



**The Actuarial Profession**  
making financial sense of the future

# **Annual Research Report 2001**



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# **1 LIST OF ALL RESEARCH GROUPS AND WORKING PARTIES ACTIVE IN 2001**

## **FACULTY RESEARCH GROUPS**

Contact: David Hare (tel: 0131 245 0632, email: David\_Hare@standardlife.com)

### **On-going Working Parties**

- Corporate Diversity and the Provision of Financial Services
- Health and Care Research Group
- Investment Research Group
- Mortality Statistics Research Group
- Pensions Research Group

### **Completed Working Parties**

- Bonus and Valuation Research Group

### **Discontinued Working Parties**

- International Research Group

## **FINANCE AND INVESTMENT BOARD WORKING PARTIES**

Contact: Peter Dingwall (tel: 020 7632 2136, email: peterd@actuaries.org.uk)

### **Planned Working Parties**

- Applications of Equity Portfolio Management
- Indexation

### **On-going Working Parties**

- Advances in Portfolio Risk Management
- Applications of Defined Contribution Pension Scheme Strategy
- Applications of Derivatives
- Applications of Investment and Taxation
- Commercial Real Estate Indices
- Investment Management Selection
- Measuring and Monitoring the Effectiveness of Asset Allocation in the Life and Pension Industries
- Quantitative Techniques
- Really Long Term Investment Products
- Risk Mitigation for Pension Funds/SIP and Under-Funding
- Sterling Corporate Bond Index
- The Effects of Buybacks on Investment Trust Discounts
- The Future Demands of Equities
- The Role of Hedge Funds
- Value Measurement Investment
- Value Measurement Steering Group

**Completed Working Parties**

- Applications of Bond Portfolio Management
- Applications of Financial Theory in Investment Management
- Applications of Institutional Investment Topics
- Applications of Performance, Portfolio Risk and Return
- Applications of Stochastic Investment Models
- Mortgage Prepayment Risk

**GENERAL INSURANCE BOARD WORKING PARTIES**

Contact: Richard Winter (tel: 020 7334 6225, email: richard.winter@prudential.co.uk)

**Planned Working Parties**

- Draft GN15 Equivalent
- General Insurance Investment Strategies
- Professional Indemnity and D&O - Pricing and Current Issues
- State of the Art Pricing

**On-going Working Parties**

- APH Update and Issues
- Applying the New Tax Regulations in Practice
- Aviation Insurance
- Cost of the Compensation Culture
- Definition and Interpretation of Terminology in Common Use
- European Weather Derivatives
- Fair Value Accounting
- Financial Condition Reporting
- House Insurance
- Investment Strategies for General Insurance Companies
- Measuring Customer Value
- Operational Risk
- Political Risk Insurance
- Portfolio Transfers
- Pricing, Management and Control of Extreme Events
- Reinsurance Commutations
- Reliance on Advice from Other Professionals
- Stochastic Reserving Methods
- Update Claims Reserving Model
- Why Insurers Fail

**Completed Working Parties**

- Calculating Premium Monitoring / Rate Change Indices
- Structured Settlements - Lessons for the UK from Overseas

**Discontinued Working Parties**

- Capital Allocation

## **LIFE BOARD WORKING PARTIES**

Contact: Maria Singleton (tel: 020 7632 2173, email: [marias@actuaries.org.uk](mailto:marias@actuaries.org.uk))

### **On-going Working Parties**

- Customers' Interests
- Customer Value
- Life Assurance Value Measurement
- Life Office Taxation
- Management of Closed Funds
- Product Reviews
- Selection in the Annuity Market
- Use of Derivatives in Life Assurance

### **Completed Working Parties**

- Fair Valuation
- Financial Condition Reports
- Regulatory Capital for Financial Services
- Transparency of With-Profits Business

### **Discontinued Working Parties**

- Value at Risk
- Virtual Life Offices

## **PENSIONS BOARD WORKING PARTIES**

Contact: Georgina Ivers (tel: 01865 268235, email: [georgini@actuaries.org.uk](mailto:georgini@actuaries.org.uk))

### **Planned Working Parties**

- Benefit Design
- Risk Benefits

### **On-going Working Parties**

- Retirement Income Reform
- Stochastic Pensions Valuations and the Assessment of Funding Risk

### **Discontinued Working Parties**

- Investment Strategies for Money Purchase Schemes

## **SOCIAL POLICY BOARD WORKING PARTIES**

Contact: Martin Hewitt (tel: 020 7632 2185, email: [martinh@actuaries.org.uk](mailto:martinh@actuaries.org.uk))

### **Planned Working Parties**

- Genetics and Insurance - Issues for Social Policy
- The Interface Between the Public and Private Sectors in Healthcare
- The Potential for Insurance Companies Developing Provisions in Care Rather than Cash
- The Role of Actuaries in Healthcare

**On-going Working Parties**

Consumer Risk  
Medical Advances  
Pension Provision Taskforce  
Retirement Options

**Completed Working Parties**

Critical Illness Cover - the Future

**HEALTH AND CARE COMMITTEE – Health Services Group (leader: John Coss)****On-going Working Parties**

UK Vaccination Programme - Risk and Reward

**Completed Working Parties**

The NHS Plan

**Discontinued Working Parties**

Health Data Charter  
Measuring Health Systems  
The 'Healthcare Management Actuary'

**HEALTH AND CARE COMMITTEE – IP/CI (leader: Sue Elliott)****Planned Working Parties**

IP – Trends

**On-going Working Parties**

CI - Robustness of Definition  
IP - Internal Risk Factors  
IP - Trends by Cause (Terminations)

**HEALTH AND CARE COMMITTEE – Long Term Care Group (leader: Ian Sissions)****On-going Working Parties**

Reserving/Valuation

**Discontinued Working Parties**

Experience Analysis  
Projections

**HEALTH AND CARE COMMITTEE – Multi-disciplinary Group****Planned Working Parties**

Healthcare - Related Employee Benefits



**HEALTH AND CARE COMMITTEE** – PMI Group (leader: Neil Hilary)

**Planned Working Parties**

Health Inflation Index

Pricing Small Group PMI

**On-going Working Parties**

Health Data

## **2 THE ORGANISATION OF UK ACTUARIAL RESEARCH**

This section describes how research is currently organised within the UK actuarial profession. In addition to the research described below, the Continuous Mortality Investigation Bureau conducts and publishes research in respect of its work on the preparation of standard mortality and morbidity tables. Further information about any aspect of actuarial research can be obtained from the Secretary to the Research Steering Committee, at Napier House.

### **2.1 The Research Committees**

#### **2.1.1 Research Steering Committee**

The Research Steering Committee co-ordinates research activity on behalf of the Faculty and Institute, reporting through the ECPD Board. Key roles of the Research Steering Committee are:

- to encourage and commission further research with an emphasis on research of a practical nature that is expected to be of value to a significant proportion of the profession;
- to provide practical support for researchers, including advice on publication;
- to assist researchers and others by ensuring an adequate exchange of information between those involved in research activities and/or those interested in the results of such research;
- to co-ordinate research, try to avoid duplication of effort and to highlight gaps;
- to ensure that the resources available for research are used effectively;
- to liaise with overseas actuarial societies, professional bodies, research funding organisations and others on research matters;
- to administer and monitor funding through the profession's annual research grants awards programme and the Memorial Education and Research Fund.

#### **2.1.2 The Faculty Research Committee**

The Faculty Research Committee also reports to the ECPD Board as well as to the Faculty Council and oversees the operation of a number of standing Research Groups based in Scotland. The Committee sets the broad terms of reference for these groups and monitors their progress and can form further groups. The Research Groups provide a vehicle to allow individual members to participate in research projects which they could not undertake individually. Each Group aims to produce work which can eventually be published for discussion at a Faculty Sessional meeting, Student Society Meeting or other forum. Participation in these Groups is a valuable part of the continuing education of members, particularly younger Fellows. Further details of these Groups are given in Section 4.

## **2.2 Practice Boards**

Identifying potential areas of research and instigating research activity is primarily the responsibility of the Practice Boards. Currently those responsible for research by subject area are:

- Finance and Investment Board;
- General Insurance Research Organising Committee (GIRO);
- Life Research Committee;
- Pensions Technical Support and Research Committee;
- Social Policy Board.

### **Voluntary Support**

Research working parties established by the Practice Boards have historically relied on the voluntary efforts of individual members of the profession. In some cases this means that there is considerable support from the member's firm whereas in other cases the work is carried out in the member's own time. In either case, the role of volunteers is vital to both the organisation of research and in its undertaking.

## **2.3 Research Staff**

Staff support for the profession's research activities is provided by the Chief Education Executive's (CEE) Department and through the Board secretaries. During the last five years more staff time has been allocated to research in recognition of its growing importance for the profession.

The role of the Secretary to the Research Steering Committee is to assist the Committee in the formulation of an effective policy for the promotion, co-ordination and promulgation of research and to help to ensure that the policy is put into practice. In addition the Secretary oversees the annual research grants programme, the maintenance of the on-line research database and the production of an annual research report. This work is supported by a 40% time allocation from one of the CEE Department's Administrators.

Secretaries to the Practice Boards' Research Committees assist these committees to implement their research programmes and also work with the Secretary to the Research Steering Committee to co-ordinate research activities. Contact details are included in the relevant sections of this report.

Some of the time of the Staff Actuaries is also allocated to the co-ordination of research activities. Staff members do not undertake research in this role.

This structure has been devised to provide links with the range of activities carried out, both within the Practice Boards and across the profession through the ECPD Board.

## 2.4 Research Funding

Funding for research within the UK actuarial profession is currently provided through the annual research grants programme and the Memorial Education and Research Fund (MERF). From 2002 the profession is collaborating with the Engineering and Physical Sciences Research Council (EPSRC) on grants under their programme for financial mathematics.

There are currently two sources of funding for research. The Memorial Education and Research Fund, which is an amalgamation of various endowments and other grants, has a capital value of around £110,000. Details of awards made from the Memorial Educational and Research Fund since 1998 are given in Section 3.

Since 1996 the Education and CPD Board, with the agreement of FIMC, has allocated part of its annual budget to the funding of actuarial research. The responsibility for recommending applications for funding of projects to the ECPD Board lies with the Research Steering Committee, which administers the grants programme on behalf of both the Faculty and Institute of Actuaries.

