Contract Role — Life

Salary: Up to £1250 per day
Location: South Coast

A great opportunity to lead the development of the Internal Model for S2 at this leading insurer. This is a high level role, with significant leadership and people management exposure. You will drive the project from start to finish; coordinating, designing, and providing advice on the model development. You must be a qualified Actuary with significant S2 experience and a proven record in this area. RP101

Switch to Life

Salary: £35k - £65k + Bonus + Benefits
Location: UK Wide

Looking to move in to Life Insurance? A number of opportunities have arisen for trainee and qualified Pensions Actuaries within leading insurers across the UK. Roles include risk management, reserving, financial reporting and modelling. You will be able to demonstrate good understanding of the issues facing the Life Insurance industry and commitment to retraining in this area. MW5592

Pensions Buyout — Pensions

Salary: £45k - £70k + Bonus + Benefits
Location: UK Wide

This global organisation is seeking nearly / newly qualified Pensions Actuaries to join their Pensions Buyout practice. You will play an active role, creating effective and tailored de-risking solutions. This is a client facing role, working in a non-traditional area of Pensions providing exposure to investment and insurance markets. MW1658

Pensions Consulting — Pensions

Salary: £40k - £60k + Bonus + Benefits
Location: London

This highly regarded global consultancy requires forward-thinking, commercially focused, part-qualified Pensions Consultants. You will benefit from their exceptional client base, gain exposure to a broad range of projects from audit support to innovative de-risking solutions and expereince multi-disciplinary assignments. MW1659

Life

Clare Bethell: 020 7337 8829 clare@highfinancegroup.co.uk
Graeme Braidwood: 020 7337 8820 graeme@highfinancegroup.co.uk
Jack Eccles: 020 7337 1207 jack@highfinancegroup.co.uk

Pensions

Miranda Wilkinson: 020 7337 8815
miranda@highfinancegroup.co.uk

Contract

Rupa Pithiya: 020 7337 1200
rupa@highfinancegroup.co.uk

Actuarial | Finance | Risk | Audit | Compliance | IT | Strategy & Consulting | Solvency II | Claims & Underwriting

020 7337 8800 actuarial@highfinancegroup.co.uk www.highfinancegroup.co.uk

Oliver James associates

www.ojassociates.com

Contract - Life Insurance

Subject Matter Expert — Rob Bentham
London — **£1500/day**

A market leading life insurer is looking for a Solvency II expert to design and validate the board level training materials on a 6 month contract.

Solvency II Actuary — Gary Rushton
South East — **£1200/day**

A number of roles are currently available within my client's SII programme. SII, MCEV and Modelling exp are all of interest. 9 month contract.

Peak 2 Actuary — Rob Bentham
South West — **£1000/day**

Our client is looking for a qualified actuary for an initial 6 month contract, to work on their Peak 2 valuations project.

Reporting Actuary — Rob Bentham
South West — **£1000/day**

A major life insurer is looking for reporting actuaries to join their busy Solvency II programme for 6-12 month contracts.

Solvency II Technical Author — Ik Onyiah
Edinburgh — **£850/day**

Technical Author in our client's Modelling Methods workstream, producing high quality, technically complex modelling methodology docs – 6 months

Prophet Developers — Gary Rushton
South East — **£800/day**

My client is seeking experienced Prophet developers to deliver changes to the existing stochastic Prophet models for Solvency II requirements.

Internal Model Actuary — Gary Rushton
London — **£1250/day**

The development and maintenance of Capital models, including: Solvency II, Standard Formula and Internal Model. 12 month contract.

Review Actuary — Rob Bentham
Midlands — **£1000/day**

A closed book life insurer is looking for reporting actuaries to join their busy Review team for 6-12 month contracts.

Methodology Actuary — Ik Onyiah
South West — **£1000/day**

You will be tasked with developing and proposing methodology for Solvency II technical provision and capital calculations – 6 month contract.

Documentation Actuary — Ik Onyiah
South East — **£900/day**

Our client is seeking an actuary with Solvency II documentation experience to work within the IMAP workstream - 6 month contract.

