



The Actuarial Profession
making financial sense of the future

Annual Research Report 2000

Published by the Faculty of Actuaries
and Institute of Actuaries

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1 LIST OF ALL RESEARCH GROUPS AND WORKING PARTIES ACTIVE IN 2000

FACULTY RESEARCH GROUPS

Contact: Ray Milne (tel: 0131 317 0693, e-mail: ray_milne@bankofscotland.co.uk)

On-going Research Groups

- Bonus and Valuation Research Group
- Health and Care Research Group
- International Research Group
- Investment Research Group
- Mortality Statistics Research Group
- Pensions Research Group

FINANCE AND INVESTMENT BOARD WORKING PARTIES

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

Planned Working Parties

- Applications of Equity Portfolio Management
- Applications of Institutional Investment Topics
- Applications of Stochastic Investment Models
- Indexation
- Mortgage Prepayment Risk

On-going Working Parties

- Applications of Bond Portfolio Management - On-going
- Applications of Defined Contribution Pension Scheme Strategy
- Applications of Derivatives
- Applications of Financial Theory in Investment Management
- Applications of Investment and Taxation
- Applications of Performance, Portfolio Risk and Return
- Investment Management Selection
- Quantitative Techniques
- Sterling Corporate Bond Index
- Value Measurement Steering Group

Completed Working Parties

- Applications of Investment Manager Style Analysis

GENERAL INSURANCE BOARD WORKING PARTIES

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

Planned Working Parties

- APH Update and Issues
- Calculating Premium Monitoring / Rate Change Indices
- European Weather Derivatives

General Insurance Investment Strategies
Measuring Customer Value
Professional Indemnity and DandO - Pricing and Current Issues
State of the Art Pricing

On-going Working Parties

Capital Allocation
Reinsurance Commutations
Stochastic Reserving Methods
Structured Settlements - Lessons for the UK from Overseas

Completed Working Parties

Assessing Financial Strength of an Insurer
Comparison of Technical Terms
Distribution Channels for 21st Century
Employers Liability Insurance
General Insurance and The Public Interest
Insurance, Games and Psychology
Motor Rating - Current Techniques and a Personal Injury Claims Analysis
Reinsurance to Close
Shareholder Value Measures
The Aviation and Space Insurance Market

Discontinued Working Parties

Assessing Causes of (Re) insurer Failure
Trends in Household Insurance

LIFE BOARD WORKING PARTIES

Contact: Paul Bristow (tel: 020 7632 2118, e-mail: paulb@actuaries.org.uk)

Planned Working Parties

Management of Closed Funds
Value at Risk
Virtual Life Offices

On-going Working Parties

Customer Value
Customers' Interests
Fair Valuation
Financial Condition Reports
Life Assurance Value Measurement
Life Office Taxation
Product Reviews
Regulatory Capital for Financial Services
Selection in the Annuity Market
Transparency of With-Profits Business
Use of Derivatives in Life Assurance

Completed Working Parties

- Capital Management
- Distribution of Financial Services
- Reserving for Expenses
- Resilience Reserves
- With Profit Bonds

PENSIONS BOARD WORKING PARTIES

Contact: Georgina Ivers (tel: 01865 268235, e-mail: georgini@actuaries.org.uk)

Planned Working Parties

- Investment Strategies for Money Purchase Schemes

On-going Working Parties

- Stochastic Pensions Valuations and the Assessment of Funding Risk

Completed Working Parties

- Income withdrawal
- MFR transfer values
- The effects of a prolonged period of low inflation and gilt returns

Discontinued Working Parties

- Non-insured money purchase schemes

SOCIAL POLICY BOARD WORKING PARTIES

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

Planned Working Parties

- Medical Advances

On-going Working Parties

- Pension Provision Taskforce
- Retirement Options Working Party

Completed Working Parties

- Equity Release Mechanism

HEALTH AND CARE COMMITTEE – Cross Border Group**Completed Working Parties**

- Guarantees
- Integration with NHS

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

- Health Data Charter

Measuring Health Systems
The 'Healthcare Management Actuary'
The NHS Plan
UK Vaccination Programme - Risk and Reward

HEALTH AND CARE COMMITTEE - IP/CI Group (leader: Sue Elliott)

Planned Working Parties

IP - Trends

On-going Working Parties

CI - Robustness of definition

IP - Internal Risk Factors

IP - Trends by Cause

Completed Working Parties

CI - Experience Analysis and Standard Tables

IP - Solvency of IP Portfolios

HEALTH AND CARE COMMITTEE - Long Term Care Group (leader: Ian Sissons)

Planned Working Parties

Projections

On-going Working Parties

Experience analysis

Reserving/Valuation

Completed Working Parties

Public/Private Issues

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

Completed Working Parties

Group PMI

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 Susanna Reece, CPD and Research Manager, 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 and others on research matters;
- to administer 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. 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 and undertaking of research.

2.3 Research Staff

The central focus of staff support for the profession's research activities is provided by the CPD and Research Manager, Susanna Reece, assisted by the CPD and Research Administrator, Judith Philpott and supported by four Staff Actuaries.

