

GIRO conference and exhibition 2010 James Tanser and John Lewandowski

Ratemaking Survey Working Party

Initial results

12-15 October 2010

Agenda

- Purpose
- Survey
- Response rate
- Selected results

Purpose

- Proposed in GRIP paper
- Understand what current practice is
- Cover all aspects of pricing
- Cover as much of the world as possible
- Compare responses by region
- Report back to the professions

Agenda

- Purpose
- **Survey**
- Response rate
- Selected results

Survey

Starting point

- UK, US and Australian working parties
- Starting with Reserving questions
- Three separate sets of questions
- Three alternate interpretations of scope
- Three very different time zones

Survey Process

- Each group came up with questions, and reviewed other teams questions
- Chairs had discussions to agree:
 - Common global questions
 - Region specific questions
- Due to other commitments, final survey was US/UK
 - Separate Australian survey was also ran but not included here

Survey

Final version

- Bigger than expected
 - 34 Common Questions
 - 11 US questions
 - 14 UK questions
- Went live early July until mid-August

Agenda

- Purpose
- Survey
- Response rate
- Selected results

Response rate

- Invitations sent out to:
 - CAS mailing list
 - GIRO mailing list
 - LMAG
 - CAE
 - ...

Response rate

- 1295 responses to first question
 - 1002 from the US
 - 135 from the UK
 - 46 from Europe
 - 112 from Rest of the World
- 566 (44%) finished the survey
 - 416 (42%) US
 - 64 (47%) UK
 - 34 (74%) EU
 - 52 (46%) ROW

Agenda

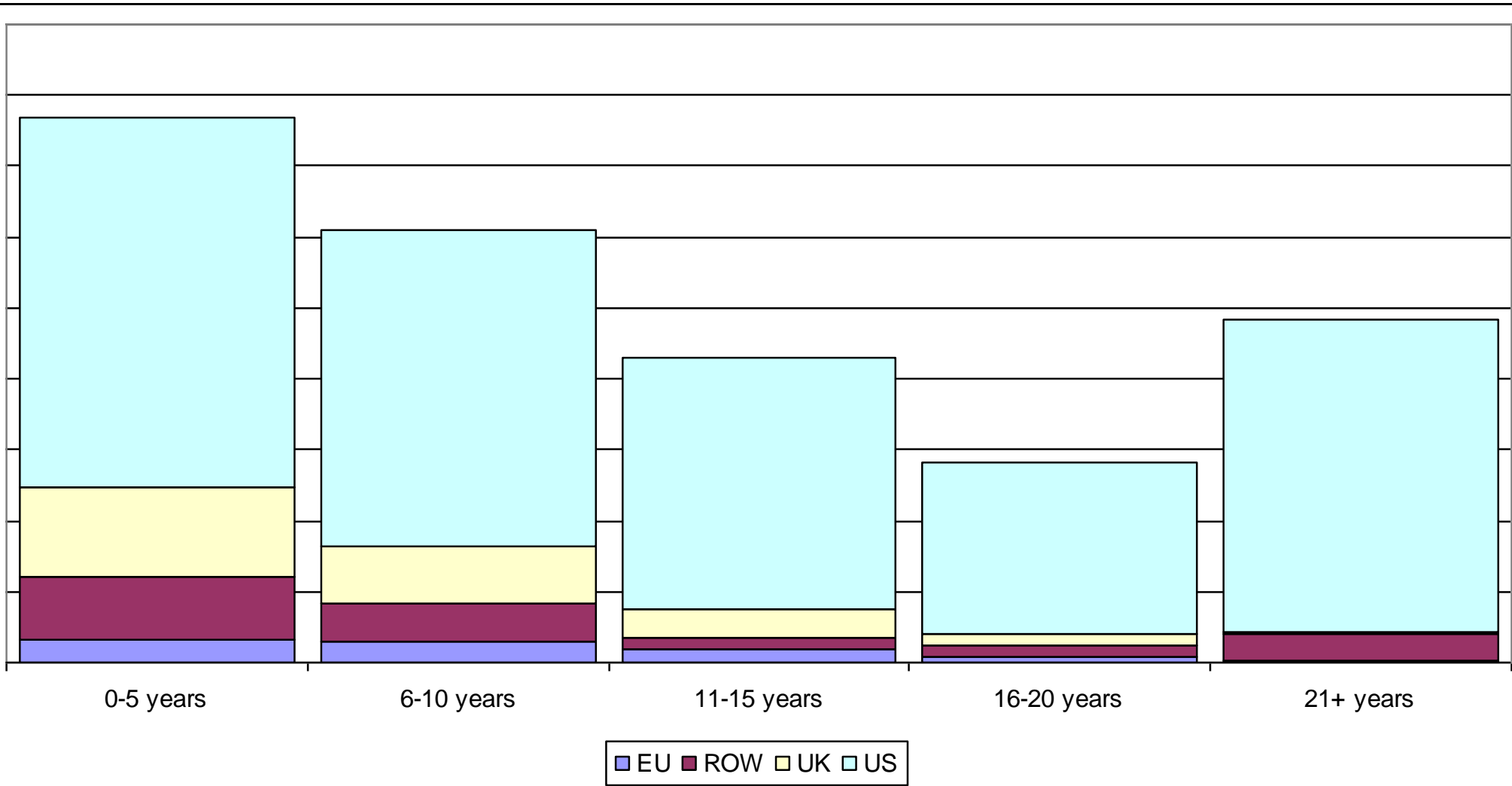
- Purpose
- Survey
- Response rate
- **Selected results**

