

United States moves on Basel II

Following an intense political battle in Congress which saw smaller banks and at least one regulator in opposition to large 'money-centre' banks and apparently to the Federal Reserve system, a notice of proposed rulemaking to implement Basel II for a small number of internationally active banks finally appeared on 30 March.

'Given the increasing complexity of the activities at our largest banks, and the related risks of those activities, I fully support efforts to develop a more appropriately risk-sensitive capital framework for those institutions,' said new Federal Reserve Board chairman Ben S Bernanke. 'The current Basel I framework has become increasingly inadequate for capturing the risks at large, complex US banking organisations.'

The political controversy reflected a fear on the part of smaller banks that their larger counterparts would be able to make use of data and modelling techniques to justify lower capital requirements in respect of – for example – mort-

gage loans and that this would accelerate industry consolidation. The regulators have responded in part by extending transitional safeguards although it remains to be seen whether this will suffice. Not to proceed would likely leave the US banking industry generally at a competitive disadvantage internationally.

Details are at: www.federalreserve.gov/generalinfo/basel2/DraftNPR/

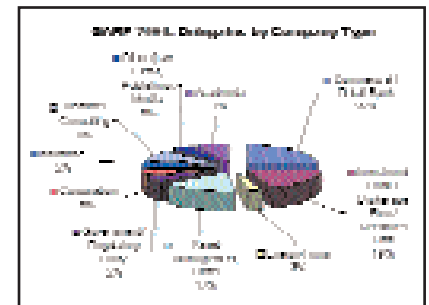
Record attendance at GARP 2006

The chart on the right shows the range of institutions represented at the two-day convention earlier this year of the Global Association of Risk Professionals – we noted that 95% of the delegates did not represent insurance firms.



The convention, part of which was supported by the Society of Actuaries, attracted 675 delegates. Some of the presentations, which should be of considerable interest to actuaries, may be found at:

www.garp.com/events/GARP2006PostConv/presentation.html



From the world of general insurance

Asbestos and pollution developments

There appears to be a significantly reduced chance of asbestos liability reform in the United States, following the failure on a point of order vote in the Senate reported in the last edition of *The Actuary*. While there still remains some enthusiasm for the trust fund approach in the Senate, there is very little support in the House of Representatives, and the White House does not appear to consider it to be a high priority. Meanwhile, the Association of Run-off companies in the UK has indicated that it would only be in favour of the trust fund approach if it offered finality to insurers.

AM Best has estimated that the 'funding gap' between its estimate of the ultimate asbestos and pollution liabilities and the paid and reserved amounts of the US property/casualty insurance industry had narrowed from \$53bn as at the end of 2001 to \$34bn by the end of 2004. Of this latest amount, it attributes \$10bn to asbestos and \$24bn to pollution.

World Trade Center (WTC)

The main 'one event/two event' dispute between Silverstein Properties Inc (main leaseholder of WTC) and its insurers has been referred to a federal appeals court, to consider whether the initial decisions, some stipulating that the terrorist attacks were one event, and others that they constituted two events, should be rationalised. There is potential for changes of several billions of dollars if this referral results in a change in the original decisions, with Silverstein set to gain substantially if the court believes all insurers should pay under a 'two-event scenario', and those insurers which have settled under a 'two event' scenario to benefit if this decision is overturned. In view of certain differences between some of the wordings, complete

rationalisation seems unlikely.

The Virginia Supreme Court has ruled that an airline cannot recover losses owing to the grounding of its planes following the terrorist attacks of 11 September 2001 from both its business interruption insurer and the funds available under the Air Transportation Safety and System Stabilization Act. This overturns an earlier decision by a lower court.

American International Group (AIG)

In early March, after a series of courtroom disputes, the ex-chairman and chief executive, Hank Greenberg, obtained a copy of an internal AIG report into the company's accounting problems. He hopes that this will assist him in the defence of the case which has been filed against him by the New York attorney general, Eliot Spitzer, and the New York Insurance Department. Meanwhile AIG announced increased net profits for 2005, compared with 2004, and the new chief executive, Martin Sullivan, stated that AIG is now a 'better company' following its resolution of the problems of the past year.