They are all part of the Chief Education Executive's (CEE) Department. The CPD and Research Manager is Secretary to the Research Steering Committee and her role 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.

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

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

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 research grants made from the Memorial Educational and Research Fund during 2000 are given in Section 3.

Since 1996 the Education and CPD Board, with the agreement of Institute Council, 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 £230,000 have been awarded since 1996 and details of these are set out in Section 3. It is hoped that it will be possible to make a similar level of funds available awards during the 2001/2002 Session. Further information can be obtained from Susanna Reece or Judith Philpott at Napier House.

3 RESEARCH GRANTS

3.1 Research Grants Awarded In 2000

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	10,000
General Insurance research working parties	General Insurance Board	2,000

Memorial Education and Research Fund (MERF)

The following prizes were awarded from the MERF at the General Insurance Conference in 2000:

- First Prize of £1000 to Sholom Feldblum for his paper 'Underwriting Cycles and Business Strategies',
- Second prize of £500 to Patrick Brockett et al for their paper 'Great (and not so great) Expectations: An Endogenous Economic Explication of Insurance Cycles and Liability Crises'.

3.2 Previous Grants Awarded Between 1996 and 1999

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.

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 research 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 research 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 six 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;

Ray Milne (tel: 0131 317 0693, e-mail: ray_milne@bankofscotland.co.uk).

Bonus and Valuation Research Group - On-going

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 by April 2001.

Progress to date

Terms of reference agreed, resource identified.

Membership

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

Other members: Ewing, Jim; Gracie, Stewart; Morrison, Douglas; Institute volunteers identified at Birmingham

Health and Care Research Group - On-going

Objectives

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

Expected outcome

A research paper for presentation at Faculty and possibly Institute sessional meetings.

Progress to date

None as group only just set up

Membership

Chairman: Smart, Fraser

Other members: McCarthy, Rod; Jack, Martin; Paton, Brian; Rear, Andy; Walker, Alistair

International Research Group - On-going

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.

Investment Research Group - On-going

Objectives

Aim of project: Contrasting behaviour of professional and individual investors.

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 2000. The possibility of a review article for The Actuary.

Progress to date

A review article was published in December 1999 edition of The Actuary. A paper 'Investor Sentiment and the Closed-End Fund puzzle' was presented to the Investment Conference, June 2000.

Membership

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

Other members: Adams, Andy; Bowie, David; Cresswell, Phil; Devlin, Frank; Macpherson, Roddy; Sandford, Chris

Mortality Statistics Research Group - On-going

Objectives

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: Macdonald, Angus

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

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.

Membership

Chairman: Fleming, Donald

Other members: Anderson, Douglas; Bell, Colin; Cairns, Andrew; Gourlay, Keith; Taylor, Ronnie

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).

Applications of Equity Portfolio Management - Planned

Membership

Chairman: Richardson, Mark

Other members: Ahluwalia, Manraj

Applications of Institutional Investment Topics - Planned

Membership

Chairman: Cutler, Hugh

Applications of Stochastic Investment Models - Planned

Expected outcome

Two papers, 'Autoregression without a free lunch' and 'Setting consistent assumptions for multinational asset models' to be presented at the Finance and Investment Conference 2001

Membership

Chairman: Smith, Andrew

Indexation - Planned

Membership

Chairman: Hitchin, Chris

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

Mortgage Prepayment Risk - Planned

Expected outcome

A paper, 'Models for Mortgage Prepayment Risk', Finance and Investment Conference 2001

Membership

Chairman: Perry, Simon

Applications of Bond Portfolio Management - On-going

Expected outcome

Paper 'The Sterling Corporate Bond Market and its future development' to be presented at the Finance and Investment Conference 2001

Progress to date

A paper 'The use of Yield Curves in Bond Portfolio Management' presented at the Investment Conference 1998

A paper 'The Impact of Swaps on the Bond Market' Presented at the Investment Conference 1999

Membership

Chairman: Mehta, Shyam

Other members: Booth, Philip; Dyer, David; Harlow, Peter; Rains, Peter

Applications of Defined Contribution Pension Scheme Strategy - On-going

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

Applications of Derivatives - On-going

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; Jelcic, Dan; Kemp, Malcolm; Ludvik, Peter; McLean, Derek; O'Sullivan, Nigel; Race, Patrick; Sandford, Chris

Applications of Financial Theory in Investment Management - On-going

Objectives

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

Expected outcome

A paper 'Pension fund investment - the effect of institutional investment on the UK economy' to be presented at the Finance and Investment Conference 2001

Progress to date

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.

Membership

Chairman: Exley, Jon

Other members: Armitage, Seth; van Bezooyen, Jeroen; Cairns, Andrew; Clarkson, Robert; Ludvik, Peter; Mehta, Shyam; Smith, Andrew; Speed, Cliff; de Varenue, Francis; Wilson, Ed

Applications of Investment and Taxation - On-going

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

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

Applications of Performance, Portfolio Risk and Return - On-going

Expected outcome

Paper 'The practicalities of Budgeting, Managing and Monitoring Active Risk for Pension Funds' to be presented at the Finance and Investment Conference 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

Membership

Chairman: Gardner, Daniel

Other members: Bowie, David; Brooks, Mike; Cumberworth, Martin; past members: Griffiths, Julie; Sandford, Chris; Hitchin, Chris; McIver, Malcolm

Investment Management Selection - On-going

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

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

Quantitative Techniques - On-going

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

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

Sterling Corporate Bond Index - On-going

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

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

Value Measurement Steering Group - On-going

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

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

Applications of Investment Manager Style Analysis - Completed 2000

Progress to date

Paper 'Investment Manager style analysis' at Investment Conference 2000.