Mainly primary insurers

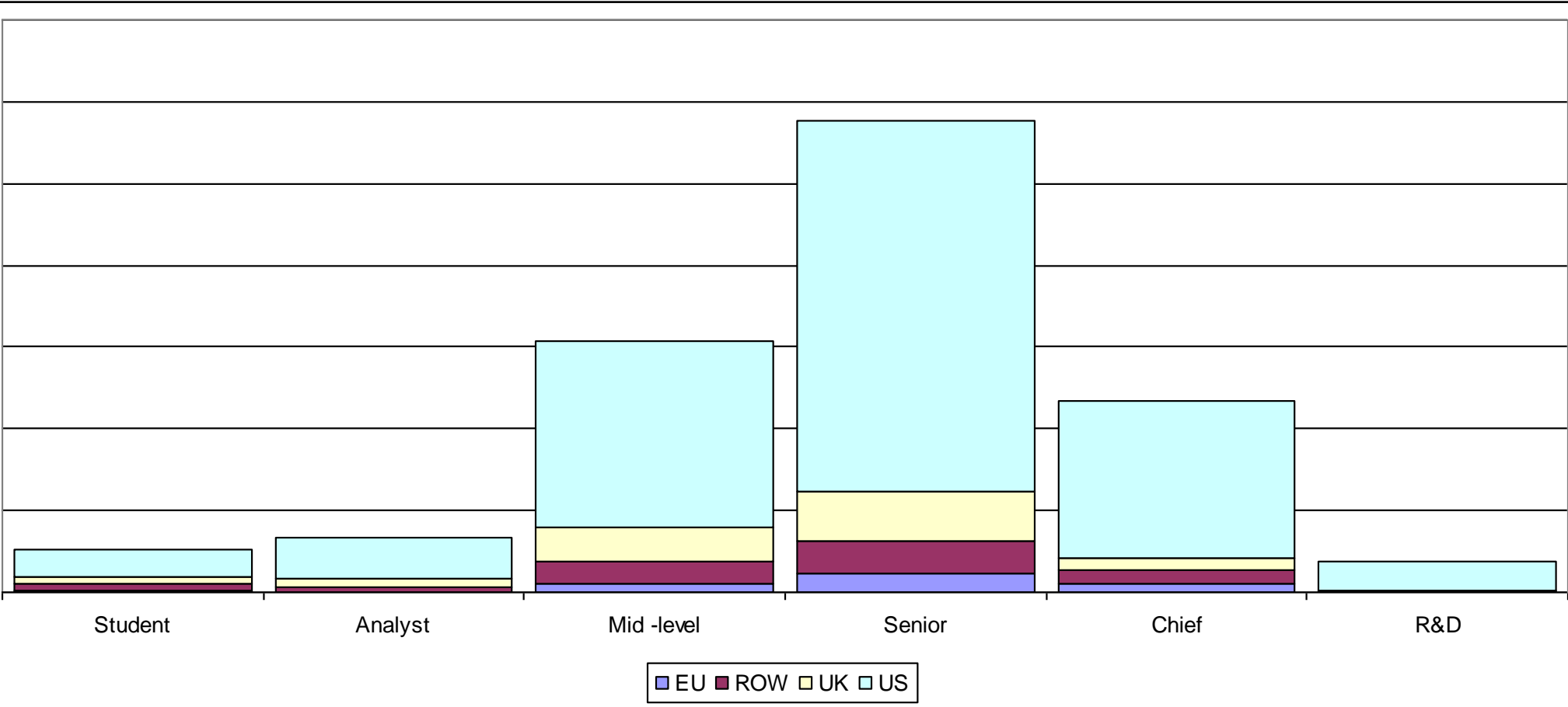
| | EU | ROW | UK | US | Total |
|--|----|-----|----|-----|-------|
| Broker/Intermediary | 0% | 0% | 1% | 2% | 3% |
| Small consulting | 0% | 0% | 0% | 4% | 4% |
| Large consulting | 0% | 0% | 1% | 4% | 6% |
| Insurance Information Entity (ISO, NCCI, etc.) | 0% | 0% | 0% | 3% | 3% |
| Lloyds Syndicate | 0% | 0% | 2% | 0% | 2% |
| Primary Insurer (Multi-National Multiline) | 1% | 2% | 4% | 12% | 18% |
| Primary Insurer (National Multiline) | 0% | 2% | 2% | 32% | 36% |
| Primary Insurer (Regional or Monoline) | 0% | 1% | 0% | 14% | 16% |
| Regulatory Body | 0% | 0% | 0% | 2% | 2% |
| Reinsurer | 1% | 2% | 1% | 5% | 9% |

Reasonable cross section by experience

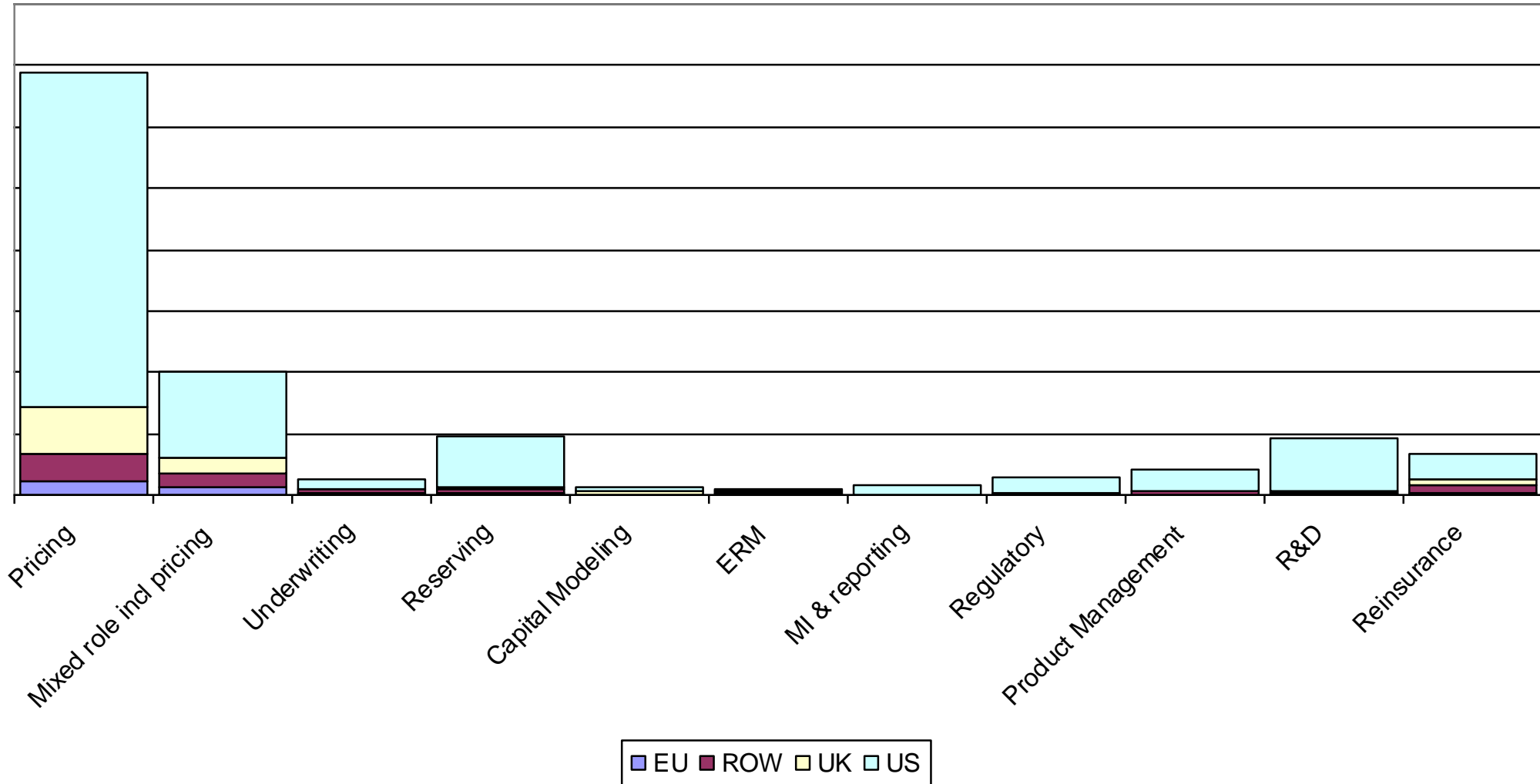
Seniority higher from US



Well targeted at senior individuals...