Annuities Reporting Actuary — Gary Rushton
South East — **£850/day**

An outstanding 12 month contract opportunity to lead the financial management of a deferred annuities business for a leading UK Life Insurer.

Actuarial Contractor (ALS) — Ik Onyiah
South West — **£800/day**

You will support the work of the methodology workstream of the Solvency II project within the Life & Pensions business. Must have DFA/ALS experience.

Contract - General Insurance

Capital Actuary — Stewart Cherry
London — **£900/day**

An international London Market insurer is looking for a Capital Actuary (2-5 years PQE) to undertake a 9 month contract.

Reserving Actuary — Stewart Cherry
London — **£800/day**

My client, a leading Lloyd's Market insurer, is currently looking for an experienced reserving actuary for an initial 6 month contract.

Syndicate Actuary — Stewart Cherry
London — **£700/day**

Part/fully qualified actuary required for a 6 month contract with a broad range of experience in Pricing, Reserving and Capital.

Solvency II Actuary — Stewart Cherry
London — **£900/day**

London Market insurer seeks a Solvency II actuary (nearly or recently qualified). Must have up to date SII exp. 9 month contract.

Remetrica Modeller — Stewart Cherry
London — **£800/day**

Experienced Remetrica capital modelling actuary required for a 9 month contract focusing on the internal model development for SII.

Pricing Actuary — Stewart Cherry
London — **£650/day**

Commercial/personal lines pricing actuary required for a 6 month contract working within the Lloyd's Market.

Contact

Gary Rushton — **0207 310 8793**
gary.rushton@ojassociates.com

Ik Onyiah — **0207 310 8785**
ik.onyiah@ojassociates.com

Contact

Stewart Cherry — **0207 310 8651**
stewart.cherry@ojassociates.com

Rob Bentham — **0207 649 9351**
rob.bentham@ojassociates.com

"...energy, integrity and a long term perspective."

HEDGE FUND — **CATASTROPHE MODELLING**

LONDON — £ to attract the best

Leading hedge fund seeks a catastrophe modeller to join its dynamic team. You will be super bright, inquisitive and full of energy. You will design and implement creative modelling solutions in order to make optimal investment decisions.

Ref: Star367

NON-LIFE PRICING OPPORTUNITIES

NATIONWIDE — up to £150k + bonus + benefits

We are working with a wide variety of clients across the UK seeking nearly qualified and qualified actuaries with non-life pricing experience. These roles will provide successful candidates with the support and opportunity to implement cutting edge techniques, develop leadership skills and contribute to the profitable growth of their organisations.

Ref: Star366

MOVE TO LIFE

NATIONWIDE — up to £85k + bonus + benefits

Now is a great time for part qualified and qualified actuaries from a pensions background to move to company and consultancy roles in life insurance. Opportunities exist within Solvency II, Risk Management and Financial Reporting. Locations include South East, South West, Midlands, Yorkshire and Scotland.

Ref: Star365

CAPITAL MODELLING — **NON-LIFE COMPANY**

LONDON — up to £50k + bonus + benefits

Fast growing insurer seeks part qualified actuary to work on the development of its internal model. You will have very strong analytical ability combined with a pragmatic approach to problem-solving. Take this opportunity to thrive in an environment where you are encouraged to grow with the team.

Ref: Star364

SOLVENCY II — **MOVE TO NON-LIFE**

MIDLANDS — £ excellent + bonus + benefits

Award winning general insurance company seeks a nearly qualified or qualified actuary to join its expanding actuarial function. You will work on reserving and capital modelling projects, including Solvency II. You will have strong technical and interpersonal skills. Candidates from a pensions or life insurance background will be considered. Join this supportive team for a great working environment and an excellent work/life balance.

Ref: Star363

ALL THE RIGHT FRIENDS — **CONSULTANCY**

NATIONWIDE — up to £300k

We are working with the leading consultancies across all areas of actuarial specialism. Work on a wide variety of projects with some of the most talented actuaries in the land. Build your technical skills, build your advisory skills, build your profile, build your career.