Membership

Chairman: Kemp, Malcolm

Other members: Derbyshire, Gareth; Gill, Alasdair; Ludvik, Peter; McIver, Malcolm; Osborn-Barker, Tony; Tatham, Charles; Richardson, Mark; Wilson, Colin

6 GENERAL INSURANCE BOARD WORKING PARTIES

Next year's GIRO convention is joint with CAS and will be held in Glasgow on 3-6 October 2001. If you are interested in participating in one of the planned or on-going working parties, or have another topic to suggest, please contact Richard Winter (tel: 020 7334 6225, e-mail: richard.winter@prudential.co.uk)

APH Update and Issues - Planned

Membership

Chairman: Slater, David

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

Calculating Premium Monitoring / Rate Change Indices - Planned

Membership

Chairman: McConnell, Bill

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

European Weather Derivatives - Planned

Membership

Chairman: Sayers, Jeff

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

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

Measuring Customer Value - Planned

Membership

Chairman: Newton, Derek

Other members: Falconer, Dave; Jones, Stephen; Lovick, A C; McDonnell, Sarah; Plowman, Ed; Robinson, Esmee; Seth, Anup; Theaker, David

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

Membership

Chairman: Johnson, Henry

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

State of the Art Pricing - Planned

Membership

Chairman: Coughlan, Dave

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

Capital Allocation - On-going

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

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

Reinsurance Commutations - On-going

Progress to date

Sessional paper submitted for review

Membership

Chairman: Joseph, Bryan

Other members: Collins, Jon; Gedella, Brian; Jarman, Lucy; Johnson, Henry; Lyons, Graham; Piper, Jonathan; Shah, Shreyas; Wells, Gary; Wilkinson, Mark

Stochastic Reserving Methods - On-going

Progress to date

Initial presentation to GIRO 2000

Membership

Chairman: Fagnoni, Hervé

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

Structured Settlements - Lessons for the UK from Overseas - On-going

Objectives

Aim of project: Look at future of structured settlements in the UK, and role of actuaries within them

Terms of reference: The paper will cover the following subject areas:

Comments on the Law Commission Report on structured settlements

Outline and comment on the basis of the Ogden recommendations and the Institute of

Actuaries position statement recommending lower interest rates

Consideration of compensation systems in a number of other countries including Australia, France, USA, Ireland, Netherlands, Germany and Italy

The application of structured settlements in the UK to date, the possible future application and development in the context of developments overseas. Examination of the limitations of structured settlements.

Comments on indemnity – the spectrum from what it could ideally mean - to how the current systems could be developed to move toward the ideal – to practical proposals.

Comments on the philosophy underlying the current UK compensation system

Specification of heads of damage for which structured settlements could be made mandatory or at the discretion of judges. The conclusions of Law Commission report should be examined in this context.

Specification of a possible system under which structured settlements could form an integral part of the compensation system. Consideration of the issue of whether government intervention is required to insure the risks under a more comprehensive compensation system and possible private sector solutions. Under more comprehensive compensation arrangements – is pooling (at insurer level) necessary?

Implications of recommendations for all vested interests (plaintiffs, lawyers, insurers, insureds).

What role can actuaries play?

Progress to date

Initial paper presented to GIRO 2000

Membership

Chairman: Charles, John

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

Assessing Financial Strength of an Insurer - Completed 2000

Objectives

Aim of project: Examine reasoning and methods used to analyse the strength of insurers from a variety of viewpoints

Terms of reference: To examine the reasoning and methods used to analyse the strength (including both financial and non-financial aspects) of insurers from different viewpoints, including those of:

1) Providers of "Strength" ratings or criteria: Regulators (UK and overseas), Debt/Financial Strength Rating Agencies, Equity analysts/Investors, Actuaries (internal and consultancy).

2) Users of these ratings: Brokers, (Retail) Policyholders, Insurance Companies (in selecting re/co-insurers), Insurance Company Management.

From each viewpoint, we will attempt to explain the concepts of strength used, describe the factors considered to be important, and to look at the historical suitability/relevance of such factors and concepts where possible.

Progress to date

Paper presented to GIRO 2000

Membership

Chairman: Harris, Simon

Other members: Angell, Kate; Archer-Lock, Phil; Moss, Gaynore; Patfield, Steve; Sayers, Jeff

Comparison of Technical Terms - Completed 2000

Objectives

Terms of reference: Produce a comparison of general insurance terminology in the UK and US.

Expected outcome

Paper for GIRO.

Progress to date

Interim reported to GIRO 1999.