The principal criteria applied by the Research Steering Committee in awarding grants are:

- the research is of practical relevance and likely to be of value to a significant proportion of the profession;
- the proposal provides value for money;
- the research results in a paper or other deliverable that will be promulgated widely.

It is the aim of the Research Steering Committee to encourage Practice Boards to sponsor applications for funds in order to ensure that a proportion of research is driven directly by the needs of practising actuaries. The Committee is keen to encourage research in the application of existing actuarial techniques to new areas as well as the development of new ideas in mainstream actuarial work.

Funds totalling approximately £295,000 have been awarded since 1996, enabling the profession to support 39 small short-term projects of actuarial relevance. Details of the projects supported are set out in Section 3. The vast majority of the funding has been directed at universities and those engaged primarily in more theoretical work. In its policy for awarding research grants the Research Steering Committee aims to encourage an effective bridge between the development of theoretical techniques and their application to solve practical problems.

It is hoped that it will be possible to make a similar level of funds available awards during the 2002/2003 Session although some of the funding has already been committed to the collaboration with the EPSRC.

Further information can be obtained from the Secretary to the Research Steering Committee, at Napier House.

### 3 RESEARCH GRANTS

#### 3.1 Research Grants Awarded In 2001

| 2001   |                 |           |
|--|-----------------|-----------|
| Project title  | Applicant(s)    | Award (£) |
| Appraisal of the methodology and accuracy of commercial property indices   | Prof P M Booth  | 11,500    |
| Risk equalisation in Irish private health insurance  | Mr G Colgan     | 5,000     |
| New approaches to annuitisation: Optimal asset allocation strategies in defined contribution pensions post-retirement and comparisons with investment-linked annuities | Prof S Haberman | 7,500     |
| Incorporating risk in the analysis of PFI/PPP projects   | Mr W Rodney     | 12,500    |
| Compilation of a database of UK gilt prices  | Prof A D Wilkie | 4,350     |

#### Memorial Education and Research Fund (MERF)

##### 2001 MERF research awards:

- £1,000 to Yung-Ming Shiu for a paper on 'Identify factors of dynamic financial analysis in the UK general insurance industry'

The MERF prize was not awarded at the General Insurance Conference in 2001.

#### 3.2 Previous Grants Awarded Between 1996 and 2000

The following tables summarise the projects which have received funding from the Faculty and Institute since the establishment of the research grants programme in 1996.

| 2000   |   |           |
|--|---|-----------|
| Project title  | Applicant(s)                              | Award (£) |
| Bayesian networks for classification in insurance  | Dr R Cowell                               | 11,000    |
| Modelling risk by postcode area in general insurance: further research including the consideration of extreme events | Dr M J Dixon, Prof R Verrall              | 11,500    |
| Penalised goodness of fit functions for inference  | Prof D Hand, Ms V Vinciotti               | 6,500     |
| Stochastic pension valuations and the assessment of the funding risk   | Prof S Haberman                           | 7,440     |
| Interest rate modelling using genetic programming  | Dr G Kennedy                              | 10,000    |
| Asset-liability matching in complete and incomplete market situations  | Dr R K Parchure                           | 5,000     |
| Reserving for Guaranteed Annuity Options: A Stochastic Simulation Approach   | Miss S Yang, Prof H Waters, Prof D Wilkie | 8,180     |
| General Insurance Working Parties  | General Insurance Board                   | 1,000     |

| 1999   |                                      |           |
|--|--------------------------------------|-----------|
| Project title  | Applicant(s)                         | Award (£) |
| Regulation of Pension Provision in the European Union  | D Cooper                             | 11,400    |
| Rating by Postcode Area in General Insurance   | M J Dixon, R Verrall                 | 11,400    |
| An assessment of the suitability of the MFR using deterministic and stochastic scenario testing techniques | I D Wright, S Haberman, Z Khorasanee | 11,400    |
| Financial Companies in the Stock Market, 1825-1962: A Quantitative Study                                   | C Green, P Maggioni                  | 4,000     |
| An integrated approach to aspects of the Wilkie Model  | A D Wilkie, M Omram, A S Macdonald   | 10,000    |
| Charting the Frontier Between Actuarial Science and Mathematical Finance                                   | S Jacka, J E Kennedy, H P Wynn       | 9,202     |
| General Insurance Working Parties  | General Insurance Board              | 2,000     |

| 1998   |                                       |           |
|--|---------------------------------------|-----------|
| Project title  | Applicant(s)                          | Award (£) |
| Frailty models and the age and time dynamics of mortality  | S Haberman                            | 9,000     |
| An investigation of the solvency risks of insurers with health insurance liabilities specifically PHI using a stochastic simulation approach | R G Chadburn, B Rickayzen, S Haberman | 9,000     |
| Development of market valuation techniques for pension funds   | A J Cairns                            | 9,000     |
| Actuarial Applications of Econometric Tools  | S F Whelan                            | 4,000     |
| General Insurance Working Parties  | General Insurance Board               | 1,000     |

| 1997   |                                    |           |
|--|------------------------------------|-----------|
| Project Title  | Applicant(s)                       | Award (£) |
| Underwriting and Alzheimer's Disease   | A S Macdonald, H R Waters          | 10,000    |
| Designing a practical model to examine Long-Term costs in Great Britain                                | B Rickayzen, S Haberman, P M Booth | 8,000     |
| Applying actuarial techniques to the valuation of implicit options in freehold property                | P M Booth, R Gerrard               | 8,500     |
| Testing the Sensitivity of Model Life office simulation results to variations in asset model structure | R G Chadburn, P P Huber            | 7,000     |
| Improvements in mortality at higher ages: prospects and financial implications                         | R G Thomas, J Presnell, N G Rhodes | 5,000     |
| To investigate the analysis of claims on an individual claim basis, using Bayesian methods             | R Verrall                          | 5,500     |
| The Construction of International Bond Yield Indices   | A J G Cairns                       | 6,000     |

| 1996   |  |           |
|--|--|-----------|
| Project title  | Applicant(s)                           | Award (£) |
| Investment strategy for defined contribution pension schemes   | Z Khorasanee                           | 10,000    |
| Optimal funding of defined benefit pension schemes   | S Haberman                             | 10,000    |
| Non-linear time series models for actuarial use  | R G Thomas, H Tong                     | 7,480     |
| Statistical analysis of individual offices' phi data and some financial consequences of these analyses | H R Waters, A A Korabinski, I D Currie | 7,000     |
| Analysis of credit and default risk on bank lending and mortgages                                      | P M Booth, R Verrall, I Allan          | 7,000     |
| Investigation of models for the term structure of interest rates                                       | A J G Cairns                           | 6,000     |
| Reducing the resilience reserve of a life office   | G Kennedy, M Kerr                      | 3,000     |

## 4 FACULTY RESEARCH GROUPS

There are several standing research groups within the Faculty Research Committee.

If you are interested in participation in one of these research groups, or have another topic to suggest, please contact the Chairman of the Faculty Research Committee;

David Hare (tel: 0131 245 0632, e-mail:David\_Hare@standardlife.com).

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### **Corporate Diversity and the Provision of Financial Services - On-going**

#### **Expected outcome**

Paper to be presented to the Faculty, Feb 2002 and to the Institute, May 2002.

#### **Progress to date**

Paper in progress.

#### **Membership**

Chairman: Hare, David (David\_Hare@standardlife.com)

Other members: Guijarro, Philippe

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### **Health and Care Research Group - On-going**

#### **Objectives**

Aim of project: To identify the balance between the provision of public and private healthcare in Europe and throughout the rest of the world.

Terms of reference: Research health and care areas including health insurance, income protection, critical illness and long term care insurance.

#### **Expected outcome**

A short research paper for presentation at a Faculty sessional meeting.

#### **Progress to date**

Limited, any additional help would be appreciated.

#### **Membership**

Chairman: Smart, Fraser (fsmart@btinternet.com)

Other members: McCarthy, Rod; Jack, Martin; Paton, Brian; Walker, Alistair; Meldrum, Neil

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### **Investment Research Group - On-going**

#### **Objectives**

Aim of project: Investigating the effects of buybacks on investment trust discounts.

Terms of reference: To summarise the various behavioural finance theories, outline their potential practical applications and their relevance to actuaries working in Investment.

#### **Expected outcome**

A paper for the Investment Conference, July 2002. Paper for Publication.

#### **Progress to date**

A paper 'Investor Sentiment and the Closed-End Fund puzzle' was presented to the Investment Conference, June 2000. A study on the Global Growth Sector has provided reasonable results and will be extended in to other sectors.

**Membership**

Chairman: Moretta, Brian (brian@scottish-value.co.uk)

Other members: Adams, Andy; Bowie, David; Cresswell, Paul; Devlin, Frank; Macpherson, Roddy

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**Mortality Statistics Research Group - On-going****Objectives**

Aim of project: The Group is now considering further research with a view to producing a paper on The Review of Health Economics.

Terms of reference: The group is currently discussing topics for future work; suggestions include genetics, long-term care insurance, adverse selection in life insurance, mortality improvements in old age and the impact of drug-resistant infectious disease.

**Expected outcome**

The group is now considering further research with a view to producing a paper for a future Sessional Meeting.

**Progress to date**

A paper on comparative mortality trends was discussed at International Congress and has been published in BAJ. The group has withdrawn its paper on lapse rates from BAJ, as it has lost its topicality during the four years of the refereeing process.

**Membership**

Chairman: New Chairman to be appointed (a.s.macdonald@ma.hw.ac.uk)

Other members: Cairns, Andrew; Gwilt, Philip; Miller, Keith; Pollock, John

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**Pensions Research Group - On-going****Objectives**

Terms of reference: This group is considering various areas of potential research; including the ambition of stripping away the mumbo-jumbo that exists in the pensions arena.

**Progress to date**

A discussion was held with the FASS about the group's latest paper on future pension scheme design, December 2001. A paper is now being prepared for the Sessional Meeting in February 2002.

**Membership**

Chairman: Fleming, Donald

Other members: Bell, Colin; Gourlay, Keith; Taylor, Ronnie

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**Bonus and Valuation Research Group - Completed 2001****Objectives**

Aim of project: Provide sample calculations of fair values in line with IASC proposals.

