GRIP Update
Duncan Anderson
GIRO 2007

GRIP 2005 - 2007
- Born 2005
- Consultation draft Sep 2006
- Report 12 January 2007
- Special GI Board meeting March 2007
- Sessional paper May 2007
- Now disbanded
- GI Board & individual members of GRIP are pushing forward recommendations through existing and new Institute/Faculty groups

Consultation & communication
UK
- GIRO 2005
- CIGI 2006
- GIRO 2006
- CIGI 2007
- Sessional Meeting 2007

International
- USA - CAS Seminar on Ratemaking, March 2007
- South Africa - ASSA Short Term Conference, June 2007
- Japan - IAJ meeting, November 2007
- Australia - IAA Pricing Seminar November 2007
GRIP - Key Recommendations

- Role
- Methods
- Education
- CPD
- Guidance

GI Board debate the desired role the Profession should play in evolution of GI pricing

- The Profession should debate and agree how to balance need for strong governance with desire for actuaries to hold management positions in value-adding pricing functions

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Undertake research & development in:

- Integration with ICA models, Expense loadings, Variable capital loads, Catastrophe models, Implementation and delivery systems, Market prices of insurance liabilities, Link with reserving, Effect of climate change, Pricing for latent claims, Industry benchmarks / market information, Game theory, Demand modelling, Price optimisation

- Establish a pricing wiki
- setting out good practice (cf best practice)
- "Premium Rating Manual"
- International collaboration

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GIRO pricing working parties 07/08

- Integrating pricing with ICA models
  - Chairman: JB Crozet
- Variable capital loads in pricing
  - Chairman: Martin Cairns
  - Justin Skinner
- Demand and elasticity modelling
  - Chairman: James Tanser

GIRO pricing working parties 07/08

- Implementation and delivery systems in pricing
- Benchmarks / market information (non-personal lines)
- Catastrophe models in pricing
- Using pricing models within reserving
- Price optimisation
- Expense allocation in pricing
- Pricing for latent claims
- Market prices of insurance liabilities
- Game theory pricing

GI Pricing Wiki

- New group established
  - Karl Murphy (Chairman)
  - Tony Lovick
  - James Tanser
  - Will Forster
  - Gary Callan
  - Martin Cross

- Terms of reference:
  - to establish a pricing methods wiki as recommended in the GRIP paper
  - to consider where to host the wiki
  - to populate an initial wiki
  - to determine rules for access for editing
  - to publicise the existence of the wiki
  - to liaise with other interested bodies (such as the CAS and IAA) to encourage a broader involvement
  - to monitor content, to encourage contributions in under-performing areas and to moderate any disputes
GI Pricing Wiki

- Hosting software reviewed
- Prototype site established independently
- Intend to move to Institute systems as soon as practical
- Formal international launch will then follow
- In the meantime, ...

www.ratemaking.org
Further details on distance-based smoothing can be found in Dutilleul (1993) and Li and Wu (1998) and in Anderson (1999).

Adaptively based smoothing

Distance-based smoothing incorporates information about locally neighboring locations. Each location value is influenced by its local neighborhood, with each value being weighted by its distance. The weights are determined by a kernel function, which assigns higher weights to closer locations.

As the smoothing method relies on the kernel function, location values of each other natural or artificial boundaries can be affected in the resulting map.

Location values for both smaller and larger areas, or as adaptively based smoothing can sometimes handle urban and rural differences more adaptably, for non-relation random parts.

Further details can be found in Dutilleul and Wu (1998).

Degree of smoothing

Capital allocation and capital charges references


GRI:

GRI, established by the International Executive Council of the GRI in 2004, is a non-profit organization that promotes sustainable development in the financial sector. The GRI framework is designed to help companies report on their sustainability performance in a comprehensive and comparable manner.

1. Scope
   - The scope of this report is the GRI framework, which covers the following areas:
     - Social responsibility
     - Environmental performance
     - Economic performance

2. Methodology
   - The methodology used in this report includes:
     - Quantitative data collection through surveys and questionnaires
     - Qualitative data collection through interviews and workshops

3. Reporting guidelines
   - The GRI framework includes guidelines for all three areas of sustainability:
     - Social
     - Environmental
     - Economic

4. Key findings
   - The key findings of this report include:
     - Increased awareness of sustainability issues among stakeholders
     - Improved reporting and transparency
     - Enhanced stakeholder engagement

Any queries concerning the GRI report should be addressed to the GRI Secretariat at info@thegri.org.
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- GI element of examination syllabus be enhanced to provide more detail on:
  - pricing basics
  - policy terminology
  - insurance products
  - exposure measures
  - experience rating
  - trends
  - profit, expense, risk and catastrophe loads
  - GLM
  - demand modelling
  - price optimisation
  - understanding rating factors
  - individual risk rating
  - excess and deductible rating
  - reinsurance rating
  - catastrophe modelling
  - medical malpractice and professional liability
  - use of ISO / NCCI information

Syllabus re-write

- GIECPD Committee driving forward re-write of GI education material
- Majority of GRIP's recommendations on course to being included
- Target date for revised exams April 2009
GRIP - Key Recommendations

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- Introduce one day annual UK pricing seminar from 2008
- Profession to consider
  - partnering with a third party training company to develop training material relating to communication and management skills
  - extending professionalism course to cover non-technical skills

One Day Pricing Seminar

- Friday 13 June 2008
- Royal College of Physicians
- ~20 speakers already
- Personal lines, commercial lines, London Market
- Mostly concurrent workshops

Proposed Communication Course

- Two day (assessed) residential communications course as part of exam syllabus
- Specialist external trainer in communications will be used as necessary to develop the programme and assist with running as required
- First courses Spring 2009
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- Profession debate with BAS the merits of adopting the IAA "two hat" approach (even though this is wider than pricing and even GI)
- Information and Assistance Notes (IANs) should be issued to help pricing actuaries interpret GN12 and GN50

Professional Guidance

- Two hat point communicated to BAS
  - informally
  - formally in Profession’s July response to BAS’s consultation paper “Towards a Conceptual Framework”
- Issues around use of GN12 et al (including IANs) being led by GI Professional Standards Committee
  - workshop C10
  - Peter Copeman

www.actuaries.org.uk/grip
Next steps…

- Sign up for a pricing working party today
- Feed back pricing issues on professional guidance to GI PSC / Peter Copeman
- Visit and add sign up to www.ratemaking.org
- Come to the pricing seminar on 13 June 2007!

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