Membership

Chairman: Armstrong, Kevin

Distribution Channels for 21st Century - Completed 2000

Objectives

Aim of project: Consider implications on actuarial work of emerging distribution channels

Terms of reference: To raise awareness of issues affecting distribution and inform/educate

To develop a conceptual framework to describe changes taking place – and make sure its robust enough to survive imaginable changes

To consider the “impact” on expense ratios (and prices)

To identify opportunities for actuarial analyses and implications for “typical” actuarial work (eg premium rating, reserving, M&A).

To prepare a paper and/or other stimulus material (possibly a game/interactive session) for GIRO 2000

Progress to date

Paper presented to GIRO 2000

Membership

Chairman: Tripp, Michael

Other members: Akinlajce, Ade; Biswas, Shamit; Cheeseman, Dick; Eves, Michael;

Patfield, Steve; Westcott, David

Employers Liability Insurance - Completed 2000

Objectives

Aim of project: Review of market and highlight potential issues

Terms of reference:

1. Legal and Contractual Framework: Intro/history, Legal requirements, EL -v- workers comp – what constitutes liability?, EU/US/Australian position, Cover/wordings, Contract redlining, Losses occurring.

2. Market: Size/scope/change in industrial base, Products insurance comp -v- self-funding, Product features including pooling/rehabilitation.

3. Underwriting and Rating: Underwriting cycle, Methodologies (practical and theoretical), Rating factors/experience rating, Lower investment returns (Woolf impact), NW to review commercial pricing paper.

4. Claims: Structured settlement, Percentage to Court – stats – what percentage of cases actually go to Court?, Analysis of HSE stats, Types of claim, Latent claims, Tracing insurers/multiple insurers/apportionment, Industry agreements?, NI effect/geographical effects?

5. Reserving: Typical settlement pattern, Injury -v- disease (description of diseases), Ongoing old disease -v- new emerging -v- “finished” (e.g. asbestosis), Average cost/distributions, Recent Court awards, Stress.

6. Reinsurance: The effect of low retention levels current in the 50's and 60's, Change in cover unlimited - £10m, XS market, Piper Alpha.

7. Current Issues: NHS pooling, Code of practice (record-keeping for 60 years etc.), Turnbull, LCR, Put the rates up!!

8. Potential Issues: ART/risk management/product innovation, US developments coming to the UK?, Future latent claims (latex allergy).

9. Next Steps: EU market?

Progress to date

Paper presented at GIRO 2000

Membership

Chairman: Gibbs, Jefferson Williams, Nathan

Other members: Barton, Catherine; Callan, Gary; Slater, David; Smith, Mike; Whelan, Owen

General Insurance & The Public Interest - Completed 2000

Objectives

Aim of project: To stimulate thoughts on the issue of Public Interest.

Terms of reference:

1. To follow-up on research by the preceding working party, in particular in respect of those key issues highlighted in the July 1999 report: Product "mis-selling" (including the implication that certain insurance is compulsory when in fact it isn't) (Michael Tripp and Richard Winter), Compulsory insurance (not covered much in the previous report) (Peter Hinton and Julian Leigh), Availability of insurance (both absolute and at an affordable price) (Martin Cross and Katie Carmona), Premium rating by propensity to shop around (this could usefully be extended into consideration of which premium rating factors are and which are not considered to be acceptable) (Peter Hinton and Katie Carmona), The role and remuneration of intermediaries (Ian Cross and Keith Taylor), Claims management (this can encompass the role of the insurance industry and its members in promoting good risk management practice, as well as the management of proposed industry changes - this could be a paper in itself but we will try to restrict ourselves to the Public Interest aspects and see how far we can get) (Martin Cross and Keith Taylor), Captives and ART (Martin Cross and Keith Taylor), Public relations. (Kathy Byrne and Richard Winter)
2. To consider public interest issues as they apply specifically to markets other than personal lines: Commercial lines (especially small businesses) (Derek Newton), Reinsurance (Peter Hinton and Ian Clark), Lloyd's (Derek Newton).
3. To clarify the due process in respect of the preparation of positions statements by the profession and then to assist in the drafting of position statements on public interest related topics, as identified by the General Insurance Board. (We believe that, through its research and discussions, the working party can make a useful contribution to the formulation of the profession's public position on such issues and would be happy also to assist in the articulation of that position. At this stage we are not wholly clear what the due process is - we would like to clarify that as soon as possible so that we can determine how best to contribute.) Derek Newton will undertake the clarification, various members (starting with Messrs Taylor, Tripp and Hinton) will undertake initial drafting - for circulation and comment amongst the rest of the working party - as and when required by the GIPR Committee.

Expected outcome

Final report to GIRO

Progress to date

Final report to GIRO 2000

Membership

Chairman: Newton, Derek

Other members: Byrne, Kathy; Carmona, Katie; Clark, Ian; Cross, Martin; Hinton, Peter; Leigh, Julian; Silverman, Tony; Taylor, Keith; Tripp, Michael

Insurance, Games and Psychology - Completed 2000

Progress to date

Game for delegates and paper presented to GIRO 2000

Membership

Chairman: Lowe, Julian

Other members: Carpenter, Nigel; Dolan, Conor; Ross, Nick; Wilson, John

Motor Rating - Current Techniques and a Personal Injury Claims Analysis - Completed 2000

Objectives

Aim of project: Investigate ways of modelling bodily injury experience

Terms of reference: Investigate a number of new statistical techniques

Investigate different methods of modelling personal injury claims experience, preferable by pooling appropriate data, but otherwise by companies trying out methods individually (if personal injury data is available to be pooled) carry out a general analysis of the effect of factors upon personal injury claims experience.