Terms of reference: Work with FV working party to identify issues in implementing proposals in practice.

**Expected outcome**

Paper outlining sample calculations and issues for simple policies. Aim to incorporate the paper into the FVWP sessional paper as an Appendix in November 2001.



**Progress to date**

Terms of reference agreed, resource identified, paper complete. Paper outlining sample calculations and issues for simple policies. Aim to incorporate the paper into the FVWP sessional paper as an Appendix in November 2001. The group is currently considering topics and actively seeking new members.

**Paper can be found at:**

[www.actuaries.org.uk/sessional/sm01111.pdf](http://www.actuaries.org.uk/sessional/sm01111.pdf)

**Membership**

Chairman: Priestley, Richard (rpriestley@aegon.co.uk)

Other members: Abbink, Michel; Mills, Steve; Morrison, Douglas; van Beek, Patrick; Wilson, Mike

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**International Research Group - Discontinued 2001****Objectives**

Aim of project: To consider aspects of international insurance which are of interest to the Faculty and its members.

Terms of reference: Considering the attractiveness of certain European and Asian markets to UK insurers in the context of a globalising and consolidating financial services marketplace.

**Progress to date**

This group has produced a paper on the attractiveness of Germany and India to UK insurers in the context of a globalising and consolidating financial services marketplace. The paper (by the original membership of the group) was presented at the October 1999 Faculty Sessional Meeting.

**Membership**

Chairman: Grenham, Dermot (Dermot.grenham@uk.pwcglobal.com)

Other members: Since the presentation of the paper in 1999 all the then existing members of the group have resigned. New members are currently being sought.

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## 5 FINANCE AND INVESTMENT BOARD WORKING PARTIES

If you are interested in participating in one of the planned or on-going working parties, or have another topic to suggest, please contact the Secretary to the Finance and Investment Board; Peter Dingwall (tel: 020 7632 2136, e-mail: peterd@actuaries.org.uk).

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### **Applications of Equity Portfolio Management - Planned**

#### **Membership**

Chairman: Richardson, Mark (m\_richardson@btinternet.com)

Other members: Ahluwalia, Manraj

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### **Indexation - Planned**

#### **Membership**

Chairman: Hitchin, Chris (chris.hitchin@railpeninvestments.co.uk)

Other members: Charters, Graeme; Holt, Stephen; Jagger, Simon; McLean, Derek; Wilcock, Alan

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### **Advances in Portfolio Risk Management - On Going**

#### **Objectives**

Terms of reference: To build on the work of the 2000 working party on 'Predicted Tracking Errors: Fact or Fantasy?'

#### **Progress to date**

Abstract submitted.

#### **Membership**

Chairman: Brooks, Mike (mike.brooks@bailliegifford.com)

Other members: Beukes, Leon; Gardner, Dan; Hibbert, John

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### **Applications of Defined Contribution Pension Scheme Strategy - On-going**

No update on the 2000 information has been received for the 2001 Report.

#### **Progress to date**

A paper 'Investment strategies for Defined Contribution Pension Schemes' presented at Investment Conference 1998.

A paper 'Defined Contribution Pension Schemes' presented at Investment Conference 1999.

#### **Membership**

Chairman: van Bezoooyen, Jeroen

Other members: Exley, Jon; Mehta, Shyam; Smith, Andrew

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### **Applications of Derivatives - On-going**

No update on the 2000 information has been received for the 2001 Report.

#### **Progress to date**

Paper 'Applications of Derivatives in Life Insurance' presented at Investment Conference 2000.

#### **Membership**

Chairman: Wilson, Colin

Other members: Cairns, Andrew; Derbyshire, Gareth; Jelacic, Dan; Kemp, Malcolm; Ludvik, Peter; McLean, Derek; O'Sullivan, Nigel; Race, Patrick; Sandford, Chris

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### **Applications of Investment and Taxation - On-going**

No update on the 2000 information has been received for the 2001 Report.

#### **Objectives**

Terms of reference: To investigate applications of investment and taxation.

#### **Expected outcome**

A paper 'Taxation - Allowing for Tax in Modern Statistical Models' to be presented at the Finance and Investment Conference 2001.

#### **Progress to date**

A paper 'Taxation and Investment' was presented at the Investment Conference, September 1998. A further paper, 'Taxation Effects on Cost of Capital' was presented at the 2000 Investment Conference.

#### **Membership**

Chairman: Exley, Jon (jon.exley@uk.wmmerc.com)

Other members: Armitage, Seth; Mehta, Shyam; Smith, Andrew; Wilson, Robert; van Bezooyen, Jeroen

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### **Commercial Real Estate Indices - On Going**

#### **Objectives**

Terms of reference: Analyse published UK real estate indices, of the problems in their construction and characteristics of real estates data.

#### **Progress to date**

Abstract submitted.

#### **Membership**

Chairman: Booth, Philip (p.booth@city.ac.uk)

Other members: Ashurst, Robert; Blundell, Gerald; Brown, Stephen; Cumberworth, Martin; Marcato, Gian Luca; Matysiak, George; Morrell, Guy; Pugh, Russell; Waites, Chris

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## **Investment Management Selection - On-going**

No update on the 2000 information has been received for the 2001 Report.

### **Progress to date**

Paper 'Can retail investors exploit techniques used by Investment Consultants to financial institutions in the selection of Investment Managers?' at Investment Conference 2000.

### **Membership**

Chairman: Charters, Graeme (g.charters@ukonline.co.uk)

Other members: Cutler, Hugh; Rains, Peter; Riddaway, Bobby

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## **Measuring and Monitoring the Effectiveness of Asset Allocation in the Life and Pension Industries - On Going**

### **Objectives**

Terms of reference: 1) Compare/contrast the approaches to asset allocation decisions in the life and pension industries. 2) Document the issues regarding measuring and monitoring the effectiveness of asset allocation advice. 3) Suggest possible ways in which the effectiveness of asset allocation can be monitored.

### **Progress to date**

Abstract submitted in the form of the TORs.

### **Membership**

Chairman: Slater, Andrew (aslater@seic.com)

Other members: Riddaway, Bobby; Gillespie, Craig; Burke, Aidan; Bowie, David; Howie, Robert; Yakoubov, Yakoub; Wilson, Colin

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## **Quantitative Techniques - On-going**

No update on the 2000 information has been received for the 2001 Report.

### **Objectives**

Terms of reference: To investigate the quantitative techniques used in investment today, with the aim of looking behind the smokescreens of complicated mathematics and jargon to assess whether the methods are theoretically sound and appropriately applied.

### **Progress to date**

A preliminary paper on factor modelling techniques was presented to the Investment Conference, June 1996.

A paper entitled "Actuaries take note: the yield curve is not flat", was presented to the Investment Conference, June 1997.

A paper "Strategic Currency Hedging" was presented to the Investment Conference, September 1998.

Three papers, 'Demystifying Active Quant', 'Relative Importance of Industry and Country Influences' and 'Market Neutral Investing' were presented at the 2000 Investment Conference.

**Membership**

Chairman: Jelacic, Dan (dan.jelacic@abnamro.com)

Other members: Brooks, Mike; Griffiths, Julie; Holt, Stephen; Jagger, Simon; Kemp, Malcolm; Lavin, Paul; Munro, Joanna; Sandford, Chris; Wilson, Colin

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**Really Long Term Investment Products - On Going****Objectives**

Terms of reference: To review the arguments why DB pension funds might be considered long term (long duration liabilities) and why in practice they may not be (trustees and employers manage them on a short or medium term basis, corporate activity means they change nature and form regularly, accounting measures such as FRS17/IAS19 mean shareholders see short term volatility): a) Are DB pensions long term investments? b) Does the investment term affect strategy decisions? c) A review of the rationale and evidence for DC lifestyling strategies.

**Progress to date**

Draft abstract submitted.

**Membership**

Chairman: Howie, Robert (robert.howie@uk.wmmerc.com)

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**Risk Mitigation for Pension Funds / SIP and Under-Funding - On Going****Objectives**

Terms of reference: 1) Within the context of investment strategies for institutional funds, to establish a framework in which to analyse financial strength and changes in financial strength across multiple stakeholders. 2) Provide some insights into how risks and returns can be (re)collateralised so that unrewarded risks are mitigated with respect to each stakeholder.

**Progress to date**

Draft abstract submitted.

**Membership**

Chairman: Speed, Cliff (cliff.speed@bacon-woodrow.com)

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**Sterling Corporate Bond Index - On-going**

No update on the 2000 information has been received for the 2001 Report.

**Objectives**

Terms of reference: To review Indices relative to MFR and FRED 20 needs with a view to presenting a short report.

**Expected outcome**

Agreement with Index providers as to the creation of an appropriate specification 'approved' Sterling Corporate Bond Index.

**Progress to date**

The specification has been agreed, potential providers have been identified and negotiations are underway.

**Membership**

Chairman: Rains, Peter (peter.rains@morleyfm.com)

Other members: Ayers, Ken; Cumberworth, Martin; Nowell, Peter; Tomlinson, Lindsay

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### **The Effects of Buybacks on Investment Trust Discounts - On Going**

#### **Objectives**

Terms of reference: To describe the buybacks made over the study period and try to assess the circumstances where this has led to sustainable discount reductions and to investigate the effect on discount volatility.

#### **Progress to date**

Abstract submitted.

#### **Membership**

Chairman: Moretta, Brian (brian@scottish-value.co.uk)

Other members: Adams, Andy; MacPherson, Roddy

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### **The Future Demands of Equities - On Going**

#### **Objectives**

Terms of reference: To produce a paper from a UK view but taking into account the global perspective which addresses: where demand has come from in the past and why; where the supply has come from in the past and why; future demand from institutions e.g. pension funds, life offices; future demand for individuals.

#### **Progress to date**

Draft abstract submitted.

#### **Membership**

Chairman: Mcelvanney, Robert (robert.i.mcelvanney@uk.pwcglobal.com)

Other members: Delvin, Peter; Hurt, Andy; McLean, Derek; Mollan, Marcus

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### **The Role of Hedge Funds - On-going**

#### **Objectives**

Terms of reference: To consider the practicalities of integrating hedge funds with traditional institutional investment approaches.