Ref: Star362

Louis Manson
M +44 (0)7595 023 983
E louis.manson@staractuarial.com

Antony Buxton FIA
M +44 (0)7766 414 560
E antony.buxton@staractuarial.com

Irene Paterson FFA
M +44 (0)7545 424 206
E irene.paterson@staractuarial.com

Martine Scott-Gordon AFA
M +44 (0)7900 696 825
E martine.scott-gordon@staractuarial.com

Lance Randles MBA
M +44 (0)7889 007 861
E lance.randles@staractuarial.com

STAR ACTUARIAL FUTURES

T +44 (0)20 7868 1900 F +44 (0)20 7868 1800 W www.staractuarial.com A 68 Lombard Street London EC3V 9LJ

Follow us on Twitter
http://twitter.com/StarActuarial

STAR **ACTUARIAL** FUTURES

CONTRACT OPPORTUNITIES — **LIFE AND NON-LIFE**

NATIONWIDE — up to £1,000 per day

We are working on various contract assignments. Your modelling skills, Solvency II and financial reporting experience are in great demand. Now is the time to consider whether contracting is for you. Give us a call for an informal, confidential discussion.

Ref: Star361

RISK TOLERANCE — **INVESTMENT CONSULTANCY**

LONDON — up to £50k + bonus + benefits

Specialist pensions investment consultancy is seeking a part qualified actuary to support the successful day-to-day management of client portfolios. You will work with clients to understand and establish their investment objectives and risk tolerance. An unrivalled opportunity to develop your career within this leading consultancy.

Ref: Star360

PROJECTS ACTUARY — **LIFE COMPANY**

EDINBURGH/GLASGOW — up to £60k + bonus + benefits

Our client is seeking a qualified actuary to take a key role in proposition developments, assessing costs and benefits and making recommendations. You will lead projects requiring actuarial input, preparing reinsurance tenders, reprice reports and board papers. You will also develop and support the actuarial trainees. Candidates from a pensions background will be considered. An excellent opportunity to join this major insurance group.

Ref: Star351

LONDON MARKET ACTUARY — **NON LIFE**

LONDON — up to £100k + bonus + benefits

Major London Market company is seeking a qualified actuary to join its reserving team. In this varied and exciting role, you will advise on independent projections of reserves and reserve uncertainty. You will also review syndicate Internal Models and identify key issues, completing benchmark analysis. An unrivalled opportunity to play a key role in a world-class company.

Ref: Star348

RISK ACTUARY — **LIFE**

SOUTH WEST — up to £100k + bonus + benefits

Our client is seeking a qualified actuary to manage its financial risk area including second line oversight of capital and investment proposals and the annual ICA process. You will also provide technical input to the Solvency II project in relation to the SCR calculations and pillar 2 processes, especially ORSA and governance processes, and the quantification and allocation of risk and capital. An excellent chance to play a pivotal role within a major insurance group.

Ref: Star346

SOLVENCY II AND BEYOND — **LIFE COMPANY**

LONDON — £ excellent package

Innovative, dynamic insurer seeks a nearly qualified or qualified life actuary. In this exciting and diverse role, you will develop the Solvency II and economic capital methodology and support the ongoing hedging strategy. This is a great opportunity to make a difference within a strong team.

Ref: Star326

WORLDWIDE — **LIFE/NON-LIFE/PENSIONS/HEALTH**

CANADA AND MORE — £ to attract the best

Leading international consultancy seeks nearly qualified and qualified actuaries from all disciplines to join its growing practice in Canada.

We are also working on a number of opportunities in other locations, including Ireland, Spain, Switzerland, Germany, the Netherlands and Bermuda.

Ref: Star303

HEDGING ACTIVITIES — **LIFE**

LONDON AND INTERNATIONAL — £ very attractive

Global consultancy seeks talented individuals to join their financial risk management practice in London. You will design risk management solutions and project manage hedge effectiveness investigations. You will expand your experience in the physical implementation of hedging activities. This is an ideal opportunity to work with a leading global consulting practice in this innovative, dynamic and cutting edge field.