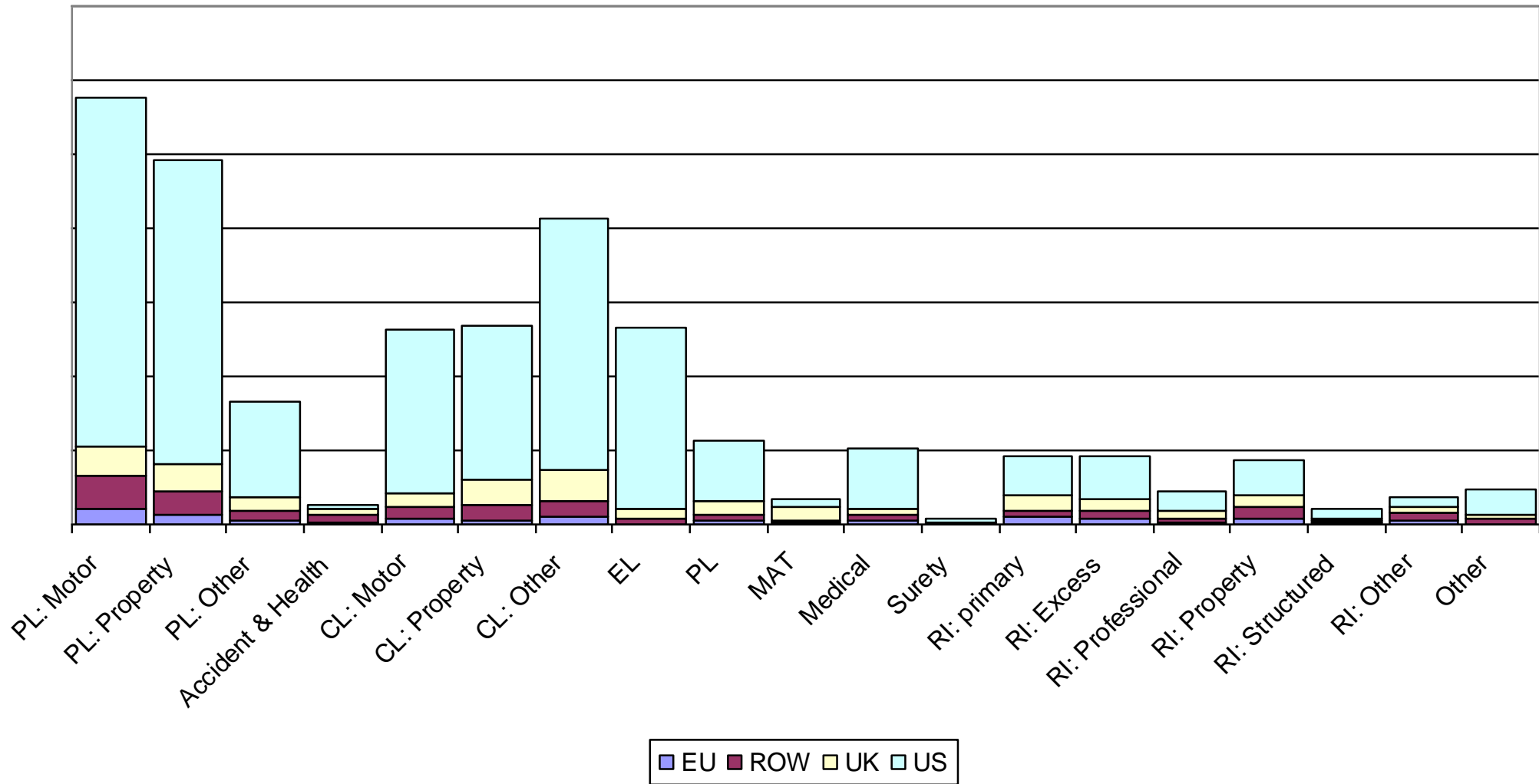


... who work in pricing!