(if possible) pool retention data, link it to appropriate broker quotation data, and analyse to determine the effect of (and best measures of) change in premium and competitiveness of premium

Write an extensive "discussion section", briefly reviewing the state of the market, setting out in detail current pricing practice, and briefly pontificating on possible future changes which will affect pricing.

Progress to date

Workshop presented at GIRO 2000; due to data confidentiality issues no paper will be produced

Membership

Chairman: Anderson, Duncan

Other members: Howard, Sheree; Jones, Stephen; Kneller, Simon; Massey, Roger; Regan, Natasha; Sausse, Alan; Scott, Jo; Tanser, James

Reinsurance to Close - Completed 2000

Objectives

Aim of project: Explore theoretical and practical aspects of the introduction of actuarial sign-off of the RITC

Terms of reference: The Reinsurance to Close working party will aim to build on the work in the Institute sessional paper entitled "The Lloyd's Reinsurance to Close Process". We will explore the theoretical and practical aspects of the introduction of actuarial sign-off of the RITC.

Specifically, we will aim to:

Explore the impact of the introduction of a two-sided actuarial opinion on the reasonableness of the "RITC reserves". In particular, we will consider the meaning of "reasonable" in this context, and explore the extent to which the introduction of such a system would lead to a release of held reserves.

Construct a simplified model to estimate the "actuarial RITC" of a syndicate. In particular, we will consider the extent to which the need for a risk margin and the effect of discounting off-set each other.

Consider the implications of the introduction of an actuarial sign-off of the RITC for the various stakeholders in Lloyd's.

Consider how the introduction of an actuarial sign-off of the RITC would affect the process for setting the RITC.

Progress to date

Paper published in GIRO 2000 pack and presented

Membership

Chairman: Sheaf, Simon

Other members: Bradley, Helen; Couper, Andrew; Finley, Nigel; Graham, Mark; Harding, Justyn; Shah, Shreyas; Vazquez, Jose

Shareholder Value Measures - Completed 2000

Objectives

Aim of project: What measures are applicable to an insurance company; compare with financial and other institutions

Terms of reference: To provide an insight into Shareholder Value Measures in a Non-Life Insurance Company. The working party will cover: An explanation of Shareholder Value; Possible measures for measuring shareholder value, both internal and external to a Non-Life Insurer; A comparison of shareholder value measures in use between insurers, banks and other organisation.

Progress to date

Paper presented at GIRO 2000

Membership

Chairman: Rodriguez, Richard

Other members: Bland, Richard; Fulcher, Graham; Kelsey, Richard; Laird, Sean; Shaw, Richard

The Aviation and Space Insurance Market - Completed 2000

Objectives

Aim of project: Review of aviation market to highlight issues

Progress to date

Paper presented at GIRO 2000

Membership

Chairman: Harding, Justyn

Other members: Hart, David; Tippin, Philip; Widdows, James

Assessing Causes of (Re) insurer Failure - Discontinued 2000

Membership

Chairman: Johnson, Henry

Other members: Collinson, Rob; Ford, Alex; Ross, Julian

Trends in Household Insurance - Discontinued 2000

Objectives

Terms of reference: "setting the scene" - an introduction; trends in use of different exposure methods and rating factors in household insurance; convergence - or lack of - in the market's rating structures, especially with respect to postcode, trends in reserving and case estimation, especially for subsidence Change in claims management, cost control, etc.; an analysis of expense levels allocated to household business and how they vary by distribution channel/company; the insurance cycle as applied to household business; claims equalisation reserves, use of for household business; trends in product and/or distribution methods, possible future developments; something about e-commerce - possibly a subset of the above); correlations between claims experience and external factors (e.g. housing market, economic activity, weather, soil moisture deficit, etc.); reinsurance - who is buying what, at what level, etc.; "and finally..." - unusual or amusing anecdotes relating to household claims, a bit of light relief (joint effort here, everyone asked to rack their brains).

Membership

Chairman: Sausse, Alan

Other members: Black, Simon; Fuller, Derek; Goldby, Andrew; Pape, Kim; Plowman, Edward; Seago, Wendy

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;
Paul Bristow (tel: 020 7632 2118, e-mail: paulb@actuaries.org.uk)

Management of Closed Funds - Planned

Expected outcome

Sessional meeting paper in 2001

Membership

Chairman: Moore, P

Value at Risk - Planned

Membership

Chairman: Thomas, Perry

Virtual Life Offices - Planned

Membership

Chairman: Granville, Mike

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

Membership

Chairman: Mynott, Dave (dmynott@cc.ernsty.co.uk)

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

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 "policyholders' reasonable expectations" (PRE) as set out in the Insurance Companies Act by that of "customers' interests" (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

Presentation planned to conference on 9 March 2001. Brief report followed by watching brief over developments.