Ref: Star243

Please contact us at any time (including evenings and weekends) to discuss vacancies of interest or for an informal discussion regarding your career goals.

Actual Search
SEEKING THE EXCEPTIONAL

T: 020 8420 1818
E: jobs@actualsearch.co.uk
W: www.actualsearch.co.uk

Fed up with consultancy?

London £65-150K + exc bens

Life & GI solvency roles for nearly & qual actuaries at this prominent, influential firm. Conduct technical risk assessments, advise teams, analyse data, direct future solvency policy. Capital or reserving / reporting skills needed. Suit consultants seeking shorter hours & better life style. Ref:1401

Pensions – South Midlands

Warks / Worcs £30-85K + bonus

Part & newly qual pensions roles available in a small team of highly respected consultants. Varied duties. Technical & advisory work with direct client contact. Corporate and trustee clients. Exposure to investment issues. Great working environment in friendly & hospitable team. Min 2 yrs exp. Ref:1402

Life Pricing

Middx / Berks £30-50K

P/q students with life skills needed for this global, award winning insurer based near London. Duties inc pricing, product development, profitability analysis & some reinsurance work. Terrific career opportunity with future option to rotate depts. Min 1 yrs exp. needed in any life discipline. Ref:1403

Reserving with Solvency II

London £50-85K + bonus

Renowned for creative solutions this global property & casualty insurer continues to expand by employing the best in the sector. Their solvency & reserving teams need dedicated & experienced non life candidates with either personal or commercial lines exp. Exam progress not essential. Ref:1404

Dull It Isn't

London £Excellent

Roles at all levels with prestigious & award winning international life consultancy. Projects vary from valuation & reporting to capital & solvency II and from pricing & profitability to asset & liability modelling. Meet your clients & solve their problems. Learn new skills. Dull it isn't. Ref:1405

Challenging Reinsurance

London £55-120K + bens

Develop your business risk skills with this innovative & client focused reinsurance firm. Dynamic, exciting & varied role at the cutting edge of deal making. Solve complex actuarial problems & liaise with clients & brokers alike. GI skills in pricing, reserving or capital modelling needed. Ref:1406

Pricing Wealth Management Products

S West / Surrey / Hants / Wilts £50-90K + bens

New opportunity for a talented pricing or product development actuary with strong modelling skills. Manage a small motivated pricing team and price an international range of products. Suit nearly/newly qualified life actuaries with good organisation & planning skills keen to step into management. Ref:1407

Exams behind you!

City £40-55K

Corporate position with this successful life reinsurer. Varied role - experience analysis, developing Terms of Trade for all lines of business, support a variety of research & development projects & assist pricing team to deliver quotes. Suit part qualified life actuary with pricing/valuations & good Excel. Ref:1408

Senior Life Actuary

London £75-100K + bens

Ideal role for well organised life actuary to be an expert resource in the Pricing Analytics team. Wide scope for personal autonomy whilst performing complex analysis leading to pricing recommendations. Drive key developments from design to implementation, oversee & develop others. Ref:1409

Actuarial Analyst – Pricing

Southern Home Counties £30-45K + benefits

Do you have advanced Excel skills with either a valuations, pricing or product development background? This niche insurer with strong customer ethos offers training & good career prospects to part qual actuaries with 2 yrs+ exp wanting high quality support to advance their careers. Ref:1410

Life Actuary, Developing Markets

Channel Islands £Excellent

Newly created role at this international financial services company expanding into new markets. They seek a qualified actuary with life reporting experience looking for increased responsibility. Initiate changes to reporting processes in reserving, MCEV & capital assessment. Ref:1411