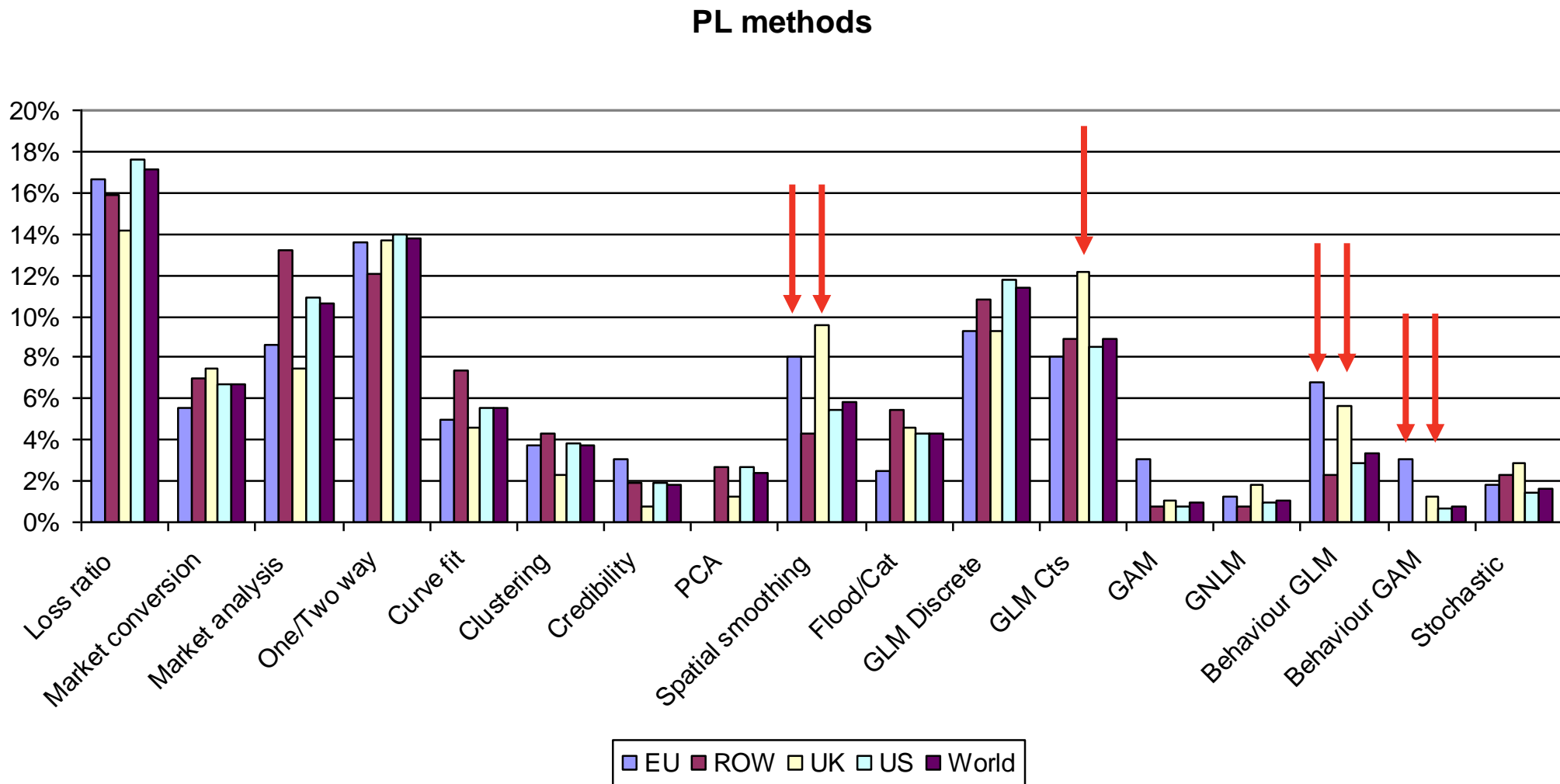
Reasonable mix of lines

- slightly more personal lines



Personal Lines Methods

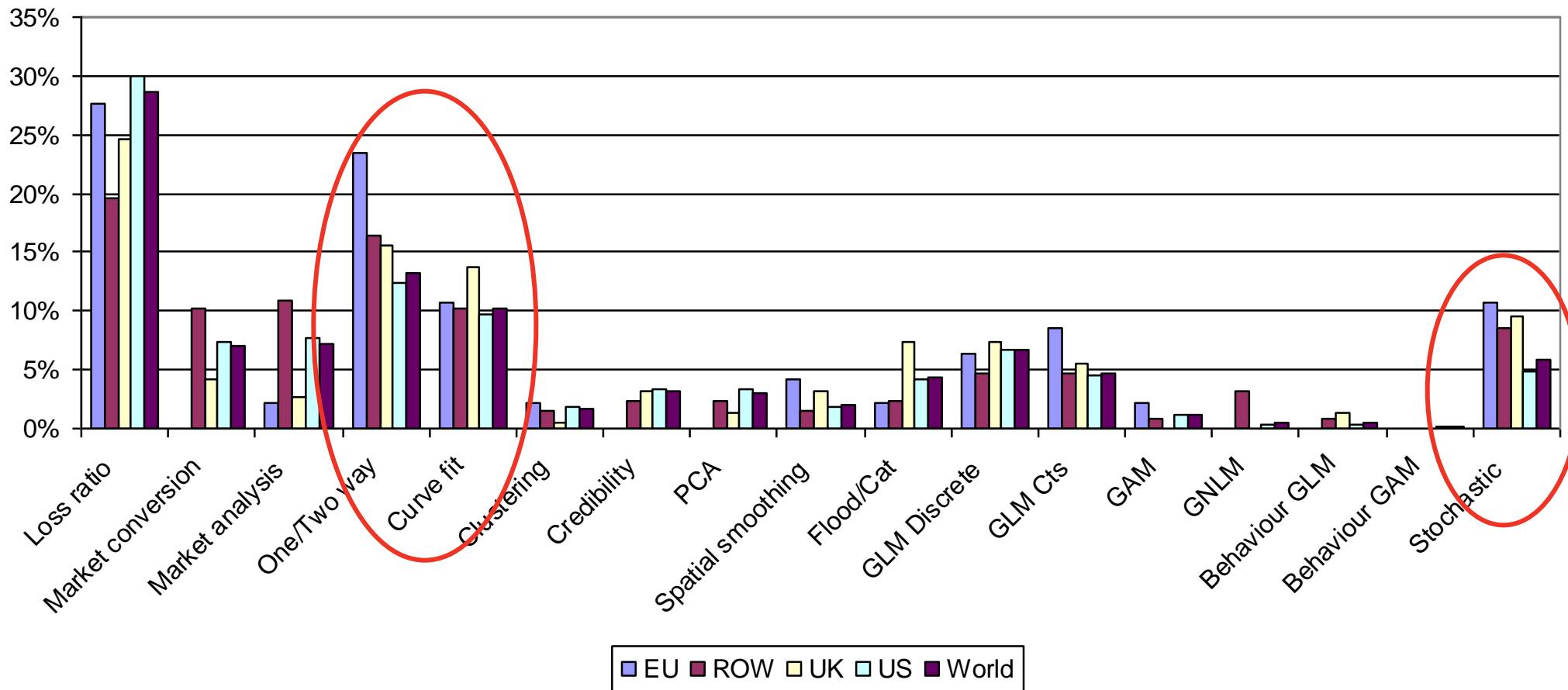
Europe uses more sophisticated models



CL methods

Simpler and stochastic methods