Finite risk reinsurance and contingent commissions

At the end of February, Converium Holding Ltd restated its financial results for accounting periods from 1998 to second quarter 2005, to correct improper accounting for various finite risk reinsurance contracts, some assumed and some ceded. These contracts apparently included insufficient risk transfer to allow them to be treated as reinsurances. The investigations which led to these restatements followed the receipt of subpoenas from the Securities and Exchange Commission (SEC) last year. It is believed that the company could still face regulatory action in relation to these restatements.

Zurich Financial Services (ZFS) has reached a settlement with the attorneys general of New York, Con-

necticut, and Illinois with regard to contingent commissions paid by its subsidiary Zurich American Insurance Company, to brokers and finite reinsurance contracts in the United States. This is in addition to earlier agreements with other major states (including California, Florida, Massachusetts, and Texas) – in total it is understood that ZFS has paid a total of \$325m to settle these issues. The settlement with the latest three states amounted to \$153m, of which \$88m is to compensate policyholders and \$65m is in fines. ZFS did not admit to any breach of federal laws, but did agree to introduce new procedures with regard to disclosure and compliance, including discontinuance of any contingent commissions.

A dispute has arisen between Marsh McLennan Cos Inc (MMC) and the Florida attorney general with regard to bid-rigging and contingent commissions. This follows a suit being brought against MMC accusing the company of these illegal practices – the company maintains that it has already settled these issues as part of its \$850m settlement with the New York attorney general last year. This latest dispute is likely to continue for some time.

Solvency II

Paul Sharma of the Financial Services Authority has expressed concern that the Solvency II rules being developed in Europe may not adequately allow for relatively recent developments in the insurance industry – he mentioned, in particular, catastrophe bonds and securitisation of insurance risk. He likened the situation to that in the banking sector a few years ago when they were formulating their new capital framework, which did not provide properly for developments then taking place in the credit derivatives market.

There is, in addition, some concern about the apparent relatively low level of interest among large UK

insurers regarding the capital adequacy project. Only 47% of UK general insurers (and an even smaller proportion of life insurers) responded to the Quantitative Impact Study Participation 1 consultation process. These percentages were much lower than those achieved in other EU countries.

US collateral requirements

The National Association of Insurance Commissioners (NAIC) has disclosed that it plans to review the US reinsurance regulatory system, to which adverse reaction has been made recently by European reinsurers, as reported in previous issues of *The Actuary*. It is planned that it will make a recommendation on the subject by the end of 2006. At this stage there is no commitment to change, but alien reinsurers, who consider themselves to be unreasonably penalised by the current regime, were generally guardedly optimistic about the outcome.

Global supervision

Under an agreement between the US National Association of Insurance Commissioners (NAIC) and the Committee of European Insurance & Occupational Pensions Supervisors (Ceiops), the two principal bodies representing insurance supervisors will, in future, share the data on insurers working under their supervision. This reflects the international nature of much insurance business and, it is hoped it will improve the ability of the regulators to provide effective supervision.

Lloyd's

Lloyd's has announced the appointment of Richard Ward as its new chief executive officer, in succession to Nick Prettejohn, who resigned late in 2005 to take up a senior role at Prudential plc. Mr Ward, who commenced his new role on 24 April, has spent most of his career in ➤

From the world of general insurance

► the energy (principally oil) industry, although he did have some experience in a financial and commodity brokerage some 12 years ago. Most recently he has been vice-chairman of the ICE Futures arm of Intercontinental Exchange, and was previously employed by its predecessor company, International Petroleum Exchange.

Financial Services Compensation Scheme (FSCS)

The Financial Services Authority has suggested a series of alternative options for funding the FSCS, following the expression of concern by various insurers as to the fairness and sustainability of the current arrangements under which levies are based on the insurers' premium income in broad bands of class. The options put forward include the use of a general pool to reflect the fact that some catastrophe losses are multi-class, and various different levels of class division.