Systems / IT - Solvency 2

London, South East £45-100K + benefits

Exciting prospects at this successful expanding life assurance co. for part quals & qualified's to work on a mix of systems design, tools, regulatory requirements, valuations & pricing functions. Fast-moving role with a dynamic team that manages pricing engines, reporting engines & end-to-end processes. Great variety of work with new platforms to be developed. Ref:1412

To apply for any of these vacancies please phone 020 8420 1818, and speak to Peter or Norma or apply online at www.actualsearch.co.uk or email jobs@actualsearch.co.uk.

the ARC

The Actuarial Recruitment Company

Consultant
Life
UK Choice
to £80K + benefits

A different and exciting role exists for qualified and part qualified actuaries who are interested in working in a consultancy capacity on S2 finance transformation assignments with major life and pensions providers in the UK. You will have a background in the life insurance sector and be looking for a role that is less to do with traditional technical actuarial work and more to do with business actuarial process change. **Ref: ARC25360**

Actuarial Head
Life
London
To £150K + Benefits

An excellent opportunity to join a large life / non life insurer in a Solvency II related role. Ideally you will have some experience across both non life and life sectors with some significant years post qualification experience. This role will span both areas of the business and drive the implementation of Solvency II requirements and planning. Excellent communication skills and senior management experience required. **Ref: ARC25365**

Solutions Consultant
Life
South
to £60K

This is an opportunity to join a leading actuarial solutions provider who deals with a large variety of insurance providers. It will suit part qualified candidates or candidates who have stopped the exams and have good experience of Prophet project work. Retraining may also be possible for candidates of the right quality who are interested in client facing assignments. Good communication skills required. **Ref: ARC25364**

Actuary
Life
London
£Significant Base + Benefits

A different opportunity for a life actuary to join a small actuarial team in this established financial services provider. The successful candidate will report to the Chief Actuary with delivery responsibility for all aspects of valuation, EV and capital modelling from ICA through to Solvency II. Good technical skills gained within the life sector is a requirement together with strong communication skills. **Ref: ARC25363**

Senior Manager
Life
London
to £150K + Benefits

This is a senior level consulting role in a major global consultancy. You will help win new business through marketing and sales activities and also be involved in leading the delivery of subsequent client life actuarial consultancy projects. You will have excellent communication skills, a strong commercial focus as well as technical experience in the capital, risk and governance fields. **Ref: ARC25366**

Actuarial Analyst
Life
Midlands
to £50K + Benefits

Excellent opportunities exist for part qualified actuaries with strong technical actuarial, analytical and software skills. Varied work on financial investigations and reporting projects including Solvency II, as well as interaction with the actuarial managers playing a key part in the review of results and development of processes. Existing knowledge of life insurance products would be an advantage but good candidates from other disciplines will be considered. **Ref: ARC25362**

Capital Actuary
Life
South
to £100K Package

This is a role for a qualified Actuary to lead the Capital Management team of a global insurer. The successful candidate will have a strong technical background particularly in the area of ICA work but will also demonstrate managerial ability and be comfortable in dealing at senior management levels. This represents an excellent career opportunity and an excellent overall package is on offer for a suitable applicant. **Ref: ARC25361**

Contract
Life
Various
Significant £££ per day

There are opportunities for part qualified and qualified actuaries with experience in any of financial reporting, capital assessment, financial modelling and all aspects of product development and pricing methodology for life products. Initial 3 / 6 month contracts are available and experience of actuarial modelling software may be an advantage. Part qualified candidates who have stopped exams will be considered and very competitive daily rates are offered. **Ref: ARCCON**

Call us anytime including evenings and weekends on 020 7717 9705 or email *enquiries@the-arc.co.uk*

A fresh approach

www.the-arc.co.uk

Global opportunities and trusted advice from experienced actuaries

Head of Actuarial
General Insurance
London
Circa £150K, high bonus potential

An established London Market operation writing multiple lines of business is looking for an experienced actuary to play a key part in managing and in the continuing development of the business. The role would involve leading an actuarial team across pricing, reserving and capital modelling functions as well as involvement in the business planning and implementation of the Solvency II programme. First class management and communication skills will be needed. **Ref: ARC25242**