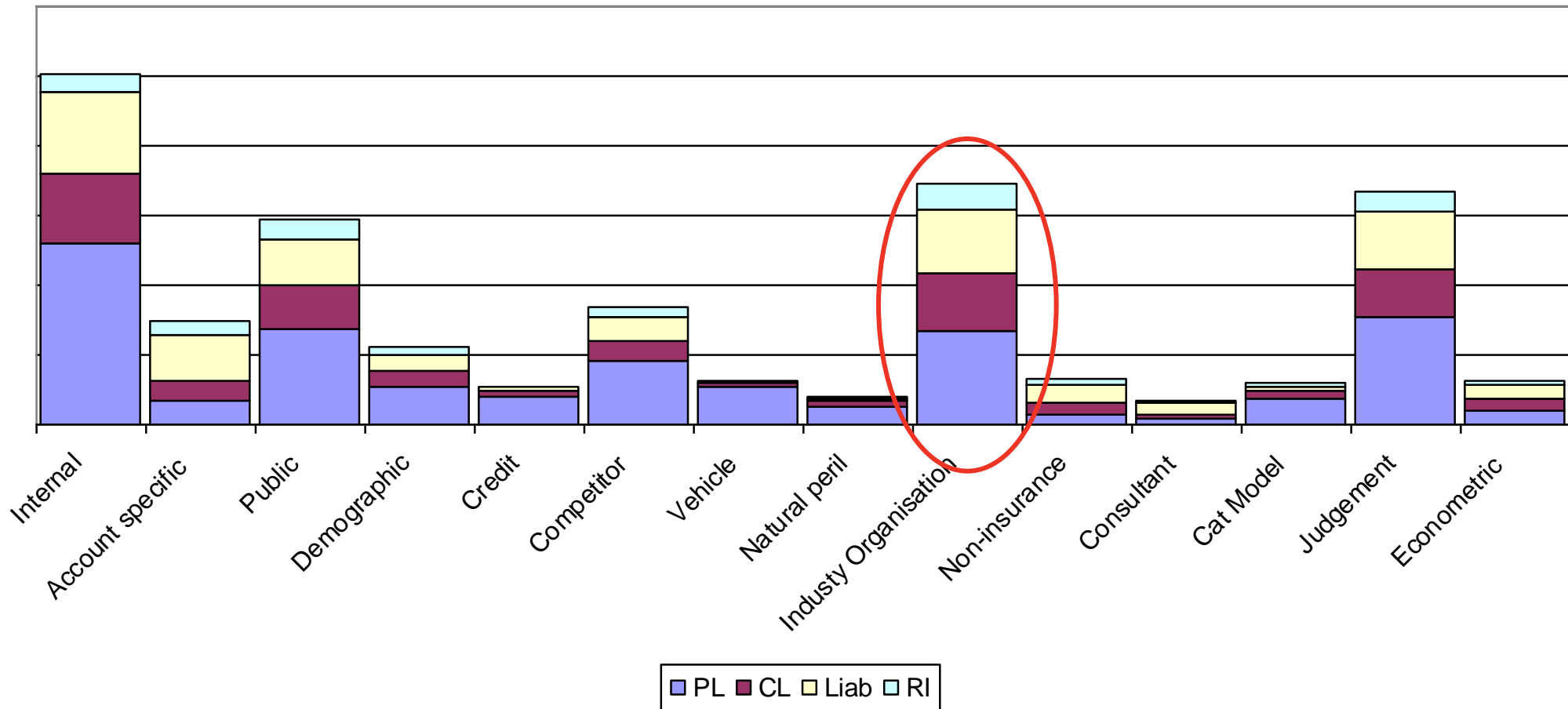
CL methods



US Data sources

Wide use of public and industry data

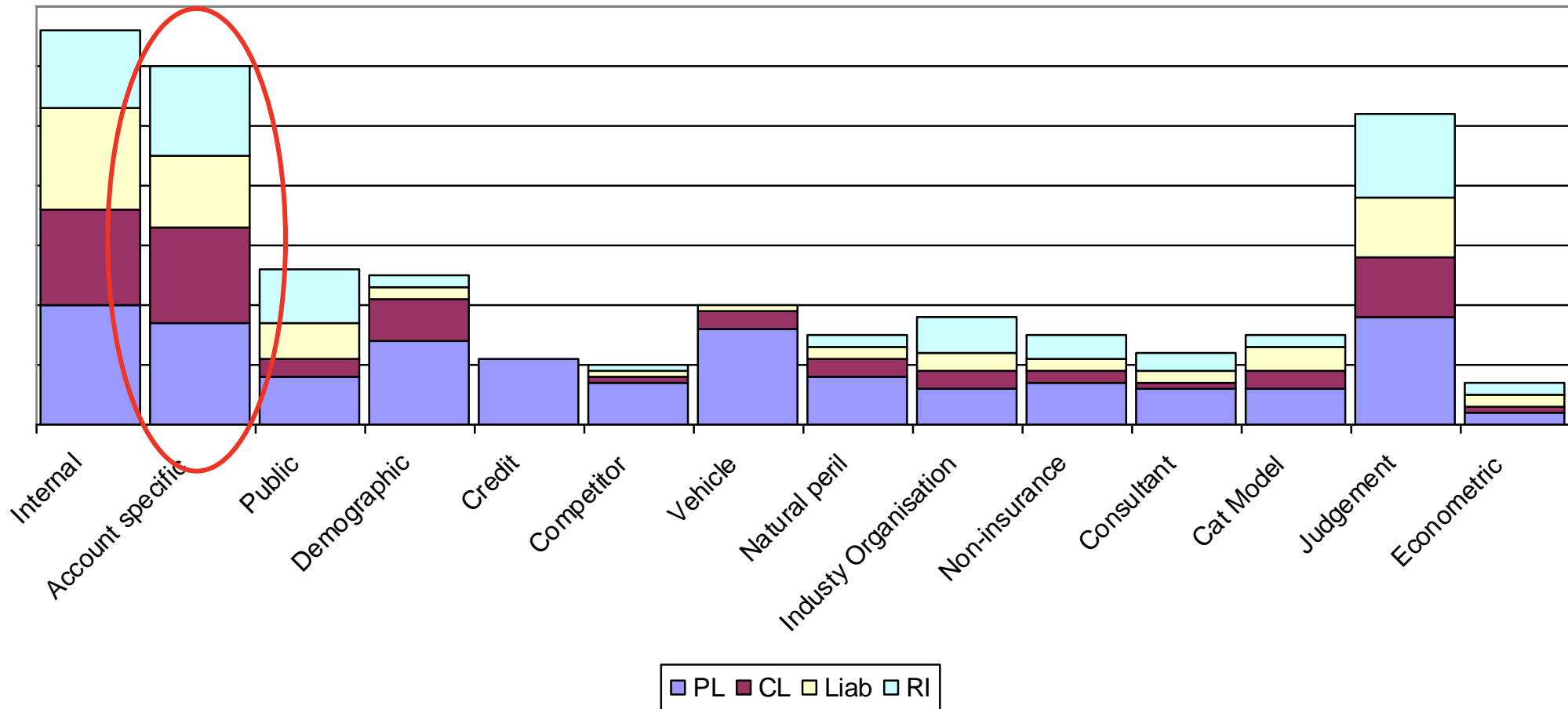
US Data source: Freq/Sev trend



UK data source

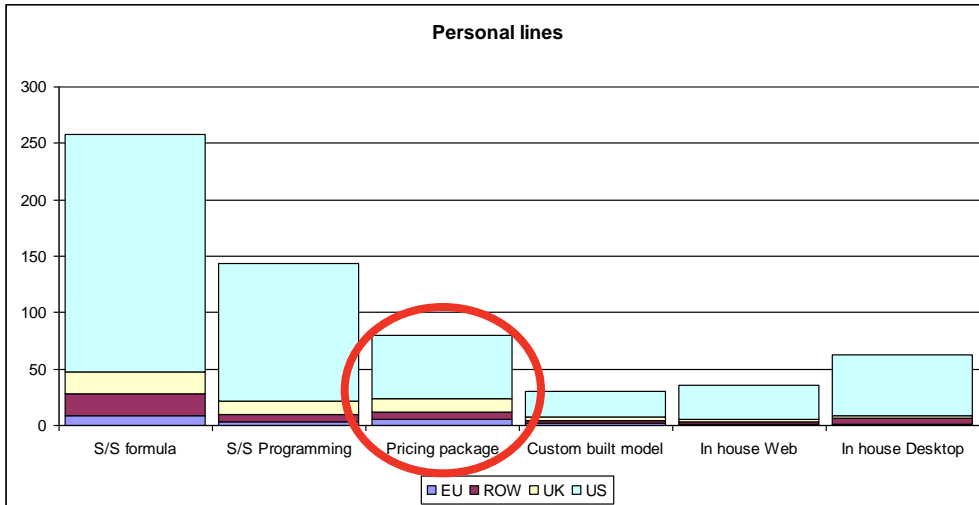
More self reliant?