HIH Casualty & General Insurance Ltd (HIH)

The failed Australian insurer HIH has failed in its attempt to claim more than (US)\$55m from its broker, JLT Risk Solutions Ltd (JLT), in relation to losses suffered under film finance contracts. A ruling in the London High Court stated that although JLT owed a duty of care to HIH, the losses were not caused by a breach of that duty. HIH had paid the claims under a pecuniary loss indemnity which it had written to protect the financiers of a slate of films in the event that they generated inadequate revenues (which, of course, they did). HIH plans to appeal the judgment.

Creditors of HIH companies in Australia and the UK have agreed a deal under a scheme of arrangement under which an average interim dividend of 5% will be paid in the middle of 2006, with a further 5%

payable at the end of the year. These creditors include the Australian government, which has paid A\$600m to HIH personal lines policyholders who were left without cover when the companies collapsed. The dividend will vary between the different companies in the group. Approval is still required by courts in the two countries.

Large losses

Loss updates and related issues include:

■ **Tornadoes in Kansas, Missouri, Illinois, and other states (11–12 March)** The 100 or so separate tornadoes suffered over this weekend claimed at least ten lives and caused serious damage at the campus of the University of Kansas. Many people were without electricity for up to four days. The entire state of Missouri was declared a disaster area by the governor. An insured loss estimate of \$820m has been made which, if confirmed, would make this the most significant first quarter tornado event on record.

■ **Cyclone Larry, northern Queensland, Australia (20–21 March)** This category 5 cyclone struck the Queensland coast south of Cairns and caused considerable devastation along a stretch of coast centred around Innisfail and Tully. In particular, it is thought to have destroyed over 80% of the region's banana crop by snapping the trunks of the trees, and caused serious damage to sugar cane crops, many of which were flattened. The wind speed at landfall was estimated at 180mph, (substantially higher than that from hurricane Katrina last year) and was reckoned to be the strongest storm to hit Australia since Cyclone Tracy in 1974. The storm was followed by some of the worst flooding seen in the area for decades. As a result of good preparation, including evacuation of many local inhabitants from their homes, other than one fatality due to a heart attack, only minor injuries have been reported. The

majority of buildings in Innisfail were damaged, with a significant proportion suffering serious damage. Early estimates indicated that insured losses could be as high as A\$1bn, although it is now thought to be likely to be less than half of this, partly because of the limited availability of coverage for crops in respect of cyclone damage.

■ **Explosion and fire on Hyundai Fortune (22 March)** This container ship, with a cargo including fireworks, exploded off the coast of Yemen. The hull has valued at around \$40m and the cargo, in 3,000 containers, at around \$250m. The lead insurer is understood to be the TT Club.

■ **Tornado in Hamburg (27 March)** This caused considerable damage to roofs and walls in the city, knocked over three large cranes on building sites, and cut off power to 300,000 people. Insured losses are, however, unlikely to be very material.

■ **Sinking of *al-Dana* in Bahrain (30 March)** This small pleasure cruiser overturned and sank with the loss of 57 lives, many of them expatriates on an evening social function. There have been serious questions raised regarding overloading of the craft, lack of appropriate licence to the owner, and the authority of the captain. It is likely that insurance would have been placed locally in view of the size of the vessel, but no insured loss information is to hand at present.

■ **Air crash in Brazil (31 March)** This involved a Let L410 small plane, which crashed 60 miles north of Rio de Janeiro, killing all 19 crew and passengers, who were construction workers in the oil industry. No insured loss estimates are yet to hand.

■ **Tornadoes in American Midwest (2 April)** These hit Tennessee, Missouri, Illinois, Kentucky, Indiana, and Ohio, causing widespread destruction and at least 23 deaths. The storms involved high winds and large hailstones.

Reports on the 2005 catastrophe experience have been produced by Swiss Re and Munich Re. Highlights drawn from the two reports indicate that:

- ◆ insured property losses worldwide were a record \$83–94bn, including \$45bn from Katrina;
- ◆ economic losses from catastrophes totalled \$210–\$230bn, another record;
- ◆ North America suffered over 87% of the total insured losses;
- ◆ Asia suffered only 3.2% of the total insured losses, but over 92% of all fatalities from natural disasters.

