No. 2 CRISLINE Nov 2001

Nottingham University Business School

# Newsletter of the Centre for Risk and Insurance Studies

*enhancing the understanding of risk and insurance*

## CLINICAL NEGLIGENCE CLAIMS: A NEW APPROACH

CRIS researchers are helping to solve the problems with the present system for handling clinical negligence claims in the NHS.

Alan Milburn, Secretary of State for Health is concerned that the system is slow and bureaucratic: cases take over 5 years to settle on average. And costs are spiralling: over £400m in 1999/2000, but with legal costs often more than the claimants actually get in damages.

Chief Medical Officer Liam Donaldson is chairing a committee looking at options for reform, so that a White Paper can be issued early next year.

CRIS researchers Paul Fenn and Stephen Diacon, in collaboration with Alastair Gray at Oxford and Neil Rickman at Surrey, have been asked by the Dept of Health to carry out research for the committee. Research assistant Howard Carrier is also working on the project.

This builds on the team's previous work including 'Accounting for Risk in the NHS' and an analysis of costs published in the *British Medical Journal.*

This policy relevant research will cover:

- an assessment of hospital trusts' claims in 2000/01,
- analysing why some trusts have higher claims and costs than others,
- a survey of patients to establish the potential demand from compensation arising from incidents from medical treatment, whether or not there was negligence; and
- modelling the likely costs of alternative compensation systems including no-fault and fixed-tariff regimes.

Watch out for the White Paper!

## Dates for your diary CRIS events in 2002

10/11 April: UK Insurance Economists Conference

17/18 April: a major conference in London on insurance regulation (see page 5)

16-18 Sept: Geneva Association European Group of Risk and Insurance Economists

Also, see page 4 for the workshop on management development in the insurance industry

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**WELCOME** **to the 2nd issue of CRISLINE**. Feedback, and requests for further information on any of the topic in Crisline, should be sent to *christopher.obrien@nottingham.ac.uk,* phone: 0115 846 6519, or *d.shaw@nottingham.ac.uk*, phone 0115 846 6607 (further contact details are on page 8).

## FOR SOLVENCY DATA... SEE OUR WEBSITE

The latest published solvency figures of leading U.K. life companies can be found on our website: www.nottingham.ac.uk/business/cris

The solvency figures of the top 20 with profit companies, available in July, were collated by Tim Orton and Cheryl Hewitt, and appeared on our website in early August. The tables include comparisons with 1999. The data can be downloaded into an Excel file so that users of the website can then carry out their own analyses, in the form they require.

A brief article by Chris O'Brien, on the website provides a commentary on the trends.

The average free assets ratio fell from 19.1% in 1999 to 11.7% in 2000. This decline reflects:

- asset values reducing as the stock market fell,
- lower interest rates resulting in higher values of liabilities; and
- changes in the regulations which effectively increase the degree of prudence built in.

Future profits were used as an implicit item (effectively an additional asset) by 5 companies in 2000, compared with 4 companies in 1999.

## U.K. GENERAL INSURERS: HOW EFFICIENT?

Recent research by Stephen Diacon explores the efficiency of UK insurers transacting general insurance business. The concept of efficiency concerns an insurer's ability to produce a given set of outputs (such as premiums and investment income) via the use of inputs such as administrative and sales staff and financial capital. An insurer is said to be technically efficient if it cannot reduce its resource usage without some corresponding reduction in outputs, given the current state of technology in the industry.

An exploration of the technical efficiency of UK general insurers was undertaken by comparing the relative performance of almost 450 general insurers licensed in 6 European countries using data from Standard & Poor's *Eurothesys* database. The study used data envelopment analysis to identify the locally efficient and inefficient insurers within each country. A comparison was then undertaken for all insurers after adjusting for the impact of their local efficiency.

The results for 1999 (the latest year of available data) indicate that UK general and composite have the potential to be among the most efficient in Europe. On average, after adjusting for local inefficiencies, UK insurers demonstrate an efficiency score of around 77%, substantially higher than, Germany (70%), France (67%), the Netherlands (69%), Switzerland (66%) and Italy (56%). However there is also evidence that many UK companies are not currently realising their potential for efficiency improvements in comparison with their European counterparts.

# MBA IN RISK AND INSURANCE MANAGEMENT

For those looking to advance their careers in risk or insurance the MBA in Risk and Insurance Management could well be the answer. It is intended to give managers a thorough grounding in the main disciplines concerned with running an insurance business.

We have updated the risk/insurance programmes introduced in 1999 to produce a new MBA degree in Risk and Insurance Management which can be taken on either a full-time or part-time basis.