UK Data source: Freq/Sev trend

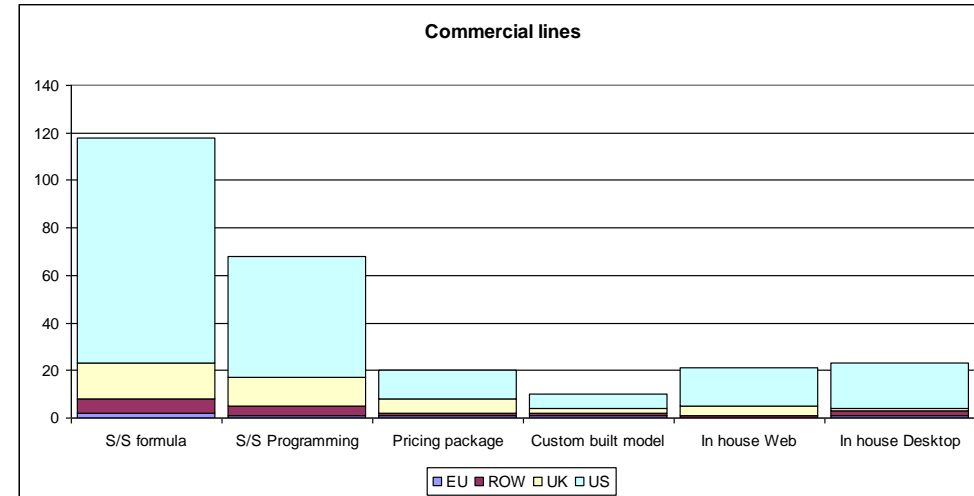


Use of packages: S/S formula, S/S Programming, Pricing package, Custom built model, In house Web , In house Desktop

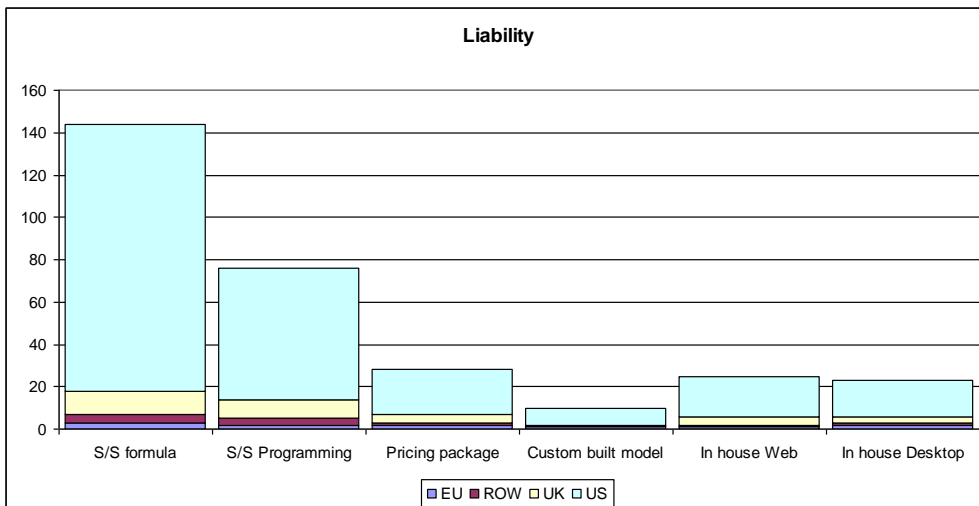
Personal lines



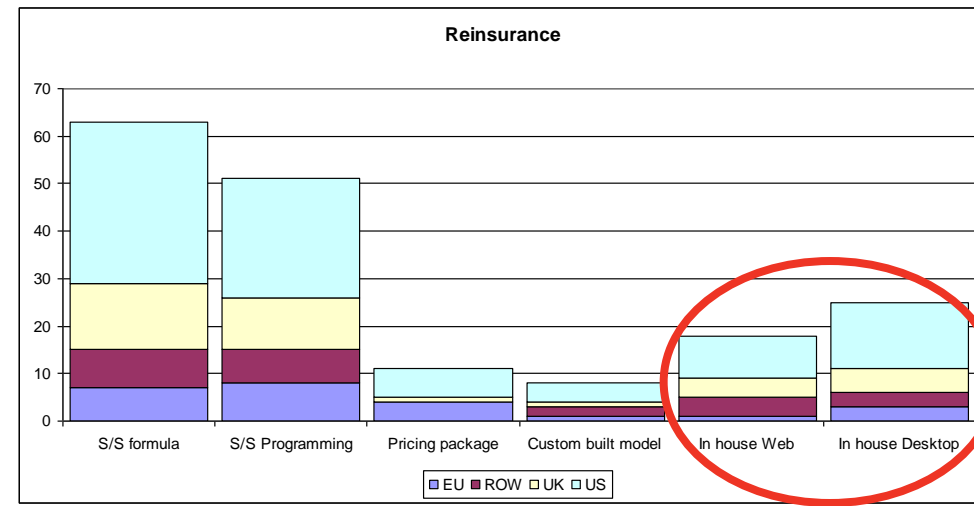
Commercial lines



Liability



Reinsurance

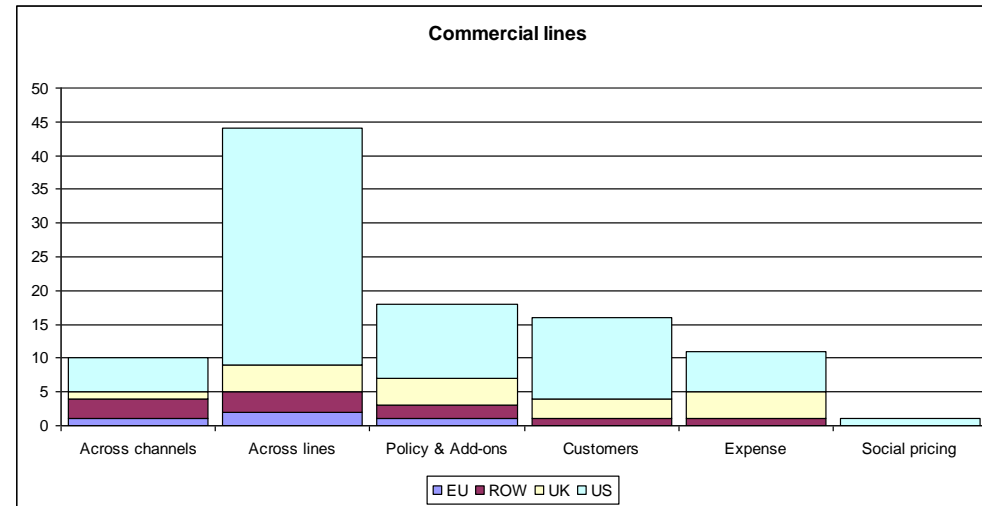


Cross subsidies: Across channels, Across lines, Policy and add-ons, Customers, Expense, Social pricing