The Brookings Institution, a US think-tank, has suggested that it will be necessary to establish a federal catastrophe reinsurer before this year's hurricane season if a market failure in certain storm-exposed areas is to be prevented. The National Association of Mutual Insurance Companies has given some support to this, but expressed a preference for insurers to be allowed to establish tax-deductible catastrophe reserves.

There was understood to be a capacity crisis in the energy insurance market as the second major renewal date of the year (1 April) arrived. This follows last year's hurricanes in the Gulf of Mexico, and has resulted in premium rates increasing by anything from 100% to 500%.

Current Issues Newsletter

Other recent developments are covered in the General Insurance Current Issues Newsletter, which can be accessed via the profession's website at:

www.actuaries.org.uk/Display_Page.cgi?url=/general_insurance/gen_ins-curr-issues.html

 DAVID HART

Pruviva or Avidential?

For a week in March it appeared that we might be about to see a very significant consolidation of both UK insurance and actuarial employment as Aviva pursued a bid to merge with or acquire Prudential. By 24 March the bid had foundered, perhaps because what Aviva wanted to describe as a merger was seen by management and directors of Prudential as a hostile acquisition attempt.

Comment on the industrial logic of the transaction was not unfavourable, as there appeared to be a real synergy between Aviva's mainly European scope and the strength of Prudential in Asia and the US. Some did, however, suggest that Aviva was acting opportunistically at the peak of the general insurance results cycle and there were question marks over the synergies to be achieved in the intermediary-dominated UK life assurance market.

Following the sudden withdrawal of the offer, the consensus was that neither party was immediately vulnerable to an approach by either a European or American player. The balance of opinion appeared to be that both parties might do well to get to know each other better away from the media glare and perhaps to do more to reconcile their thinking on management roles and shares of value in the context of an integrated enterprise.

Nasty, brutish, and short?

We were reminded of Hobbes by this slightly ghoulish news item from the *Herald* of 15 March:

'Scottish media company SMG hopes to cut its pensions deficit this year by proving through an academic study that its workforce will not live as long as those of English firms. The Glasgow-based company, which owns Scottish and Grampian TV, has asked Strathclyde University to complete a study by the end of the third quarter 2006 on the mortality rate of Scottish workers.'

'The group has invited other Scottish firms to participate in the study, which it believes will provide further proof that folk in Scotland, particularly those in the west of Scotland, die at a much younger age than those elsewhere in the UK.'

'George Watt, finance director, said the firm was "co-ordinating a broader study" into Scottish company pension schemes. He added: "We are talking to Strathclyde University (about conducting the study) and have had a good initial response from other Scottish companies. We believe the issue is primarily a Scottish one."

'Scotland has long had a reputation as the "sick man of Europe", with men, particularly, having lower life expectancy because of a high intake of alcohol and poor diet.'

'Asked whether actuaries did not already take into account a person's geographical base when making their mortality assumptions, Mr Watt said they did not and that the profession uses a UK-wide model. SMG currently assumes members of its two defined benefit pension schemes will die at around the age of 80 to 81, a few years short of the average UK mortality rate of 84.'

'However, Mr Watt noted that the anecdotal evidence indicated that Scotland's average life

expectancy could be even lower still. "We asked the actuaries to look at the experience in the (SMG) scheme, and they suggested it (mortality) was weaker than the norm", he said.

'Asked how much the company expected to lower its mortality assumptions by, and how this might affect the company's pension scheme deficit, Mr Watt would only say: "We expect it to be weaker, and that will help to close the deficit." SMG operates two closed defined benefit pension schemes – the Caledonian Publishing pension scheme, and the Scottish and Grampian Television scheme. At the end of December, these schemes had a £53m gross shortfall in them, down from over £100m a year earlier. The net deficit was £36.7m, down from £69.2m.'