**Programme Content**

It is designed to provide the same type of coverage as can be expected in a general MBA programme while including specialist modules relevant to risk and insurance.

Participants can choose either a one year full-time course or can study part-time visiting Nottingham for 12 1-week blocks over 2 to 4 years. Many modules on the programme include group work as an integral feature, enabling participants to work with talented peers from different subject and industrial backgrounds.

The programme design allows participants to concentrate on issues relevant to their own career development, and on topics relevant to their own firm.

Like all MBAs offered by the Business School it is accredited by the Association of MBAs.

**Modules**

The MBA comprises 8 core modules, 4 elective modules and an individual dissertation.

University of Nottingham
Jubilee Campus

6 core modules relate to accounting/finance, computing, economics, marketing, organisational behaviour and human recourses, and strategy.

Examples of topics on the two insurance-specific modules are:

*Legal and Social Issues in Insurance Markets*

Genetic testing

The regulation of insurance

Private and state pensions

Trends in the distribution of insurance

*Operations Management of Insurance Organisations*

Insurance firms' objectives

Valuing insurance companies

Pricing insurance products

Investment strategy

Managing risk in insurance organisations

The wide range of elective modules includes corporate risk management, crisis management and business continuity, and financial services management.

Examples of others are "the learning organisation" and "international business".

The degree is completed by an in-depth dissertation of up to 20,000 words. This can relate to a practical issue in the course member's own organisation.

**Admission**

Admission requirements are a second class honours degree or the professional equivalent, and at least 3 years' business requirement.

The programme is supported by the Worshipful Company of Insurers.

For full details contact Chris O'Brien (see page 8) or the MBA office: e-mail: mba@nottingham.ac.uk, telephone 0115 951 5500

# "WITH PROFITS" PROBLEMS

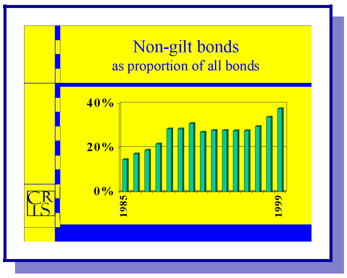
The decline in interest rates and recent poor stock market performance have created significant problems for U.K. life companies.

In a speech to an industry conference on "With Profits Business", Chris O'Brien highlighted the new economic and legal environment, and how life offices have adapted by managing the risks which have arisen.

Some of the impact of lower investment returns is borne by policyholders, as companies have reduced bonus rates. However, companies have also seen an increase in the cost of the guarantees they have provided, so that the solvency margins they have are now lower (page 2).

One response of insurers to lower interest rates has been to increase the yields they earn by moving their asset mix more towards corporate bonds (or other non-gilts).

The graph, covering 1985—1999, shows a increase in the proportion of bonds held by with profits offices which are not gilts, now approaching 40%. This change may also enable companies to reduce the value given to their liabilities and hence improve solvency, but it carries risks.




Overall a big problem of with profits policies is their lack of transparency. Policyholders cannot easily tell if they are receiving a fair return, and the apparent ad hocness of "market value reductions" on surrender is not satisfactory.

Chris's conclusion was that there is a big challenge to re-engineer new products, while managing the risks on existing business.

# MANAGEMENT DEVELOPMENT IN INSURANCE
## Workshop Schedule

We are currently finalising a new date for the workshop on management development in the insurance industry: it had to be postponed from 13 September as a result of the tragic events in the United States.

The workshop is free. If you are involved in management development and would like to attend, please contact Deborah Shaw (see page 8). The workshop will be held in the executive boardroom of Nottingham University Business School, Jubilee Campus, Nottingham. The purpose of the workshop is to share and develop ideas on professionalism and quality management in today's rapidly changing business environment. The programme is:

| | |
|---|---|
| 9.30 - 10.20 | Registration and coffee |
| 10.30 - 10.40 | Welcome and introduction |
| 10.40 - 11.30 | Current State of Management Development in UK Insurance<br>*Stuart McAdam,*<br>Swiss Reinsurance Group<br>*Sheena Gray,*<br>Financial Services Authority |
| 11.30 -11.40 | Break |
| 11.40 - 1.00 | Group discussion<br>"The Present" and feedback |
| 1.00 - 2.10 | Buffet lunch |
| 2.10 - 3.00 | The Future of Management Development in UK Insurance<br>*Sandy Scott*,<br>Chartered Insurance Institute<br>*Terry Webb*,<br>Lloyd's of London |
| 3.00 - 4.15 | Group discussion:<br>"The Future" and feedback |
| 4.15 - 4.30 | Conclusion; coffee & biscuits |

# INSURANCE REGULATION

Insurance regulation is a key issue internationally, and CRIS is organising a conference on "International Issues in Insurance Regulation" to be held in London on 17/18 April, 2002. Themes of the conference include:

- solvency
- risk management
- genetics
- demutualisation
- customer protection

The conference will be opened by Sir Colin Campbell (Vice-Chancellor of the University of Nottingham). The programme includes a wide range of individuals from universities, regulators, and those connected with the insurance industry. Overseas speakers include Terri Vaughan (President, National Association of Insurance Commissioners) from the U.S. and Michael Thom from the European Commission Office in Brussels.