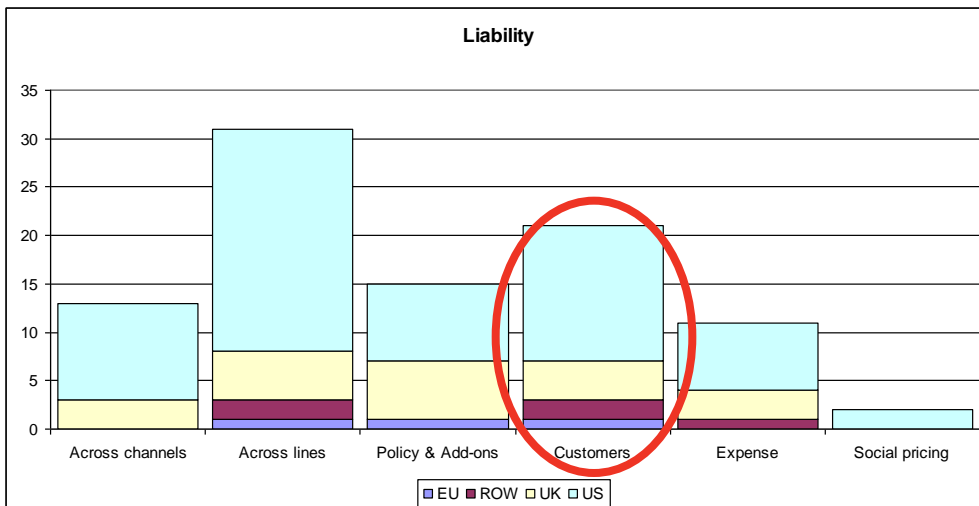
Personal lines



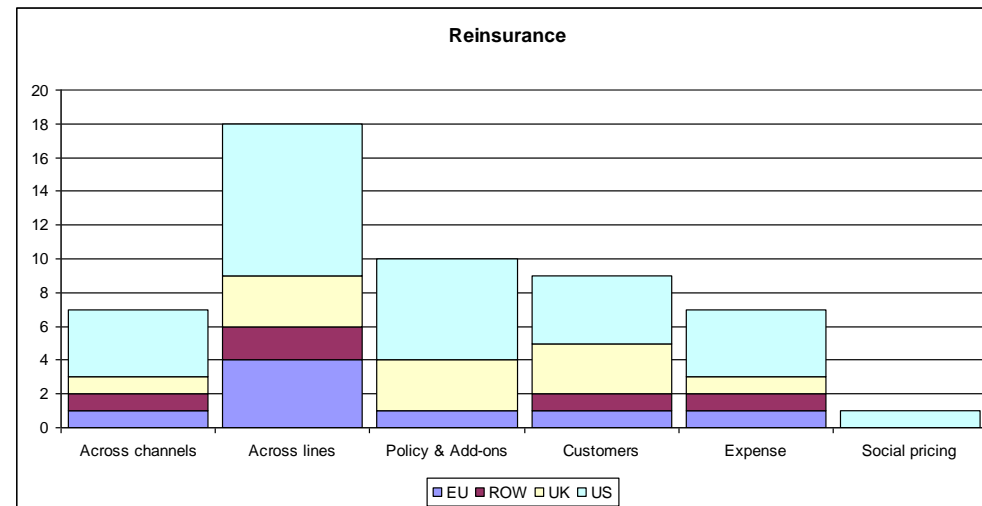
Commercial lines



Liability

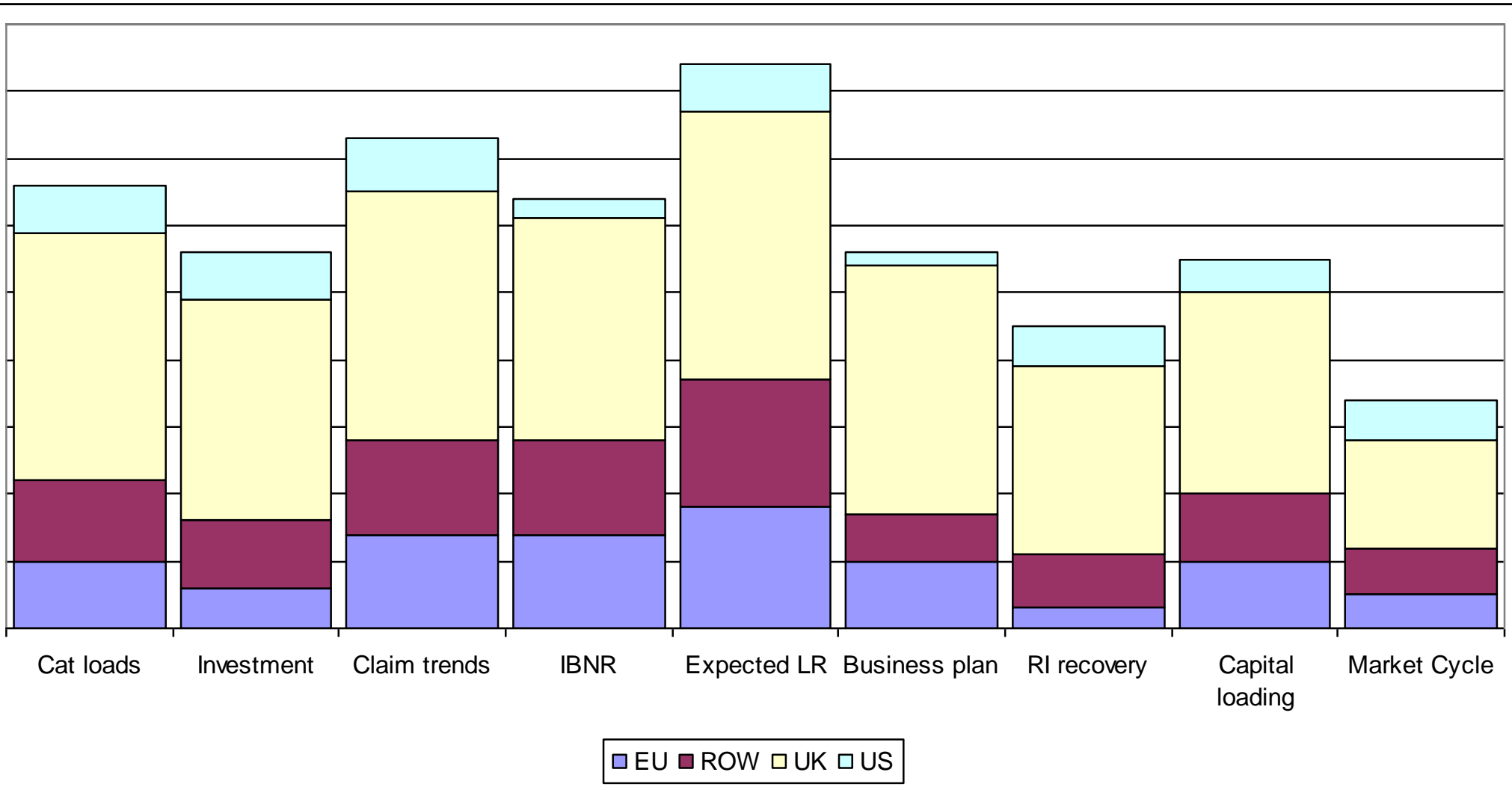


Reinsurance



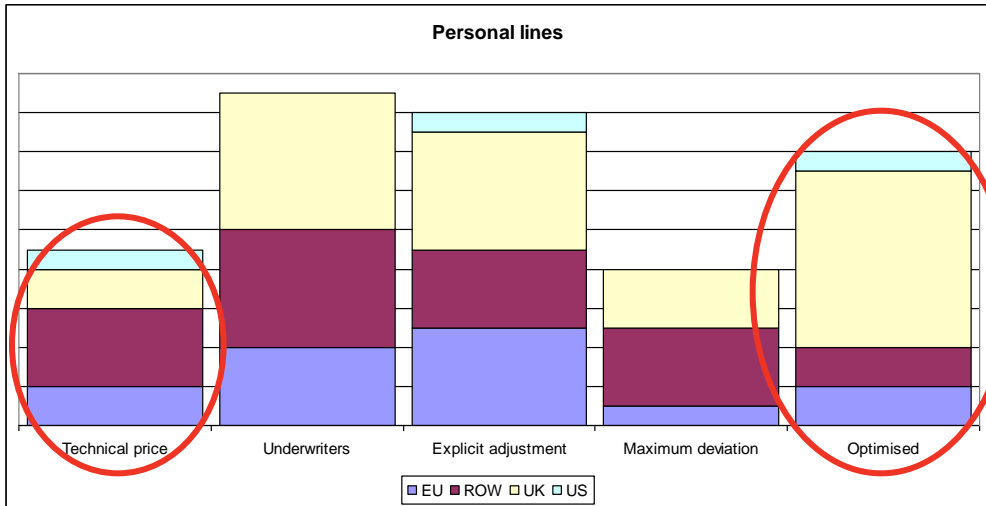
Integration with reserving and capital