#### **Progress to date**

Abstract awaited.

#### **Membership**

Chairman: Jung, Graham (Graham.Jung@gs.com)

Other members: Holt, Stephen; Howie, Robert; Gillespie, Craig; Lawrence, Adrian; Wales, Paul

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### **Value Measurement Investment - On Going**

#### **Objectives**

Terms of reference: To investigate common measures of value used outside life assurance, and analyse the potential for improving these by applying actuarial principles and risk concepts, illustrating this with worked examples.

**Progress to date**

Draft abstract submitted.

**Membership**

Chairman: McLean, Colin (colin@scottish-value.co.uk)

Other members: Board, Jeremy; Keane, Stephen; Louw, Wynand; Rodriguez, Richard; Waites, Chris; White, Martin

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**Value Measurement Steering Group - On-going**

No update on the 2000 information has been received for the 2001 Report.

**Objectives**

Terms of reference: To explore and make recommendations upon the opportunities for the use of Value Based Methods within the actuarial profession and for further investigation. To establish, oversee and co-ordinate Practice Board Working parties and evaluate their work.

**Expected outcome**

Some sort of 'understanding' paper explaining terminology and what actuaries do differently. Write-ups of one or more field studies looking at problems and why methodologies achieve different outcomes. A discussion paper including critiques and criticisms of what actuaries/others do. Suggestions as to areas of further work/changes to the Education syllabus and appropriate CPD. Interim report to the Finance and Investment Board by August 2001.

**Progress to date**

Initial survey undertaken of Value Approaches. Practice Boards asked to undertake research into the way EVA-type Value Measurement Methods might be used within specific practice areas. SIAS paper, 'Do actuaries know how to measure value?' February 2001.

**Membership**

Chairman: McLean, Colin (colin@scottish-value.co.uk)

Other members: Dixon, Sally; Massey, Chris; Pemberton, John; Pike, Martin; Sheldon, Tim; Silverman, Tony; Waites, Chris; Wilson, Colin

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**Applications of Bond Portfolio Management - Completed 2001****Progress to date**

A paper 'The use of Yield Curves in Bond Portfolio Management' presented at the Investment Conference 1998A paper 'The Impact of Swaps on the Bond Market' Presented at the Investment Conference 1999. Paper 'The Sterling Corporate Bond Market and its future development' presented at the Investment Conference June 2001.

**Paper can be found at:**

[http://www.actuaries.org.uk/library/proceedings/fin\\_inv/2001/mehta.pdf](http://www.actuaries.org.uk/library/proceedings/fin_inv/2001/mehta.pdf)

**Membership**

Chairman: Mehta, Shyam (s.mehta@btinternet.com)

Other members: Dyer, David; Garvey, Thomas; Jagger, Simon; Jones, Simon; Osborn-Barker, Antony; Riddaway, Bobby; Taylor, Nigel; van Bezooeyen, Jeroen

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## **Applications of Financial Theory in Investment Management - Completed 2001**

### **Objectives**

Terms of reference: To investigate applications of financial theory in investment management.

### **Progress to date**

A paper 'Pension funds and the UK market' presented at the Finance and Investment Conference 2001. Presentation of seven papers at the 2000 Investment Conference: 'Asset models', 'Investment strategy and the valuation of i) Interest sensitive products', 'ii) W.P. products', 'ALM for pensions funds', 'Information Structures', 'Introduction to Convenience Yields' and 'Performance Measurement'. Four papers were presented at the 1999 Investment Conference: 'A review of models for pricing caps and floors in inflation over the long-term', 'Tax considerations when investing in a Life Company', 'The deferred annuity conundrum' and 'Pension Funds - a Company Manager's View'. A paper "Valuing and Hedging Guaranteed Annuity Options" was presented at the Investment Conference, September 1998.

### **Paper can be found at:**

[http://www.actuaries.org.uk/library/proceedings/fin\\_inv/2001/exley.pdf](http://www.actuaries.org.uk/library/proceedings/fin_inv/2001/exley.pdf)

### **Membership**

Chairman: Exley, Jon (jon.exley@uk.wmmercer.com)

Other members: Armitage, Seth; Mehta, Shyam; Smith, Andrew; Speed, Cliff; van Bezoooyen, Jeroen

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## **Applications of Institutional Investment Topics - Completed 2001**

### **Progress to date**

'Hedge Funds for Pensions Funds' paper presented at Finance Conference, June 2001.

### **Paper can be found at:**

[http://www.actuaries.org.uk/library/proceedings/fin\\_inv/2001/cutler.pdf](http://www.actuaries.org.uk/library/proceedings/fin_inv/2001/cutler.pdf)

### **Membership**

Chairman: Cutler, Hugh (hugh@panoramic.fsnet.co.uk)

Other members: Derbyshire, Gareth; Gillespie, Craig; Howie, Robert; O'Brien, Michael; Paxton, Thomas; Shyam, Metha; Wright, Greg

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## **Applications of Performance, Portfolio Risk and Return - Completed 2001**

### **Progress to date**

Paper 'Persistency of returns for UK equity funds' presented at Investment Conference 1999

Paper 'Portfolio Risk Measurement and Reporting: A practical guide for pension funds' presented at Investment Conference 1999 Paper 'Predicted tracking error - Fact or Fantasy?' presented at Investment Conference 2000. Paper 'The practicalities of Budgeting, Managing and Monitoring Investment Risk for Pension Funds' presented at the Finance and Investment Conference 2001.

### **Paper can be found at:**

[http://www.actuaries.org.uk/library/proceedings/fin\\_inv/2001/brooks.pdf](http://www.actuaries.org.uk/library/proceedings/fin_inv/2001/brooks.pdf)

### **Membership**

Chairman: Brooks, Mike (mike.brooks@bailliegifford.com)

Other members: Bowie, David; Cumberworth, Martin; Haig, Alastair; Nelson, Bernie

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## **Applications of Stochastic Investment Models - Completed 2001**

### **Progress to date**

Two papers, 'An Autoregressive Yield Curve with no free lunch' and 'Consistent assumptions for multinational asset models' presented at the Finance and Investment Conference June 2001.

### **Paper can be found at:**

[http://www.actuaries.org.uk/library/proceedings/fin\\_inv/2001/smith1.pdf](http://www.actuaries.org.uk/library/proceedings/fin_inv/2001/smith1.pdf)

### **Membership**

Chairman: Smith, Andrew

Other members: Guthrie, Keith; Howie, Robert; Ludvik, Peter; Metha, Shyam; Van Bezoooyen, Jeroen

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## **Mortgage Prepayment Risk - Completed 2001**

### **Progress to date**

A paper, 'Models for Mortgage Prepayment Risk', presented at the Finance and Investment Conference 2001.

### **Paper can be found at:**

[http://www.actuaries.org.uk/finance\\_invest/mort\\_prepay\\_rpt.pdf](http://www.actuaries.org.uk/finance_invest/mort_prepay_rpt.pdf)

### **Membership**

Chairman: Perry, Simon (perrys@towers.com)

Other members: Robinson, Stuart; Rowland, John

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## 6 GENERAL INSURANCE BOARD WORKING PARTIES

Next year's GIRO Convention will be held 8-11 October 2002 at EuroDisney, Paris. If you are interested in participating in one of the planned or on-going working parties, or have another topic to suggest, please contact the Chairman of the General Insurance Research Committee (GIRO), Richard Winter (tel: 020 7334 6225, e-mail: richard.winter@prudential.co.uk)

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**Draft GN15 Equivalent** - Planned

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**General Insurance Investment Strategies** - Planned

### **Membership**

Chairman: to be agreed

Other members: Boulton, Roger; Dore, Marian; Eabry, Michael; Harding, Justyn; Laird, Sean; Maguire, Matthew; Mehta, Shyam; Olesen, Annette; Papachristous, Dimitris; Rodriguez, Richard; Sayers, Jeff; Walker, Stephen

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**Professional Indemnity and D&O - Pricing and Current Issues** - Planned

### **Membership**

Chairman: Johnson, Henry (henry.johnson@lloyds.com)

Other members: Johal, Baldeep; Lyons, Graham; McConnell, Bill; McPherson, James; Moss, Gaynore; Shepley, Stuart; Slater, David; Waite, Jez

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**State of the Art Pricing** - Planned

### **Membership**

Chairman: Coughlan, Dave (david.coughlan@zurich.com)

Other members: Angell, Kate; Dore, Marian; Mackie, Fergus; Mehta, Shyam; Mitchell, Grant; Plowman, Ed

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**APH Update and Issues** - On-going

### **Progress to date**

Paper presented at GIRO 2001.

### **Paper can be found at:**

[http://www.actuaries.org.uk/library/proceedings/gen\\_ins/2001gic/Michaels.pdf](http://www.actuaries.org.uk/library/proceedings/gen_ins/2001gic/Michaels.pdf)

### **Membership**

Chairman: Slater, David (david.slater@eu.watsonwyatt.com)

Other members: Kirk, Jerome; Macnair, Andrew; Sanders, David; Sheaf, Simon; White, Martin

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## **Applying the New Tax Regulations in Practice - On-going**

### **Membership**

Chairman: Hindley, David (dhindley@bw-deloitte.com)

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## **Aviation Insurance - On-going**

### **Objectives**

Terms of reference: Update on market since the 2000 paper. What does the future of the market look like? What role should actuaries be playing in moulding the market?

### **Membership**

Chairman: Harding, Justyn (Justyn.Harding@resolutemanagement.com)

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## **Cost of the Compensation Culture - On-going**

### **Objectives**

Terms of reference: Review the 'macro' costs of compensation in the UK. Current practice for reserving/pricing for different types of insured compensation. Compare internationally relative levels of different types of compensation. Survey the public's attitude to compensation and consider mutually beneficial underwriting approaches that insurers might adopt. Review the relative levels of different types of compensation in the UK.

### **Membership**

Chairman: Lowe, Julian (julianlowe@norwich-union.co.uk)

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## **Definition and Interpretation of Terminology in Common Use - On-going**

### **Objectives**

Terms of reference: Identifying situations where the same words are used to mean different things. How do actuaries justify the terms that they use. What problems can this cause in practice. Should the profession develop clear definitions, or is it up to individual actuaries to explain what they mean better? What insight can we get from other countries.