Peter Clark, President of the Institute of Actuaries will give a speech at the conference dinner on 17 April. The conference will be held at the Marble Arch Thistle Hotel.

Further details will be issued in due course; for more information contact Chris O'Brien (see page 8 for contact details).

# JRI FOR LEADING EDGE RESEARCH

The Journal of Risk and Insurance (JRI) is the flagship journal of the American Risk and Insurance Association (ARIA). It is edited in Nottingham by Richard MacMinn who explains what it involves:

ARIA was founded in 1932 to expand and improve teaching of and to encourage research in risk management and insurance. ARIA's members are worldwide, including academic, professional, industry and regulatory leaders in insurance, risk management and related areas.

JRI is the most well recognised academic insurance and risk management journal in the world, publishing rigorous, original work.

It is published 4 times a year which means about 28 articles. These have to be selected from 120 - 150 submissions received annually. Submissions are refereed "double blind", i.e. the author doesn't know the referees (2 for each article) and vice versa. JRI uses about 400 referees, and there is regular contact e-mail contact to ensure work is done on a timely basis. There are also editorial meetings, since putting the journal together is a team effort. There are editors for the book reviews, and the section on recent court decisions, and there are some 26 associate editors. Using the webcam is a valuable innovation for meetings!

There are some 1300 individuals and institutions worldwide who subscribe to JRI (including libraries). Subjects of recent articles include financing long-term care, insurers' use of derivatives, moral hazard, and a market model for pricing catastrophe insurance futures. Essential reading for those on the leading edge in risk and insurance!

# Centre Publications

**Seminar Papers:**
General Insurance Research Issues (presented to ABI, October 2001): £15.00

**Collected papers from the 23rd Conference of UK Insurance Economists:**
April 2001: £40.00

**Insurance Company Performance 2001:**
Part I (from 1999 accounts) and II (regulatory returns, and including a special 31 page article "Guaranteed Annuity Options: Five Issues for Resolution" by Chris O'Brien): £135.00 each; both parts for £245.00

**Insurance Company Premiums 2000:**
From 1999 accounts: £60.00

For further information or to place orders contact Tim Orton at CRIS, email timothy.orton @nottingham.ac.uk, telephone 0115 951 5269.

# CRISLINE EXTRA

## Well done!

Congratulations to Simon Ashby who, with Brendon Young has been awarded the "Lumina Award for Outstanding Research in Insurance", sponsored by the Geneva Association, for their work on insuring operational risk in banking, to be published in "Global Reinsurance" .

A Lumina Award was also won by Tapen Sinha, who is a Special Professor in CRIS.

Congratulations also to Richard MacMinn, who has won the Casualty Actuarial Society prize for his research on insurance cycles.

## Risk in health care

Paul Fenn gave the keynote address at a conference of the Irish Association of Health Care Risk Managers at Dublin on 29 September on "enterprise liability for clinical negligence". This was an opportunity for the policy-makers in Ireland to learn from UK experience.

## Research Associates

We are pleased to welcome Rob and Anita Young as Research Associates of CRIS.

## Howard Carrier

Howard has been working on the effect of conditional fee arrangements and, currently, the Department of Health project (see page 1). In January he will also begin studying for a PhD at Durham University.

## Growing again

Nottingham University Business School continues to expand its student numbers. The School now has some 1240 undergraduate and 650 postgraduate students.

## Conditional Fees Research

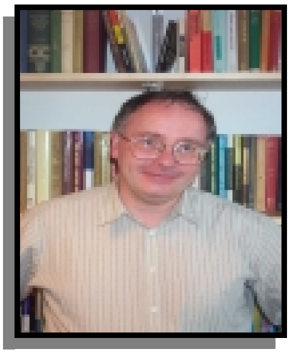
Paul Fenn has completed the report for the Lord Chancellor's Department on the project examining the use of conditional fee arrangements to fund personal injury litigation. The report compares these with alternatives including both "before the event" and "after the event" insurance. Paul, together with Howard Carrier, gave a presentation on this subject to the annual meeting of the European Association of Law and Economics in Vienna in September.