Actuary arrested in South Africa

Suspected fraudulent handling of pension scheme surpluses led to the arrest of retired actuary Peter Martin and three others in late March. According to local press sources, this followed the arrest in 2005 of one Peter Gavalas, a former investment banker with Nedcor, who emigrated Australia in 1998. Mr Gavalas is reported to have been under observation by Interpol and was arrested when he slipped into South Africa to visit his sick mother in September last. Mr Gavalas is the alleged 'mastermind' of the allegedly illegal scheme, while Mr Martin was at the relevant times employed by Alexander Forbes, the administrator of one of the pension funds involved.

Non-life profitability

The non-life insurance industry posted sound underwriting profits in 2004, according to Swiss Re's latest *sigma* study. Over the past decade, however, the contribution of underwriting to overall profitability was small, and non-life insurers faced difficulties in earning their cost of capital.

Sound technical underwriting has become a prerequisite for overall profitability in the current low-yield financial environment. As a result, the combined ratio has received renewed attention as a key performance yardstick for the non-life industry. Swiss Re's new *sigma* study, 'Measuring underwriting profitability of the non-life insurance industry', introduces the economic combined ratio as an alternative measure of underwriting profi-

tability. Compared to the conventional combined ratio, it presents the following advantages:

- ◆ It isolates the underwriting results of a certain year (accident-year view), avoiding mingling with reserve additions or releases for prior years as traditional business-year underwriting figures do.
- ◆ It adjusts for distortions resulting from extraordinary losses (catastrophes).
- ◆ It takes the time value of money into account by discounting future cashflows, particularly future claims payments.

The economic combined ratio provides new insights into insurance cycles, as the US property/casualty industry figures for 1994–2004 demonstrate. The differences compared to the

headline business-year combined ratios are:

- ◆ Economic underwriting profitability deteriorated from 1994 to 1997, although the reported headline business-year combined ratio improved.
- ◆ The cycle trough was reached in 2000, rather than in 2001.
- ◆ The accident years 1998–2001 were considerably worse than indicated by the conventional business-year combined ratio.
- ◆ Profitability in 2003/04 was comparable with 1994/95 despite a 5 percentage point lower combined ratio, because the current low interest rate environment reduces the impact of discounting for future claims payments.

Visit www.swissre.com for the detail.

Economies of scale in pensions

Analysis of the data gathered from Watson Wyatt's latest pension administration cost survey, which covers more than 250 occupational pension schemes with a total membership of 5.7m, found that the average cost of running a pension scheme remained at 0.2% of funds, for schemes with more than £5bn invested.

Allan Course, head of administration consulting at Watson Wyatt, said: 'Given all the extra administrative burdens on pension schemes, it is good to see that costs can remain so low.'

The Watson Wyatt survey found that costs are significantly higher for smaller schemes. The average running cost for schemes with over 50,000 members was £117 this year. This almost doubles to £202 for between 5,000 and 10,000 members, and rises to more than £400 for schemes with fewer than 1,000 members. At the extreme, the annual running costs for 15 schemes in the survey exceeded £600 per member. (See table below.)

These statistics indicate that

although investment management costs do not reduce much as schemes get larger, companies with more than one scheme have the potential to achieve some significant savings in other areas by combining them and achieving better economies of scale.

'Managing the cost of pension schemes is a key business objective', said Allan Course. 'Finance directors and pensions managers need to identify the running costs for their scheme and how they vary from the norm for schemes of a similar size. From our research we have identified that while many pension schemes are run effectively, some are undoubtedly not. The variation in the cost survey results was very large: just one example will illustrate that. Taking the band of schemes with between 1,000 and 5,000 as an example, although the average total cost per member was £255 per member, the cost in 15% of schemes was more than £420 per member. The challenge going forward is to increase cost efficiency without sacrificing quality or increasing risk.'