### **Membership**

Chairman: Coutts, Stewart (stewart@stewartcoutts.demon.co.uk)

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## **European Weather Derivatives - On Going**

### **Objectives**

Terms of reference: Why is there more of a market in the US than Europe? Could insurance companies use them to diversify risk? Identify potential UK markets (size, industry etc.) What underlying indicators could be used? Differences between the UK and US markets. El Nino: effect on pricing methods and data.

### **Expected outcome**

Aim to present a paper in 2002 building on the work completed in 2001 on weather derivatives.

**Progress to date**

Paper 'European Weather Derivatives' presented at the GIRO 2001; another paper is underway for 2002.

**Membership**

Chairman: Ross, Nick (rossn@norwich-union.co.uk)

Other members: Bain, Derek; Bains, Talbir; Eabry, Michael; Eagle, Matthew; Johal, Baldeep; Mackie, Fergus; Perry, Geoff; Tippin, Philip; Walker, Stephen

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**Fair Value Accounting - On-going****Objectives**

Aim of project: To consider implications and implementation of IASC proposals for Insurance Accounting as it relates to General Insurance.

Terms of reference: Increase awareness of the IASB's proposals within the actuarial profession. Consider how proposals will effect the GI accounts. Suggest how proposals could be implemented. Consider how actuaries can contribute to preparing accounts. Give practical examples of accounts.

**Expected outcome**

Paper for GIRO 2002.

**Progress to date**

Meetings held and drafting started.

**Membership**

Chairman: Clark, Peter (peter.k.clark@uk.pwcglobal.com)

Other members: Brockman, Michael; Cresswell, Catherine; Hinton, Peter; Monk, Richard; Nicholson, Erica; Silverman, Tony; Storey, Liam; Wells, Gary; White, Martin

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**Financial Condition Reporting - On-going****Objectives**

Terms of reference: Building on the work in the sessional paper, what would a financial condition report look like in practice? Case study to be presented at a seminar 2002.

**Membership**

Chairman: Aghadiuno, Chika (chika\_aghadiuno@cgnu.net)

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**House Insurance - On-going****Objectives**

Terms of reference: Recent experience, in particular claims inflation. Changing weather patterns and flood experience. Has the increasing consumption of recent years led to systematic under insurance? The likely effects of changing economic circumstances. Building a reserving index that models daily claims experience at postcode level using published/proprietary weather information.

**Progress to date**

Obtained data on household claim costs/numbers by occurrence month and peril and summarised trends. Obtained Met Office daily weather data by location. Obtained individual claims data by postcode and peril for occurrence dates back to 1997. Merged daily claims and weather data for gust speed on day against storm claims.

**Membership**

Chairman: Cowley, Rob (cowler1@norwich-union.co.uk)

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**Investment Strategies for General Insurance Companies - On-going****Objectives**

Terms of reference: Is there an optimal theoretical strategy? What do companies do in practice? What are the reasons for the differences?

**Membership**

Chairman: Eabry, Michael (michael.d.eabry@uk.pwcglobal.com)

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**Measuring Customer Value - On Going****Objectives**

Terms of reference: Identify organisations that already measure customer value. See how they do it (and how successful they are). See how they use those values. See what lessons they have learned. Identify organisations that have chosen not to measure customer value and why they have followed that course.

**Progress to date**

Paper presented at GIRO 2001.

**Membership**

Chairman: To be agreed.

Other members: Bijl, Peter; Branch, Vincent; Brown, David; Hill, Stephen; Hillon, James; Michaels, Darren; Van Delm, Rudi; Newton, Derek

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**Operational Risk - On-going****Objectives**

Terms of reference: What role could actuaries play in identifying and quantifying operational risk. What tools exist to help in the process. What needs to be developed to make this work better in the future. Also, 1) What is OpRisk and why does it matter? 2) Identify areas and sectors where OpRisk exists. 3) Review current sources of information on OpRisk. 4) How to control, manage, measure and estimate OpRisk. 5) What is the role of actuaries in OpRisk and what skills do they need? Initially looking across all industries, but recognising that ultimate application will be in actuarial fields (e.g. life and non-life insurance).

**Expected outcome**

To produce a paper on OpRisk for inclusion in GIRO 2002 conference papers.

**Membership**

Chairman: Duffy, Paul (paul.duffy@quantum-actuarial.com)

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**Political Risk Insurance - On-going****Objectives**

Aim of project: Educational Paper - introduction to issues around Political Risk Insurance, along with an exploration of the risks involved and how these may be priced and/or reserved for.

Terms of reference: Overview of cover for acts such as terrorism, political unrest, kidnap etc. How the commercial insurance market can provide this coverage, and the existence (or not) of 'insurers of last resort'. Predict market changes given current world situation. Pricing considerations. Reserving issues.

**Expected outcome**

Production of paper for GIRO 2002.

**Progress to date**

Initial meetings taken place - gathering information.

**Membership**

Chairman: Tippin, Philip (philip.tippin@kpmg.co.uk)

Other members: Alington, Nigel; Bennett, Camilla; Couper, Andrew; Eabry, Michael; Harding, Justyn; Johal, Gurpreet; McConnell, Bill; Moss, Gaynore

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**Portfolio Transfers - On-going**

**Objectives**

Terms of reference: Reasons for buying and selling portfolios. Loss portfolios versus premium portfolios. Pricing aspects: risk premium, discount, risk margin. Policyholder/regulatory issues. Legal requirements. Reinsurance considerations. Market data: frequency, typical examples. Accounting issues, including fair value accounting. US v UK differences. Contrast between portfolio transfer and outward reinsurance. Contrast between portfolio transfer and commutation.

**Expected outcome**

Intend to cover the topics agreed and produce a paper for GIRO, in time for publication in the 2002 GIRO book.

**Membership**

Chairman: MacNair, Andrew (andy.macnair@fsa.gov.uk)

Other members: Bruce, Neil; Harrar, Sukie; Perry, Geoff; Quane, Alessa; Russell, Cheryl; Townley, Lawrence

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**Pricing, Management and Control of Extreme Events - On-going**

**Objectives**

Terms of reference: Events and realistic disaster scenarios. Extreme Value Theory (and applications). Catastrophe Models. Pricing/Reserve assessment/Management.

**Membership**

Chairman: Sanders, David (david.sanders@millimanuk.com)

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**Reinsurance Commutations - On-going**

**Objectives**

Aim of project: To produce a sessional paper updating the profession on various aspects of commutations including pricing and the relevant margin for uncertainty.

Terms of reference: 1) Review the existing material. 2) Document current actuarial practice and involvement. 3) Produce a paper covering best practice and approaches.

**Expected outcome**

Sessional paper either for discussion at institute or publication in BAJ without a sessional meeting.

**Progress to date**

Sessional paper submitted for review.

**Membership**

Chairman: Joseph, Bryan (bryan.r.joseph@uk.pwcglobal.com)

Other members: Collins, Jon; Jarman, Lucy; Johnson, Henry; Lyons, Graham; Piper, Jonathan; Newbury, Karen

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**Reliance on Advice from Other Professionals - On-going****Objectives**

Terms of reference: Review work done by CAS and other actuarial bodies. How would this be different for UK/Europe. What approach do other professionals take (e.g. accountancy).

**Membership**

Chairman: Newman, Andrew (andrew.newman@uk.pwcglobal.com)

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**Stochastic Reserving Methods - On-going**

No update on the 2000 information has been received for the 2001 Report.

**Progress to date**

Initial presentation to GIRO 2000.

**Membership**

Chairman: Fagnoni, Hervé (herve.j.fagnoni@uk.pwcglobal.com)

Other members: Bain, Derek; Leifar, Andrew; Line, Nick; Monk, Joe; Skinner, Justin

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**Update Claims Reserving Model - On-going****Objectives**

Terms of reference: Review and describe new methods. Present practical chain ladder variations. Provision of ranges using stochastic or other methods. Provide working guide to the execution of reserving. APH reserving methodology. Consider provision of soft-ware versions of basic methods.

**Membership**

Chairman: Lyons, Graham (lyonsg@towers.com)

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**Why Insurers Fail - On Going****Objectives**

Aim of project: To identify the key reasons behind the failure of general insurance companies. Terms of reference: To summarise previous research on the subject, investigate individual case studies and identify the lessons which can be learnt from past failures. The paper will also consider the role the regulator plays in creating the environment that leads to failure and provide an insight into how rating agencies grade individual insurer's claims paying ability.

**Expected outcome**

A paper that will provide insight into why insurers have failed in the past with the aim of identifying

reasons why companies may fail in the future.

**Progress to date**

Research complete, a database of past failures compiled.

**Membership**

Chairman: Massey, Roger (roger.massey@churchill-insurance.co.uk)

Other members: Harris, Simon; Hart, David; Harrar, Sukphal; Hawes, Wendy; Law, Debbie; Mackie, Fergus; Niven, Clive; Westrip, Alan; Widdows, James

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**Calculating Premium Monitoring / Rate Change Indices - Completed 2001**

**Progress to date**

Paper 'Premium Rating Indices' presented at GIRO 2001.

**Paper can be found at:**

[http://www.actuaries.org.uk/library/proceedings/gen\\_ins/2001gic/mcconnell.pdf](http://www.actuaries.org.uk/library/proceedings/gen_ins/2001gic/mcconnell.pdf)

**Membership**

Chairman: McConnell, Bill

Other members: Archer-Lock, Phil; Bains, Talbir; Copeman, Peter; Foord, Alex; Hilder, Ian; Keig, Mike; Mathews, Steve; Matthee, Michiel; Tanser, James; White, Martin; Wilcox, Stephen

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**Structured Settlements - Lessons for the UK from Overseas - Completed 2001**

**Objectives**

Aim of project: Look at future of structured settlements in the UK, and overseas.

Terms of reference: The paper will cover the following subject areas: Structured settlements in the context of the UK compensation, prospective view of potential development of alternative compensation methods.

**Progress to date**

Paper presented to GIRO 2000 and update GIRO 2001. Inform debate on development of compensation methods in the UK.