Progress to date

Report to Life Convention, 13 November 2000

Membership

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

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

Fair Valuation - On-going

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.

Expected outcome

Input to international discussions of IAS on insurance accounting.

Progress to date

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

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

Financial Condition Reports - On-going**Progress to date**

Session at 2000 Life Convention

Membership

Chairman: Carr, Peter

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

Life Assurance Value Measurement - On-going**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

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: To keep abreast of new developments, to analyse their impact, to inform the profession as appropriate and 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 Actuary magazine.

Progress to date

Session at 2000 Life Convention; three papers prepared for the Actuary, two papers in progress; first regular column being drafted

Membership

Chairman: Allan, Graham (Graham.allan@zurich.com)

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

Product Reviews - On-going

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.

Membership

Chairman: Sarjant, Steve (steve.sarjant@eu.watsonwyatt.com)

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

Regulatory Capital for Financial Services - On-going

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.

Expected outcome

SIAS paper during 2001

Progress to date

Session at 2000 Life Convention

Membership

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

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

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 or SIAS paper

Progress to date

Session at 2000 Life Convention

Membership

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

Other members: Burgess, Stephen; Foot, Nigel; Jackson, Lawrence; O'Regan, Kevin; Summerfield, Andrew; Willetts, Richard; Yates, Mel

Transparency Of With-Profits Business - On-going

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.

Expected outcome

Report to be presented to Sessional Meetings in February, March and May 2001.

Progress to date

Monthly meetings from spring 2000; presentation to 2000 Life Convention.

Membership

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

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

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.

Progress to date

Session at 2000 Life Convention

Membership

Chairman: Coleman, Paul (Paul.coleman@barcap.com)

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

Capital Management - Completed 2000**Objectives**

Aim of project: A report to 'demystifying capital management in the life assurance industry'

Terms of reference: To investigate current issues relating to Capital Management in UK Life Offices and to analyse the main capital management products available in the markets

Expected outcome

Report for Life Convention in Autumn 2000.

Progress to date

Paper presented to SIAS on 10 October 2000; session at 2000 Life Convention; presentation to Faculty of Actuaries' Student Society on 9 January 2001 and to Society of Actuaries in Ireland on 30 January 2001. Possible presentations to various regional societies.

Membership

Chairman: Gemmell, John

Other members: McAusland, Graeme; Shah, Himesh; Silby, Nigel

Distribution of Financial Services - Completed 2000**Objectives**

Aim of project: To generate a better understanding of distribution under alternative likely future scenarios.

Terms of reference: To collect and evaluate information on different methods of distributing retail financial services products both in the UK and overseas, to determine their

effectiveness (cost and penetration) and to consider possible changes in the future.

Expected outcome

Report for discussion at a convention or a seminar.

Progress to date

Report produced; session at 2000 Life Convention.

Membership

Chairman: Iqbal, Mohammad (Icki.Iqbal@bacon-woodrow.com)

Other members: Graham, David; Shallis, Paul; Simcox, Raine

Reserving for Expenses - Completed 2000

Objectives

Terms of reference: To consider whether expenses should be covered at individual policy level or in aggregate, how expense reserves should be calculated in new companies with minimal in force business and how expenses should be calculated in closed companies or companies with declining portfolios of IB.

Progress to date

Life Board Supervision Committee considering draft report.

Membership

Chairman: Smaller, Locksley

Other members: Collis, Paul; Dunn, Jeremy; Kelly, Steven; Kipling, Michael; Marshall, James; Stocks, John

Resilience Reserves - Completed 2000

Objectives

Aim of project: To examine the current approach within the UK regulatory framework of Resilience Reserve requirements.

Terms of reference: To consider whether the Government Actuary should be asked to revise the standard resilience test as set out in his letter to Appointed Actuaries dated 30 September 1993 and amplified in his letter to Appointed Actuaries dated 29 October 1996, and if so for what reasons.

Progress to date

Presentation to Life Convention, November 1999; further session at 2000 Life Convention, November 2000; with Life Supervision Committee, working party considering finalisation of report.

Membership

Chairman: Urmston, Mike

Other members: Black, Alastair; Chadburn, Robert; Chamberlain, Andrew; Frankland, Ralph; King, Bob; Orton, Tim; Sheard, Mick

With Profit Bonds - Completed 2000

Objectives

Aim of project: To research the with-profit bond market and report on the products and marketing with a particular focus on PRE.

Terms of reference: To review current practice, particularly in relation to bonus guarantees

and the application of Market Value Adjustments (MVAs) and to identify whether policyholders' expectations are being managed appropriately.

Expected outcome

Final report in presented in spring 2000.

Progress to date

Session held at Life Convention in November 1999, at which findings were presented. Final report in produced in April 2000.

Membership

Chairman: Saunders, Adrian (Adrian.Saunders@clericalmedical.co.uk)

Other members: Clarkson, Alastair; Dickson, John; Fogg, Kevan; Gohil, Harish; Palmer, Martin; Sanders, Andy; Sepe, Rocco; Thornton, Craig

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)

Investment Strategies for Money Purchase Schemes - Planned

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.