Average (mean) cost per member

Scheme size (no of members)	<1,000	1,001–5,000	5,001–10,000	10,001–50,000	>50,000
Total	£441	£255	£202	£153	£117
Core administration	£107	£64	£53	£39	£24
Actuary/consultancy	£156	£63	£36	£16	£6
Investment management	£128	£105	£96	£87	£80
Other	£51	£23	£17	£11	£7

Average (mean) cost per £1 fund value

Scheme size (fund value)	<£50m	£50m–£250m	£250m–£1bn	£1bn–£5bn	>£5bn
Total	0.87%	0.58%	0.43%	0.35%	0.20%
Core administration	0.26%	0.17%	0.11%	0.08%	0.04%
Actuary/consultancy	0.32%	0.15%	0.05%	0.03%	0.01%
Investment management	0.20%	0.21%	0.23%	0.22%	0.14%
Other	0.09%	0.05%	0.04%	0.02%	0.01%

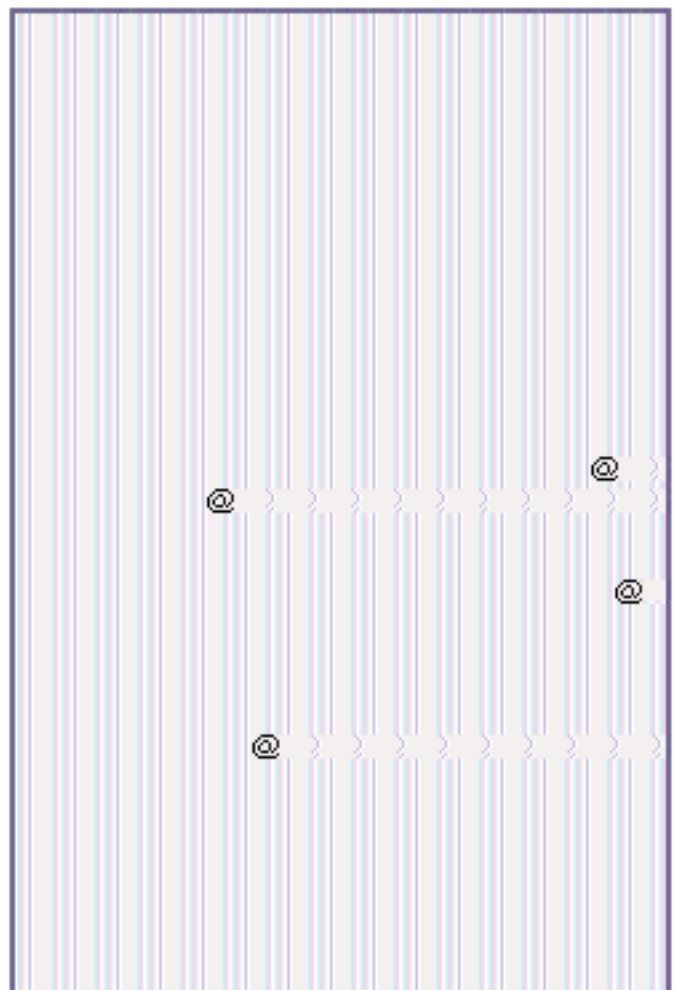
FSA keen to see improved modelling practices

We are indebted to Louise Pryor for highlighting the following:

'The latest life insurance newsletter from the FSA has a section on actuarial systems and controls. As it says, "Accurate output from a life office's actuarial area is important because any shortcomings can potentially cost a firm dearly." The FSA visited six firms, and found quite a range of standards; but no firm was completely satisfactory in every area. And the areas in which most improvement was possible were those of documentation and spreadsheet use. The FSA appears to have the following concerns:

- ◆ Systems and processes should have up-to-date documentation.
- ◆ Every actuarial system should have a full audit trail.

- ◆ Documentation and systems should have proper change processes and version controls in place.
- ◆ Documentation is especially important for systems supported by just a few knowledgeable individuals.
- ◆ Data and assumptions should be fully documented, consistent across the business, and validated.
- ◆ Financial models should be fully understood, and actuarial departments should be able to demonstrate why their models should be believed.
- ◆ Spreadsheets should be taken as seriously as any other software development environment.'



This month's focus is on pensions – see pp28–33