**Paper can be found at:**

[http://www.actuaries.org.uk/library/proceedings/gen\\_ins/2000gic/struct\\_sets\\_wp.pdf](http://www.actuaries.org.uk/library/proceedings/gen_ins/2000gic/struct_sets_wp.pdf)

**Membership**

Chairman: Charles, John (charlej@towers.com)

Other members: Barton, Catherine; Black, Simon; Boit, François; Cresswell, Catherine; Ellis, Phil; Hamilton, Alex; Maher, Jim; Montgomery, Jack; Philps, Richard; Ross, Nick

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**Capital Allocation - Discontinued 2001**

**Objectives**

Aim of project: To survey existing approaches to capital allocation and produce a report explaining its benefits.

Terms of reference: Investigate issues surrounding capital allocation.

**Expected outcome**

Final report to GIRO.

**Progress to date**

Interim report to GIRO 1999 and 2000.



**Paper can be found at:**

[http://www.actuaries.org.uk/library/proceedings/gen\\_ins/2001gic/Orr.pdf](http://www.actuaries.org.uk/library/proceedings/gen_ins/2001gic/Orr.pdf)

**Membership**

Chairman: Orr, James (James.Orr@Lloyds.com)

Other members: Dalton, Kevin; Ibeson, David; Jones, Liz; Moss, Gaynore; Perry, Geoff; Rix, Stephen; Sanders, David; Sayers, Jeff; Shah, Nylesh; Thomas, Tim

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## 7 LIFE BOARD WORKING PARTIES

If you are interested in participating in one of the planned or on-going working parties, or have another topic to suggest, please contact the Secretary to the Life Board; Maria Singleton (tel: 020 7632 2173, e-mail: [marias@actuaries.org.uk](mailto:marias@actuaries.org.uk))

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### **Customers' Interests** - On-going

#### **Objectives**

Aim of project: To consider the relationship between the concepts of "policyholders' reasonable expectations" (PRE) and "customers' interests" (CI).

Terms of reference: To consider the proposal to replace the concept of PRE as set out in the Insurance Companies Act by that of CI as defined by FSA Principle 6. In particular to consider: 1) The relation between PRE and CI. 2) The implications for the life insurance industry and the actuarial profession. 3) The implications for the role of the appointed actuary as adviser to the company. The work should include discussion with officials of the FSA and GAD, liaising with the FSA Co-ordination Committee, and monitoring developments, for example, in further FSA documents. The intention is to produce a report to stimulate discussion within the profession for the 2000 Life Convention.

#### **Expected outcome**

Brief report followed by watching brief over developments.

#### **Progress to date**

Report to Life Conventions 2000, 2001 and conference 3/2001. Met with FSA on WP Review.

#### **Membership**

Chairman: Thompson, Stuart ([Thompss@tillinghast.com](mailto:Thompss@tillinghast.com))

Other members: Bright, Doug; Cummings, John; Shah, Rajeev

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### **Customer Value** - On-going

#### **Objectives**

Aim of project: To examine the role that Customer Value can play in improving the performance of life insurance offices.

Terms of reference: To examine the usefulness of customer value techniques to life insurers, both in the short and long term and to determine suitable measures of customer value for short and long term practical use. To define the role of actuaries in this area and demonstrate how that role might be carried out. To consider how life insurers should change their strategy or behaviour to maximise the advantages from customer value initiatives.

#### **Expected outcome**

Professional paper - probably to SIAS initially.

#### **Progress to date**

Session at 2000 Life Convention and 2001 Life Convention.

#### **Membership**

Chairman: chairman to be appointed

Other members: Desai, Amish; Ford, Matthew; Gott, David; Pond, David; Thornham, Tim; Whitworth, John

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## **Life Assurance Value Measurement - On-going**

No update on the 2000 information has been received for the 2001 Report.

### **Objectives**

Terms of reference: To summarise what Value Measurement models are currently being used by life offices.

To study the ways in which Value Measurement models might be used in practice.

To consider the practical issues involved in using Value Measurement models.

To compare and contrast the various Value Measurement models.

To consider how actuaries and the profession could best contribute to the use and development of Value Measurement techniques.

To illustrate various Value Measurement methods using worked examples or case studies.

To consider what material might be suitable for the profession's CPD scheme.

### **Expected outcome**

Paper on life aspects of Value Measurement.

### **Progress to date**

Interim presentation life aspects of Value Measurement at 2000 Life Convention; some input into imminent student society paper on general aspects of Value Measurement; additional paper being drafted to cover life aspects.

### **Membership**

Chairman: Sheard, Michael (Michael.Sheard@Prudential.co.uk)

Other members: Gentry, Lee; Howell, David; Mason, Alan; Mehta, Shyam; Purves, Brian; Sharp, Andy; Stevens, Anthony; Wilson, Colin

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## **Life Office Taxation - On-going**

### **Objectives**

Aim of project: To keep the profession informed of developments in the field of Life Office Taxation.

Terms of reference: 1) To keep abreast of new developments 2) To analyse their impact 3) To inform the profession as appropriate 4) As a subsidiary objective, to consider the impact of some of the more complex aspects of UK life office taxation on actuarial work.

### **Expected outcome**

Articles on different aspects of life office taxation in The Actuary magazine.

### **Progress to date**

Sessions at 2000 & 2001 Life Conventions; a number of articles and columns published in The Actuary.

### **Membership**

Chairman: Allan, Graham (grahamjallan@aol.com)

Other members: Forbes, Morris; Taylor, Matthew; Turnbull, Paul; Wild, Keith

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## **Management of Closed Funds - On-going**

### **Objectives**

Aim of project: To identify risk areas and issues relating to the management of closed funds and to identify some possible solutions.

Terms of reference: In progress.

**Expected outcome**

Presentation on progress to date at the Life Convention in November 2002.

**Progress to date**

Initial meeting held.

**Membership**

Chairman: Pallister, Juile (julie.pallister@century-finserv.co.uk)

Other members: Burke, Andrew; Holtham, Andy; Morris, Peter; Pindar, Tim; Ross, Geoff; Smith, Alastair; Summerfield, Andrew; Walton, Andrew; Wells, Andrew; Wilkinson, Stuart

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**Product Reviews - On-going**

No update on the 2000 information has been received for the 2001 Report.

**Objectives**

Aim of project: To review current practice with regard to product reviews and, to the extent considered appropriate, to make recommendations as to best practice.

Terms of reference: The objective of the Working Party is to review current practice with regard to product reviews and, to the extent considered appropriate, to make recommendations as to best practice. The scope of the Working Party's review is to include consideration of: 1) individual life and pensions products where either the original premium was chosen with the intention of achieving a certain target level of benefits on maturity or retirement or for a period of time and/or the terms of the product (e.g. expense or risk charges) can be varied 2) the timing of reviews 3) assumptions made regarding future experience 4) policyholders' reasonable expectations 5) policyholder communications 6) remedial action taken or offered to policyholders.

**Expected outcome**

Report to CILA or similar Faculty/Institute event.

**Progress to date**

Session at Life Convention 2000.

**Membership**

Chairman: To be advised.

Other members: Foster, Simon; Gracie, Stewart; Karlcut, Harpal; Smith, David; Snow, Harold; Telford, Peter

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**Selection in the Annuity Market - On-going**

**Objectives**

Aim of project: To consider the implications for life offices and policyholders of recent developments in the annuity market regarding impaired life annuities and income drawdown.

Terms of reference: To investigate the impact of changes in the annuity market on reserving and life company profitability (specifically, impaired life annuities and income drawdown schemes) and to develop a model to measure profitability under different scenarios.

**Expected outcome**

Sessional meeting paper.

**Progress to date**

Session at 2000 Life Convention, Session at 2001 Life Convention.

**Paper can be found at:**

<http://www.actuaries.org.uk/library/proceedings/life/life2000/mpoul-c02.pdf>

<http://www.actuaries.org.uk/library/proceedings/life/life2000/slides-c02.pdf>

**Membership**

Chairman: Poulding, Michael (mike.poulding@talk21.com)

Other members: Burgess, Stephen; Jackson, Lawrence; Latto, Phillip; O'Regan, Kevin; Summerfield, Andrew; Willetts, Richard

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**Use of Derivatives in Life Assurance - On-going****Objectives**

Aim of project: To analyse examples of derivatives use.

Terms of reference: The aim of the working party is to consider examples where life assurance companies are currently utilising derivatives, or might like to use derivatives, and to establish if companies believe their use of derivatives is constrained.

**Expected outcome**

Second phase will carry this work forward once the Chairman has been appointed.

**Progress to date**

Session at 2000 Life Convention. First phase complete.

**Membership**

Chairman: To be confirmed

Other members: Brindley, Rupert; Cooper, Paul; Finkelstein, Gary; Pearson, Jeff; Rear, Andy; Turley, Frank

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**Fair Valuation - Completed 2001****Objectives**

Aim of project: In recognition of the inadequacy of the existing methods of actuarial valuation for long-term insurance, particularly for supervisory purposes, under certain circumstances and economic conditions, the working party has been asked to reconsider the issues.

Terms of reference: The Working Party reports directly to the Life Board. 1) The Working Party will consider the various objectives of valuation e.g. solvency supervision, valuation for policyholders' reasonable expectations, valuation for resilience, including using a risk capital approach, and valuation for presentation in annual Companies Act accounts (generally, in UK, of parent companies, distinguishing, if necessary, between whether the principal business of the parent is insurance business or not). It will review the essential characteristics of each and consider whether it is possible to produce consistency from approach to approach. 2) The Working Party will consider whether better methods could be developed if the constraints of existing regulation and legislation were to be ignored. In particular it is to be assumed that a new International Accounting Standard will be developed and that fair value of both assets and liabilities will be incorporated in annual reporting 3) The Working Party will attempt to identify a set of valuation principles for supervision and associated purposes. Without unduly limiting itself to UK-based considerations, the Working Party will have regard to the situation for (UK-style) with-profits business. 4) In its deliberations the Working Party will take into account all types of long-term products, unitised and conventional, existing and developing, with and without profits.

**Progress to date**

Monthly meetings from spring 2000 onwards; session at 2000 Life Convention; Sessional

Meetings held November 2001. Input to international discussions of IAS on insurance accounting.