Chief Pricing Actuary
General Insurance
London
Circa £180K

Managing an international team of actuaries with responsibility across a significant property and casualty book of business, this role will involve implementation of pricing methodologies, validation of rating models, monitoring rate changes, profit tracking, business planning and support for wider strategies across the business. Proven management ability and significant previous pricing experience will be required. Some travel with the role will be expected. **Ref: ARC25342**

Pricing Actuary
General Insurance
London
Circa £80K

Working for this international (re)insurance business this role will work on the insurance side supporting underwriters in pricing individual accounts, development of pricing tools, portfolio analysis, business planning, improving the pricing process, and working with reserving and capital actuaries to supply relevant information and parameterisation. Familiarity with financial and professional lines and political risk insurance an advantage. **Ref: ARC25320**

Reinsurance Analyst
General Insurance
London
Circa £65K

Working for the head of reinsurance pricing of this London Market company, this position for a senior student or nearly qualified actuary will have responsibility across the international casualty book of business. The role will involve case pricing of business as well as development and maintenance of pricing tools. Close interaction with underwriters and management of workflows will be expected. Those without previous pricing experience will be considered. **Ref: ARC25341**

Risk Analyst
General Insurance
London
To £70K plus good benefits

This specialist P&C (re)insurer is looking for a self motivated student with London Market or commercial lines experience to build, maintain, modify and document portfolio risk models. Also develop tools for monitoring risk accumulations, modelling of outwards reinsurance programs and development of stress and scenario testing. Excellent communication skills and an innovative and pragmatic approach to problem solving required. **Ref: ARC25260**

Actuarial Analyst
General Insurance
London
circa £50K

This varied role within the small London based actuarial team of a large international insurance group will have an initial focus on the reserving, developing and improving the quarterly process, but the role will soon have a wider scope to be involved in pricing and capital work. Ideally candidates will have previous reserving experience from a company or consulting background. Excellent IT skills are important and knowledge of ResQ and Igloo is desirable. **Ref: ARC25340**

Class Actuary
General Insurance
London
circa £85K

This mixed pricing and reserving position will provide actuarial support across a number of casualty product lines. Working for this major London Market business the role will have significant career potential within the operations in London as well as abroad. A proactive individual is required with very strong interpersonal skills and good technical ability. **Ref: ARC**

Contractors
General Insurance
London
£500 - £1,200 per day

New contract roles are coming through constantly and we currently have positions from 3mth to 12mths in all areas of the capital, pricing and reserving. **Ref: ARCContractors**

The Actuarial Recruitment Company is an employment agency

GI	Andy Clark BSc FIA	0781 333 7891	*andy@the-arc.co.uk*
Life, Pensions, Investment and Graduate	Chris Cannon BA	0771 122 8449	*chris@the-arc.co.uk*
All other enquiries	Roger Massey BSc MBA FIA	0781 398 9016	*roger@the-arc.co.uk*

Oliver James associates

www.ojassociates.com

General Insurance - UK

Head of Pricing — Rick Davis

London — **£180,000 + Bonus + Bens**

EXCLUSIVE OPPORTUNITY - A leading London Market business requires a Head of Pricing to form part of the senior management team and strategically influence all pricing policies across their business. A very high profile role in which strong technical pricing skills are essential.

Head of Actuarial — Paul Francis

London — **£180,000 + Bonus + Bens**

London market client seeking a senior actuary to lead a small and highly experienced team. You must have excellent knowledge of building the capital model and excellent pricing knowledge. You must be a superb man manager and comfortable in a visible and highly responsible role.

Actuarial Director — Paul Francis

London — **£150,000 + Bonus + Bens**

My client is seeking a senior actuarial resource to lead the development and improvements of their internal and external service offerings. You must be an excellent communicator, have a broad range of technical skills, and ideally have good knowledge of key issues in the market.