Progress to date

A Chairman is being sought.

Membership

Chairman: To be advised

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.

Membership

Chairman: Haberman, Steve

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

Income withdrawal - Completed 2000

Objectives

Terms of reference: To consider the following issues:

The need for income withdrawal, Mortality issues, Investment issues, Scope for income withdrawal concept, Use of income withdrawal in long term care, Education, CIMP's.

Expected outcome

Overall view of the Income withdrawal market, its effect on the Customers, the Advisers and the Providers.

Detailed study of certain Technical aspects of Income Withdrawal e.g. Investment Profile, Mortality, Expenses, Critical Yield.

Customer issues e.g. Appropriate Guides, for the Public, Advisers and Providers.

Wider Issues for the Economy.

Membership

Chairman: Weeder, Jeff

Other members: Cook, John; Mellis, Colin; Moloney, Michael; Roberts, Alan; O'Sullivan, Patrick; Stockbridge, Alan; Turner, Adrian

MFR transfer values - Completed 2000

Objectives

Terms of reference:

1) The Working Party will review the current practice regarding the implementation of Guidance Note GN11. A questionnaire will be circulated within the profession, and the Working Party will analyse the results with a view to:

Establishing the range of transfer values quoted through current interpretation of the guidance notes.

Analyse the returns to establish the reasons behind the variations.

If considered appropriate, the Working Party will suggest amendments to GN11.

2) When the possible changes to the MFR basis are known, the Working Party is to analyse and assess the likely implications of those changes on transfer values. It will consider whether changes to GN11 are desirable.

Expected outcome

Summary of results of survey

Progress to date

Paper presented to Pensions Technical Support and Research Committee and Pensions Board agreed that there was no need to disseminate the results.

Membership

Chairman: Moores, Philip

Other members: Anderson, Douglas; Bryans, Andrew; Estcourt, Paul; Evans, Huw; Shah, Rajen

The effects of a prolonged period of low inflation and gilt returns - Completed 2000

Objectives

Terms of reference: To consider the implications for pension (both DB and DC) arrangements of a prolonged period of low inflation and low interest rates, including implications for solvency, funding, investment strategy, membership.

To recommend what steps the profession should take in response to these implications in relation to individuals with pension arrangements, Scheme sponsors, Members of the profession, Regulators and the media.

Expected outcome

Presented as a sessional meeting.

Membership

Chairman: Meredith, Paul

Other members: Harrison, Jill; Horsfall, Nick; Kneller, Ken; Knight, James; Morgan, Beverly; Murphy, Richard

Non-insured money purchase schemes - Discontinued 2000

Objectives

Terms of reference: To determine the number, size and benefits provided by non-insured money purchase occupational pension schemes in the UK, whether or not there is any element of discretion exercised in determining the amounts of members' benefits and, if so, whether actuarial advice is obtained.

To make any recommendations thought appropriate about actuarial involvement, actuarial guidance and/or regulation in relation to such schemes.

Expected outcome

Paper for consideration by the Pensions Board.

Membership

Chairman: Froggatt, Peter

Other members: Chadwick, Robert; Bannister, Keith; Hill, Jeremy; Evans, John; Brennan, Neil; Tatham, Charles; Tompkins, Peter

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: martinh@actuaries.org.uk).

Medical Advances - Planned

Progress to date

Meeting to discuss aims, objectives etc, planned for 17 Jan 2001

Pension Provision Taskforce - On-going

Expected outcome

Further seminars will be held to present papers on Unfunded pensions in Europe and new ways of designing annuities.

Progress to date

Five papers were presented at a conference at the Institute in December. They address the size of the state pension, means testing and the age of retirement.

Membership

Chairman: Lewis, David

Other members: Brown, Harvie; Cooper, Deborah; Keogh, Tim; Smith, Aidan

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 to be held on 18.01.2001

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

Equity Release Mechanism - Completed 2000

Objectives

Aim of project: To identify the barriers to the use of ERMs and recommend ways to overcome them.

Terms of reference: To discover the awareness of Equity Release Mechanisms (ERMs) among the elderly population, their ability to understand the mechanisms, their views on the trustfulness of financial service offices and the necessity for Consumer Protection.

To review all existing types of ERMs, home improvement and other similar schemes and to gauge the effectiveness, risks and value for money to the customer, taking account of the effect on social security and means tested benefits.

To consider types of organisations, whether commercial, not for profit, friendly society, charity, local authority or state supported body that could provide the service and whether a combination of organisations is necessary.

To explore the needs of long-term institutional investors (eg pension funds, life offices and others) and whether they would find an investment linked directly or indirectly to domestic housing to give an adequate return capital and an acceptable return on capital at an acceptable degree of risk. What restrictions are imposed by legislation reserve requirements and how might a lack of marketability reduce the attractiveness of this type of investment.

To consider mechanisms so that individual domestic properties (or other funding mechanisms based on house prices) can be grouped, organised and securitised into bulk products attractive to institutional investors.