# MONEY PURCHASE PENSIONS "HIGH RISK"

Individuals with money purchase pension arrangements may be holding much greater pension risk than they realise.

This was the message in a paper by Kevin Dowd (CRIS, pictured on right), David Blake (Birbeck) and Andrew Cairns (Heriot-Watt).

The paper uses the authors' new PensionMetrics methodology. This takes data such as pension age, sex, pension contribution rate, investment strategy and retirement age. It then builds in stochastic variations about investment returns and unemployment; the outcome is expressed as the ratio of pension to final salary.



One example concerns a 25 year old managerial worker, contributing 10% of his salary to his pension fund. With a retirement age of 65, the expected rate of pension to final salary is 69%, but with a 95% confidence interval of 9% to 168%.

The outcome is sensitive to the asset mix: investment in equities would increase the expected pension/salary ratio; but the risks change too.

The authors conclude "if policy-holders are to be spared major disappointments when they retire, then they (or their advisors or their plan managers) must take account of this risk and design their pension schemes to reduce it".

# ENTERPRISE RISK MANAGEMENT

The benefits of *integrating* risk management were explained by Simon Ashby in an invited lecture at Zurich Management Centre in October.

Integrated risk management is holistic in nature, covering all the risks to which a firm is exposed, supporting its strategic and operational objectives, and ultimately contributing to value maximisation.

Simon emphasised that designing an effective risk management process requires *understanding* and *managing* sources of, exposure to and tolerance of risk.

***Understanding***

Risk sources are factors that cause an unexpected departure from normal operating patterns; they may be internal or external to the firm.

Exposure to risk has two issues: proximity (how close is the contact between the firm's activities and the source of risk) and intensity (of risk to which the firm is exposed).

Tolerance to risk is affected by, for example, the level of a firm's debt, the risk aversion of managers, and the diversification of the owners.

***Management***

Managing sources of risk means altering the distribution of a risk's outcomes. Traditional prevention tools address this but they usually deal with only individual risk sources.

Exposure management tools include risk avoidance, derivatives and insurance.

Examples of tolerance management include financial restructuring and executive share option schemes. Indeed, Simon emphasised that such techniques are particularly important in the holistic approach to risk management.

Nottingham University Business School

# Centre for Risk and Insurance Studies

*enhancing the understanding of risk and insurance*

The Centre for Risk and Insurance Studies was founded in 1991, originally as the University of Nottingham Insurance Centre. It is one of the world's leading specialist university centres for risk and insurance.

The Centre is situated within Nottingham University Business School and is based in the award-winning Jubilee Campus, opened in 1999.

The Centre staff are responsible for teaching in risk and insurance at both undergraduate and postgraduate level.

They are also active in researching and maintain close links with the insurance industry and others working in risk management. The research of the Centre reflects public policy priorities as well as those expressed from the insurance industry and covers not only traditional insurance activities but also risk management more generally.

The staff of the Centre are:

Christopher O'Brien
*Centre Director*

Professor Stephen Diacon
*Worshipful Company of Insurers Chair in Insurance Management*

Professor Kevin Dowd
*Professor of Financial Risk Management*

Professor Paul Fenn
*Norwich Union Chair of Insurance Studies*

Professor Richard MacMinn
*Swiss Re Chair in the Management of Risk*

Dr Simon Ashby
*Lecturer in Risk and Insurance*

Howard Carrier
*Research Assistant*

Tim Orton
*Research Support Officer*

Deborah Shaw
*Centre Administrator*

Cheryl Hewitt
*Clerical Assistant*

**Commissioning Research**

If you would like to consider commissioning research from CRIS, then please contact Chris O'Brien, 0115 846 6519, e-mail christopher.obrien@nottingham.ac.uk

## *Simon Ashby*

Simon will be leaving CRIS on 26 October, to take up a post at the Financial Services Authority. Simon joined CRIS in February 1998 and has played a large part in developing our new teaching modules as well as carrying out research. Best wishes to Simon in his new post.

**How to contact us:**

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# CRISLINE

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## CHANGE OF ADDRESS DETAILS, ETC.

Please tick the relevant boxes below and return to :

Deborah Shaw, Centre Administrator
Centre for Risk and Insurance Studies
Nottingham University Business School
Jubilee Campus, Wollaton Road
Nottingham NG8 1BB

or e-mail us with the information at: *d.shaw@nottingham.ac.uk*

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