Head of Reserving — Rick Davis

London — **£150,000 + Bonus + Bens**

A unique opportunity to build and lead a new Reserving team for an expanding London Market business. Working with the Group Chief Actuary, you will design and implement innovative new reserving solutions, lead various strategic projects with other senior managers and manage a team.

Actuarial Students — Ben Pitt

UK Wide — **£Highly Competitive**

As a student actuary you will have just finished the April exams and may be thinking 'what next?'. There is currently a wide variety of very interesting opportunities for actuarial students in General Insurance, both in the London market and with top multinationals. Whether you are just starting your actuarial career or are nearing qualification there will be a role for you, such as:

- Lloyds Syndicate – Pricing Actuary – **up to £65,000 + bens**
- Lloyds Syndicate – Reserving/Capital/Pricing - **£45,000 + bens**
- London Market Leader – Capital Analyst - **£40,000 + bens**
- Lloyds Syndicate – Reserving & Capital (grad+) – **up to £35,000**

For more information on the above or for friendly, impartial and confidential career advice, please contact Ben Pitt on the number below.

Senior Pricing Actuary — Jamie Howard

London or North of England — **£110,000 + Bonus + Bens**

Superb Pricing Manager opportunities for experienced actuaries looking for responsibility of a high GWP portfolio and manage a team of actuaries. Must be from a general insurance background and be a qualified actuary or statistical specialist. Flexible location and great financial incentive.

Pricing Actuaries x 5 — Jamie Howard

South East — **£75,000 + Bonus + Bens**

Multinational insurance business requires a number of actuarial students and qualified actuaries to work in personal lines pricing. The business is currently restructuring and these exciting roles all offer responsibility, autonomy and a fantastic personal development program.

Ireland, Continental Europe & Asia

Head of European Actuarial - GI — Emma Gilbert

Zürich, Switzerland — **CHF200,000 + Bonus + Bens**

Exceptional opportunity to lead and develop an actuarial team, having responsibilities across Europe. This role at a Lloyd's market insurer offers genuine longevity in the Swiss market, overseeing both Reinsurance and direct commercial lines teams. Additional language skills not needed.

Head of / Director - GI — Phu Le-Ngoc

Germany — **€120,000 + Bonus + Bens**

Exciting senior role that requires strong leadership and management skills. Experience in any of the following topics is highly desirable: Risk Management, Solvency II, Capital Modelling, Reserving, Economic Steering Principles.

Actuary - Life — Phu Le-Ngoc

Germany — **€80,000 + Bonus + Bens**

Great opportunities for PQ or qualified actuaries in Cologne. An international insurance company offers various positions for life actuaries. Good knowledge of at least one of the following is expected: MCEV, ALM, Solvency II, IFRS, Prophet and QIS. International candidates welcome.

Actuarial Analyst - Life — Paul Cook

Dublin — **€75,000 + Bonus + Bens**

A rare opportunity for a nearly/newly qualified actuary with strong reporting skills to join a global insurance company at the start of exciting growth plans. Experience of USGAAP, IFRS and Solvency II exposure advantageous. Excellent prospects for career development!

General Insurance - UK

Rick Davis — **0207 649 9353**
rick.davis@ojassociates.com

Paul Francis — **0207 649 9469**
paul.francis@ojassociates.com

Jamie Howard — **0207 310 8725**
jamie.howard@ojassociates.hhcom

Ben Pitt — **0207 310 8719**
ben.pitt@ojassociates.com

Life Insurance - UK

Clare Nash — **0207 649 9350**
clare.nash@ojassociates.com

Patrick Flanagan — **0207 649 9355**
patrick.flanagan@ojassociates.com

Harriet Hall — **0207 310 8783**
harriet.hall@ojassociates.com

Paul Cook — **0131 278 0133**
paul.cook@ojassociates.com

Life Insurance - UK

Chief Actuary — Clare Nash

City / South — **£180,000 + Bonus + Bens**

Are you considering your next move? Do you want an autonomous position where you can really make things happen? My client seeks an experienced actuary to guide and mentor their expanding team. This is an exceptional opportunity which will really fast track your career.