### **Membership**

Chairman: Hairs, Chris (ChrisHairs@aol.com)

Other members: Belsham, David; Bryson, Norval; Dann, Malcolm; George, Chris; Hare, David; Headdon, Chris; Masters, Nigel; Miller, Keith; Smith, David; Thompson, Stuart

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## **Financial Condition Reports - Completed 2001**

### **Progress to date**

Session at 2000 Life Convention.

### **Paper can be found at:**

[www.actuaries.org.uk/library/proceedings/life/life2000/pcarr-f01.pdf](http://www.actuaries.org.uk/library/proceedings/life/life2000/pcarr-f01.pdf)

### **Membership**

Chairman: Carr, Peter (peter\_carr@amp.com.au)

Other members: Adler, Will; Desai, Amish; Malpas, Jonathan; Pike, Martin; Walton, Andrew; Watson, Paul

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## **Regulatory Capital for Financial Services - Completed 2001**

### **Objectives**

Terms of reference: To summarise and compare, using case studies, the rules for determining the statutory solvency position of life insurance companies, banks and fund management companies in the UK.

### **Progress to date**

Session at 2000 Life Convention. SIAS paper during 2001.

### **Membership**

Chairman: Muir, Martin (martin.muir@eu.watsonwyatt.com)

Other members: Chamberlain, Andrew; Moran, Ian; Perry, Simon; Stocks, Stuart; Thornton, Craig

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## **Transparency of With-Profits Business - Completed 2001**

### **Objectives**

Aim of project: To prepare proposals for improving the transparency of the operation of with-profits business to assist greater understanding by the public, with particular emphasis on stakeholder pensions.

Terms of reference: The Working Party reports direct to the Life Board. The Working Party is tasked with preparing proposals for the transparent operation of with-profits business presenting 1) by 18 February 2000, an initial report that focuses on the use of with-profits for Stakeholder Pensions, and 2) in the latter part of 2000, a comprehensive report also encompassing the implications for in force business and methods of enhancing public understanding of the nature of with-profits business.

### **Progress to date**

Monthly meetings from spring 2000; presentation to 2000 Life Convention; presented to sessional meetings on 26 February and 19 March 2001. Report to be presented to Sessional Meeting in May 2001. Papers for publication in BAJ.

**Paper can be found at:**

<http://www.actuaries.org.uk/sessional/sm0102.pdf>

**Membership**

Chairman: Clay, Graham ([graham.clay@prudential.co.uk](mailto:graham.clay@prudential.co.uk))

Other members: Frankland, Ralph; Horn, Tony; Hylands, John; Johnson, Chris; Kerry, Robert; Lister, John; Loseby, Ruth; Newbould, Brian

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**Value at Risk - Discontinued 2001****Membership**

Chairman: Thomas, Perry

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**Virtual Life Offices - Discontinued 2001****Progress to date**

One meeting has been held.

**Membership**

Chairman: Granville, Mike ([mike@cinnamonw.demon.co.uk](mailto:mike@cinnamonw.demon.co.uk))

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## 8 PENSIONS BOARD WORKING PARTIES

If you are interested in participating in one of the planned or on-going working parties, or have another topic to suggest, please contact the Secretary to the Pensions Boards' Research and Technical Support Committee: Georgina Ivers (tel: 01865 268235, e-mail: georgini@actuaries.org.uk)

---

### **Benefit Design - Planned**

#### **Objectives**

Terms of reference: To consider alternatives for benefit design in the light of the changes taking place in the pensions industry. To consider the implications for members and sponsors.

#### **Membership**

Chairman: Hammer, Mike (hammerm@towers.com)

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### **Risk Benefits - Planned**

#### **Objectives**

Terms of reference: To determine the extent of self-insurance of risk benefits of occupational pension schemes. To analyse schemes that self insure by: a)size of scheme b)size and rating of employer. To determine types of risk benefit insurance effected by schemes, analysed by: a)size of scheme b)size and rating of employer. To determine optimal risk-benefit insurance strategy for schemes differentiating by size of scheme, size of employer and rating of employer.

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### **Retirement Income Reform - On-going**

#### **Objectives**

Terms of reference: 1)To consider what obstacles need to be removed to give the annuities market the flexibility to design a range of products of the type covered in Extending Choices distinguishing between those parts which are fundamental to legislation and those to Inland Revenue practice. 2)To consider how those buying annuities could obtain information. 3)To consider the need for education and advice on annuities and whether this would be helped through the provision of decision tress or a clearing house. 4)To provide simple modelling illustrations of the effect of alternative annuity scenarios over the past thirty years. 5)To illustrate how the introduction of a new annuity regime could be designed to be tax neutral. 6)To consider the implications of removing the age-related compulsory buying of an annuity. 7)To consider the implications of inheritabilty. 8)To recommend to the Pensions Board practical ways forward and to discuss these where appropriate with the Faculty and Institute advisers.

#### **Expected outcome**

To report to the Technical Support Committee by 14th February so that the Committee can report to the Pensions Board on 1st March 2002.

#### **Membership**

Chairman: Riddington, David (riddind@norwich-union.co.uk)

Other members: Boardman, Tom; Bodie, Nigel; Challis, Paul; Gray, Leslie; Poulding, Mike; Wadsworth, Mike

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## **Stochastic Pensions Valuations and the Assessment of Funding Risk - On-going**

### **Objectives**

Aim of project: To investigate the use of Stochastic Processes in the provision of advice to pension funds. To find common ground on the approaches adopted and to disseminate information to a wider audience.

Terms of reference: To investigate the application of stochastic processes to the provision of advice on the valuation of pension funds. To address the ways in which actuaries can and should communicate degrees of funding risk to the sponsors of schemes. To find common ground on the approaches adopted and to disseminate ideas to a wider audience. To make recommendations about the assumptions which should be included in reports to clients on valuations which have adopted a stochastic approach in their assessment.

### **Expected outcome**

Paper for consideration by the Pensions Board.

### **Progress to date**

The working party has met and been awarded research funding from the Education and CPD Boards' Research Steering Committee. Reported to the Pensions Conference in June 2001. Likely to be presented as a Sessional Paper in the 2002/03 session.

### **Membership**

Chairman: Haberman, Steve

Other members: Day, Christopher; Fogarty, David; Khorasanee, Zaki; Lawrence, Adrian; McWhirter, Martin; Nash, Nichola; Speed, Cliff; Wright, Douglas; Yakoubov, Yakoub

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## **Investment Strategies for Money Purchase Schemes - Discontinued 2001**

### **Objectives**

Terms of reference: To investigate the range of investment strategies adopted for money purchase schemes and stakeholder pensions, in particular looking at the degree of risk and its variation with the age of the investor. To consider "lifestyle investment" options, with an emphasis on how these are operated and how they may be affected by choices made by individual members as to, for example, retirement date. To make recommendations on the way in which different levels of risk may be communicated to lay members of pension schemes having to make choices for themselves, including possibly the use of "traffic light" systems to differentiate different levels of risk.

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## 9 SOCIAL POLICY BOARD WORKING PARTIES

If you are interested in participating in one of the planned or on-going working parties, or have another topic to suggest, please contact the Secretary to the Social Policy Board:  
Martin Hewitt (tel: 020 7632 2185, e-mail: martin.h@actuaries.org.uk).

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### **Genetics and Insurance - Issues for Social Policy - Planned**

#### **Objectives**

Terms of reference: Drawing on expertise of the Group to inform the profession of: current knowledge about actuarial research, social policy issues, issues on pooling, philosophical issues on equity, fairness, moral hazards and so forth, and future implications.

#### **Progress to date**

Drafted a plan for a paper, which is intended for a Sessional Paper in 2003.

#### **Membership**

Chairman: Daykin, Chris (chris.daykin@gad.gov.uk)

Other members: Akers, Debbie; Brett, Paul; Brown, Geoff; Macdonald, Angus; Paul, David; Turvey, Peter

---

### **The Interface Between the Public and Private Sectors in Healthcare - Planned**

#### **Objectives**

Terms of reference: To explore long term financial forecasting for the NHS in context of recommendations of Wanless Interim Report 2001. To develop the work of actuaries working as consultants. To develop the role of actuaries in the NHS, using their expertise.

#### **Membership**

Chairman: Coss, John

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### **The Potential for Insurance Companies Developing Provisions in Care Rather than Cash - Planned**

#### **Objectives**

Terms of reference: To develop the work of actuaries working as consultants. To develop the role of actuaries in the NHS, using their expertise.

#### **Membership**

Chairman: Sissons, Ian (isissons@munichre.com)

---

### **The Role of Actuaries in Healthcare - Planned**

#### **Objectives**

Terms of reference: To develop the work of actuaries working as consultants. To develop the role of actuaries in the NHS, using their expertise.

#### **Membership**

Chairman: Le Grys, Des

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## **Consumer Risk - On-going**

### **Objectives**

Terms of reference: To examine the nature and extent of consumer knowledge about financial planning. To identify factors contributing to risk averse and risk-venturing behaviour among consumers of financial products.

### **Expected outcome**

This project is part of the Personal Financial planning Committee's brief following the Banham Lecture on consumer financial education. Produce findings for annual stocktaking event in late 2002 reviewing progress since Banham lecture and to publish findings.

### **Membership**

Chairman: Goodwin, Alan

Other members: Taylor, John

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## **Medical Advances - On-going**

### **Objectives**

Terms of reference: 1)To collect data on the mortality and the morbidity of elderly people and secular trends in the UK and other developed countries. Explore differences in experience according to sex, social economic group and other factors. 2)To identify major medical advances or changes in the environment or habits that have altered health needs and mortality and to gauge how much these advances and changes have altered mortality and morbidity. 3)To identify current and future medical advances and changes in environment or habits that may affect future levels of mortality and health needs and the possible extent of the effect. 4)To determine a model to show the likely changes in mortality and health needs in the future and to project changes in life expectation and healthy life expectation. 5)To organise the work into several interlocking projects and update the Social Policy Board on progress. 6)To report findings at appropriate stages to the Actuarial Profession and externally to other professional bodies and the public.

### **Progress to date**

Meeting to discuss aims, objectives etc, held on 17 Jan 2001.