Expected outcome

Paper produced will be launched at Staple Inn on 24 January 2001

Progress to date

Paper by end 2000

Membership

Chairman: Le Grys, Des

Other members: multi-disciplinary group - refer to Peter Dingwall

Health and Care Committee - Cross Border Group

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

Guarantees - Completed 2000

Objectives

Aim of project: To consider the feasibility of models to evaluate the risk associated with providing long term guarantees

Terms of reference: Healthcare insurances which are, or can be, written on a long term basis are likely to display significant volatility in claims costs for a number of reasons. It is recognised that data available to quantify this volatility is sparse, nevertheless there is a clear need for insurers and others to gain a better understanding of the financial effects of the provision of long term guarantees.

Further models are required to evaluate the different risks involved and what a fair price for these risks should be. The working party should consider the feasibility of such models, with reference to:

Extending the model to Long Term Care products and understand the inherent differences in

rate guarantees for such products. The effect of apparently reviewable rates and how they differ fully guaranteed rates. The effect of diversification on reserves and premiums required to support guarantees. The effect of investment volatility on reserves and premiums required to support guarantees.

Progress to date

Paper and presentation at 2000 Healthcare Conference

Membership

Chairman: Paton, Brian

Other members: Collier, Gary; Northover, Carl

Integration with NHS - Completed 2000

Objectives

Aim of project: To investigate the actuarial issues associated with integrating insurance solutions with the NHS.

Terms of reference: Draw on previous work by Ian Moran and Geoff Brown on international comparisons. Put the profession in a position to comment on potential political developments.

Progress to date

Workshop at 2000 Healthcare Conference

Membership

Chairman: Coss, John

Other members: Bhunnoo, Shafique; Dreksler, Susan; Evans, Stephen; Levay, Edward; Sissons, Ian

Health and Care Committee - Health Services Group

Leader: John Coss

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

Health Data Charter - Planned

Measuring Health Systems - Planned

The 'Healthcare Management Actuary' - Planned

The NHS Plan - Planned

UK Vaccination Programme - Risk and Reward - Planned

Health and Care Committee - IP/CI Group

Leader: Sue Elliott

Contact: Martin Hewitt (tel: 020 7632 2185, e-mail: martin.h@actuaries.org.uk).

IP - Trends - Planned

Membership

Chairman: Robjohns, Neil

CI - 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

Workshop at 2000 Healthcare Conference

Membership

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

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

IP - 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)

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

IP - 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

Data requested from CMIB.

Membership

Chairman: Wilkie, David

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

CI - Experience Analysis and Standard Tables - Completed 2000**Objectives**

Aim of project: To report on the claims experience analysis and to develop a 'box table' for benchmarking.

Progress to date

Paper presented at SIAS 14 March 2000 and Workshop at 2000 Healthcare Conference

Membership

Chairman: Dinani, Azim

Other members: Grimshaw, Dave; Robjohns, Neil; Somerville, Stephen; Spry, Alasdair; Staffurth, Jerry

IP - Solvency of IP Portfolios - Completed 2000**Objectives**

Aim of project: To investigate the insolvency risk of insurers with IP liabilities, using a stochastic simulation approach.

Expected outcome

To produce a paper for a suitable journal (e.g. BAJ).

Progress to date

Interim results presented at Health and Care Conference 1999.

Presentation at ASTIN 2000. Speakers Corner at 2000 Healthcare Conference.

Membership

Chairman: Rickayzen, Ben

Other members: Butt, Zoltan; Chadman, Robert (to 15 March 2000); Haberman, Steven

Health and Care Committee - Long Term Care Group

Leader: Ian Sissons

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

Projections - Planned**Membership**

Chairman: Rickaysen, Ben (b.d.rickaysen@city.ac.uk)

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

Experience analysis - On-going**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.wmmercer.com)

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

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

Research in progress. Presentation at 2000 Healthcare Conference.

Membership

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

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

Public/Private Issues - Completed 2000

Objectives

Aim of project: To provide independent and objective input into the government's investigation on how LTCI products could be made attractive to a wider audience.

Progress to date

Workshop at 2000 H&C Conference

Membership

Chairman: Gulland, David (david.gulland@bacon-woodrow.com)

Other members: Bussell, Brian; Cornall, Monica; Le Grys, Des

Health and Care Committee - Multi-Disciplinary Group

Contact: Martin Hewitt (tel: 020 7632 2185, e-mail: martin.h@actuaries.org.uk).

Healthcare - related employee benefits - Planned

Health and Care Committee - PMI Group

Leader: Neil Hilary

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

Health Inflation Index - Planned

Membership

Chairman: Hilary, Neil

Other members: Evans, Stephen; Levay, Ed; Sissons, Ian

Pricing Small Group PMI - Planned

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: Alexander, David (until August 2000)

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

Group PMI - Completed 2000

Objectives

Terms of reference: Provide some technical actuarial input to the price of Group PMI and other actuarial issues relating to Group PMI eg: Integrated Health Care; Credibility; Managed Care; Possible survey of current pricing practice.

Progress to date

Workshop at 2000 Healthcare Conference

Membership

Chairman: Alexander, David

Other members: Brooke Taylor, Tony; Cox, Tony; Evans, Rhys; Hilary, Neil; Shah, Shrootin

10 UNIVERSITY RESEARCH CONTACTS

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

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