Head of Reporting Actuary — Patrick Flanagan

South East — **£120,000 + Bonus + Bens**

Would you enjoy leading and developing a sizeable actuarial team? Have you the interpersonal flair and management capability? If so, this unique position offers a very high profile in a prestigious employer. This will lead to unlimited career opportunities with a very real work / life balance.

Commercial Actuary — Patrick Flanagan

South West / M4 Corridor — **£85,000 + Bonus + Bens**

Are you looking for a highly commercial role with an international Life Insurer? A newly created role due to the growth and success of the business. You will lead a mid sized team and be able to be hands on when required. An exciting and unique opportunity in this location.

Senior Corporate Actuary — Paul Cook

Scotland — **£Excellent + Bonus + Bens**

My client is seeking a qualified actuary to join their life office and provide leadership in various projects, including Solvency II implementation. You will enjoy working in a varied role that requires financial and commercial awareness. Please call for further details.

Head of Financial Risk — Harriet Hall

South — **£120,000 + Bonus + Bens**

This leading insurance group is looking to bolster its Group Risk function. Acting in an oversight capacity, reporting to the CRO, you will challenge current practice and be at the forefront of framework and policy development, covering market, credit and insurance risks.

Development Actuary — Harriet Hall

London — **£100,000 + Bonus + Bens**

My client, a leading global brand, is looking for an accomplished commercial actuary to manage client relationships and be responsible for the development of profitable new business. An exciting career opportunity for those looking to gain strategic input from their next role.

Finance Actuary — Clare Nash

London — **£85,000 + Bonus + Bens**

A global player seeks a talented actuary to join their market leading team. You will be qualified and enjoy working in a projects based environment. This role requires a solid technical background coupled with sound business acumen. Unrivalled career progression for the right individual.

Actuarial Analyst — Patrick Flanagan

London — **£60,000 + Bonus + Bens**

A unique role with an entrepreneurial Life Insurer that has been growing exponentially year on year. The role will cover all facets of actuarial across Reporting, Capital, Pricing, Solvency II with exposure to Risk and Investments. Please apply now for immediate consideration.

Ireland, Continental Europe & Asia

Reinsurance Pricing Actuary - GI — Emma Gilbert

Zürich, Switzerland — **CHF150,000 + Bonus + Bens**

Several exceptional opportunities have arisen within prestigious Reinsurers based in Zurich. Strong experience of Pricing or commercial lines business is essential. These roles are a great chance to develop your skills in one of the most sought-after areas of GI actuarial.

Team Leader Valuation - Life — Julien Fabius

Brussels — **€65,000 + Bonus + Bens**

We are looking for a Team Leader Valuation for a life insurer in Brussels. This well respected insurer is specialized in life insurance, backed by a global plc and a real 'challenger' on today's market. Technical Valuation experience required for this role.

Financial Reporting Actuary - Life — Paul Cook

Dublin — **€110,000 + Bonus + Bens**

A leading worldwide insurer requires a Financial Reporting Actuary. This is a high profile position offering close interaction with the CFO and Head of Actuarial. An ideal role for those wanting to play a key role in the development of the corporate Actuarial function.

Product Manager - Life — Julien Fabius

Brussels — **€60,000 + Bonus + Bens**

Belgium's largest life insurance group seeks an experienced Product Manager to work within the Product Management department for the Protecting & Annuities line of business. You will report into the Product Head so strong technical experience and product knowledge is required.

International

Paul Cook — +353 (0)1 685 2413
paul.cook@ojassociates.com

Julien Fabius — +32 2-88 860 51
julien.fabius@ojassociates.com — 0207 649 9466

Emma Gilbert — +41 (0)43 508 0509
emma.gilbert@ojassociates.com — 0207 310 8782

Phu Le Ngoc — +49 (0)89 2206 1068
phu.le-ngoc@ojassociates.com — 0207 310 8643

Asian Opportunities - Life / GI / Investments

Jonny Plews — 0207 649 9467
jp@ojassociates.com