### **Membership**

Chairman: Seymour, Paul (paul.seymour@mathon-lodge.fsnet.co.uk)

Other members: Bailey, Bill; Cornall, Monica; Gallop, Adrian; Hangartner, Robert; Langkjaer, Martin; Le Grys, Des; Leader, Scott; Macdonald, Angus ; Mayhew, Les; Metz, David; Paul, David; Robjohn, Neil; Shah, Rajeev; Spreeuw, Jaap; Van-Beek, Maria; Willets, Richard; Wittenberg, Raphael

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## **Pension Provision Taskforce - On-going**

### **Objectives**

Terms of reference: 1)To produce papers on: size of the state pension, means testing and the PHI offset, unfunded pensions both in the EU and the public sector, age of retirement and longevity, impact of annuitisation 2)To raise public awareness of these issues.

### **Expected outcome**

Objective: to contribute a distinctive actuarial view to the debate on what State Pension Age should be and what needs to be changed before it can be raised.

**Progress to date**

Following presentation of 5 briefing papers in December 2000, the Taskforce delivered 3 of these papers at a seminar at the Palace of Westminster in February 2001: Means-testing, The size of the State Pension and the Age of Retirement. Findings from these papers were used to support the Profession's response to several Government Consultations during 2001.

**Membership**

Chairman: Lewis, David

Other members: Cooper, Deborah; Smith, Aidan

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**Retirement Options - On-going****Objectives**

Aim of project: To consider advice the Profession might offer to members of the public as they conclude their working life and commence retirement.

Terms of reference: To be decided.

**Expected outcome**

To be decided.

**Progress to date**

First meeting held on 18<sup>th</sup> January 2001.

**Membership**

Chairman: Shallis, Paul (paul.shallis@landg.com)

Other members: Armstrong, Kirsten; Binns, Martin; Cizdyn, Roman; Goodman, Alan; Hindle, Joanne; Owen, Robert; Reilly, Stuart; Roberts, John; Smith, Ewan; Smith, Jo; Taylor, John

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**Critical Illness Cover - the Future - Completed 2001****Objectives**

Aim of project: To investigate the future variability and direction of CIC.

Terms of reference: A joint investigation between the profession's Critical Illness Cover (CIC)

Working Party and the Investment Life Insurance Group (ILAG) into the future variability and direction of CIC. To discover how CIC consumers perceive the product and how they positioned it alongside other forms of healthcare protection.

**Progress to date**

Output: completed October 2001.

**Membership**

Chairman: Payne, Stephen (stephen.payne@gerling.co.uk)

Other members: Mannion, Peter

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## **Health and Care Committee - Health Services Group**

**Leader:** John Coss

**Contact:** Martin Hewitt (tel: 020 7632 2185, e-mail: [martinh@actuaries.org.uk](mailto:martinh@actuaries.org.uk)).

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### **UK Vaccination Programme - Risk and Reward - On-going**

#### **Objectives**

Aim of project: To identify what actuaries can contribute to the study of the balance of risks (probability of experiencing adverse effect of vaccination versus risk of contracting illness by refusing vaccination) associated with vaccination programmes.

#### **Progress to date**

Delivered paper at 2001 Healthcare Conference. Project transferred to APMA.

#### **Paper can be found at:**

[www.actuaries.org.uk/library/proceedings/health2001/Cornall.pdf](http://www.actuaries.org.uk/library/proceedings/health2001/Cornall.pdf)

#### **Membership**

Chairman: Cornall, Monica ([monica.cornall@kpmg.co.uk](mailto:monica.cornall@kpmg.co.uk))

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### **The NHS Plan - Completed 2001**

#### **Progress to date**

Response to Government in 2000.

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### **Health Data Charter - Discontinued 2001**

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### **Measuring Health Systems - Discontinued 2001**

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### **The 'Healthcare Management Actuary' - Discontinued 2001**

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## **Health and Care Committee - IP/CI Group**

**Leader:** Sue Elliott

**Contact:** Martin Hewitt (tel: 020 7632 2185, e-mail: [martinh@actuaries.org.uk](mailto:martinh@actuaries.org.uk)).

---

### **Income Protection - Trends - Planned**

#### **Objectives**

Terms of reference: To examine underlying trends in the factors influencing UK Insured Critical Illness claim rates, and from these to assess: 1) the historic trend in incidence in death rates for the major CI's. 2) any pointers for future trend in Standalone CI, Mortality and hence Accelerated CI.

#### **Expected outcome**

To seek new information and a broader base on medical specialists and claims and underwriting experts etc. To form links with other groups such as APMA, ABI CI definitions group. Funding for data sets etc. To publish papers.

#### **Membership**

Chairman: Robjohns, Neil ([nrobjohns@munichre.com](mailto:nrobjohns@munichre.com))

Other members: Morris, Richard

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### **Critical Illness - Robustness of Definition - On-going**

#### **Objectives**

Aim of project: To review the long-term robustness of CI and occupation definitions.

#### **Expected outcome**

Planned SIAS paper in Spring 2001 and paper for the Healthcare Conference 2001.

#### **Progress to date**

Paper presented at Healthcare Conference 2001.

#### **Membership**

Chairman: Bradshaw, Nigel ([nigelb@scotprov.co.uk](mailto:nigelb@scotprov.co.uk))

Other members: Hanks, Chris; Macdonald, Alisdair; Payne, Stephen

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### **Income Protection - Internal Risk Factors - On-going**

#### **Objectives**

Aim of project: To produce guidance on risks associated with IP portfolios.

Terms of reference: To produce a ready-reference document to assist actuaries new to IP to understand the risk factors facing the portfolio.

To attempt to quantify the effectiveness of different companies' approaches to controlling these risks.

#### **Expected outcome**

Workshop at 2000 Healthcare Conference.

#### **Progress to date**

Risk factors associated with Income Protection were identified and rated.

#### **Membership**

Chairman: Pindar, Tim ([tfpp@msas.co.uk](mailto:tfpp@msas.co.uk))

Other members: Hilary, Neil; Howe, Andrew; Pipe, Julian; Shirley, Ailish

## **Income Protection - Trends by Cause (Terminations) - On-going**

### **Objectives**

Aim of project: Investigate trends in inception and recovery experience by cause of disability (1975-1994).

### **Progress to date**

Presented at Healthcare Conference 2001.

### **Paper can be found at:**

[www.actuaries.org.uk/library/proceedings/health2001/wilkie.zip](http://www.actuaries.org.uk/library/proceedings/health2001/wilkie.zip)

### **Membership**

Chairman: Wilkie, David

Other members: Coulthard, Terry; Moran, Ian; Northover, Carl

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## **Health and Care Committee - Long Term Care Group**

**Leader:** Ian Sissons

**Contact:** Martin Hewitt (tel: 020 7632 2185, e-mail: [martinh@actuaries.org.uk](mailto:martinh@actuaries.org.uk)).

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### **Reserving/Valuation - On-going**

#### **Objectives**

Aim of project: To make recommendations on the statutory valuation basis for long term care business in the UK.

Terms of reference: In particular to consider the sources and credibility of data; methods of modelling; changes in demographic assumptions; valuation issues arising from guarantees and policy reviews; PRE issues.

#### **Progress to date**

Presentation at 2001 Healthcare Conference.

#### **Membership**

Chairman: Laurie, Stephen ([100336.3635@compuserve.com](mailto:100336.3635@compuserve.com))

Other members: Baxter, David; Cook, Andy; Kipling, Robert; Smith, Martin

---

### **Experience Analysis - Discontinued 2001**

#### **Objectives**

Aim of project: To consider the experience of LTC providers.

Terms of reference: Intention is to cover: Inception experience by ADL trigger; Cognitive Impairment inception experience; Assistive Devices Benefit experience (currently no UK date exists on this benefit); Long term we aim to extend the study to include terminations and potentially immediate care experience.

#### **Progress to date**

Speakers' Corner at 2000 Healthcare Conference.

#### **Membership**

Chairman: Moody, Simon ([simon.moody@uk.wmmerc.com](mailto:simon.moody@uk.wmmerc.com))

Other members: Elliott, Sue; Gougal, Mike; McGurk, Peter

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### **Projections - Discontinued 2001**

#### **Membership**

Chairman: Rickayzen, Ben ([b.d.rickayzen@city.ac.uk](mailto:b.d.rickayzen@city.ac.uk))

Other members: Elliott, Sue; Gallop, Adrian; Hodgson, Mark; Levay, Edward; Rear, Andy

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## **Health and Care Committee - Multi-Disciplinary Group**

**Contact:** Martin Hewitt (tel: 020 7632 2185, e-mail: [martinh@actuaries.org.uk](mailto:martinh@actuaries.org.uk)).

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### **Healthcare - Related Employee Benefits - Planned**

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## **Health and Care Committee - PMI Group**

**Leader:** Neil Hilary

**Contact:** Martin Hewitt (tel: 020 7632 2185, e-mail: [martinh@actuaries.org.uk](mailto:martinh@actuaries.org.uk)).

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**Health Inflation Index** - Planned

### **Membership**

Chairman: Hilary, Neil ([neilh@actuaries.org.uk](mailto:neilh@actuaries.org.uk))

Other members: Sissons, Ian

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**Pricing Small Group PMI** - Planned

### **Membership**

Chairman: Evans, Stephen

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**Health Data** - On-going

### **Objectives**

Aim of project: To consider health data relevant to PMI.

Terms of reference: To work on data relevant to PMI in particular: Health data sources; Potential health data analysis for third party administrator; Keep abreast of developments on industry data (if any).

### **Progress to date**

Workshop at 2000 Healthcare Conference.

### **Membership**

Chairman: Plum, Robert ([robert.plumb@vectorrisk.com](mailto:robert.plumb@vectorrisk.com))

Other members: Fisher, Hamish; Levay, Edward; McGurk, Peter; McIntosh, Steve

---

## 10 UNIVERSITY RESEARCH CONTACTS

Details of actuarial research activities in the following universities can be obtained from the addresses given.

**Richard Verrall**

Department of Actuarial Science and Statistics  
City University  
Northampton Square  
London  
EC1V 0BH

[r.j.verrall@city.ac.uk](mailto:r.j.verrall@city.ac.uk)

**Howard Waters**

Department of Actuarial Mathematics and Statistics  
Heriot-Watt University  
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# for further information

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