More with reserving, it seems

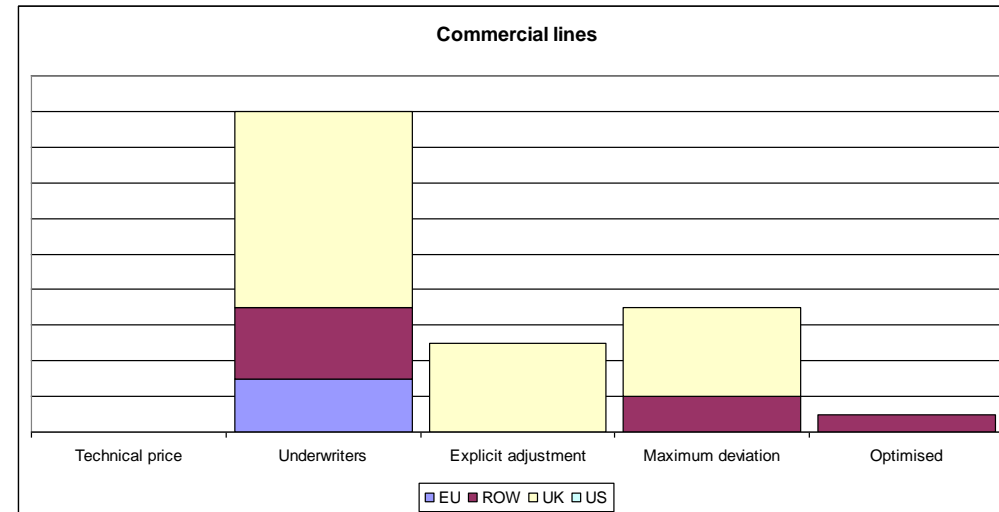


Technical to street price: Technical price, Underwriters, Explicit adjustment, maximum deviation, optimised

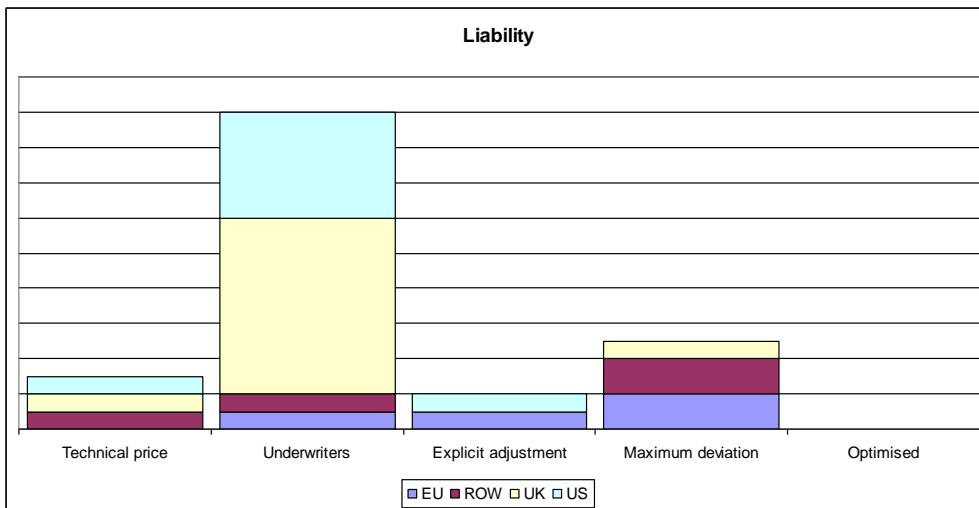
Personal lines



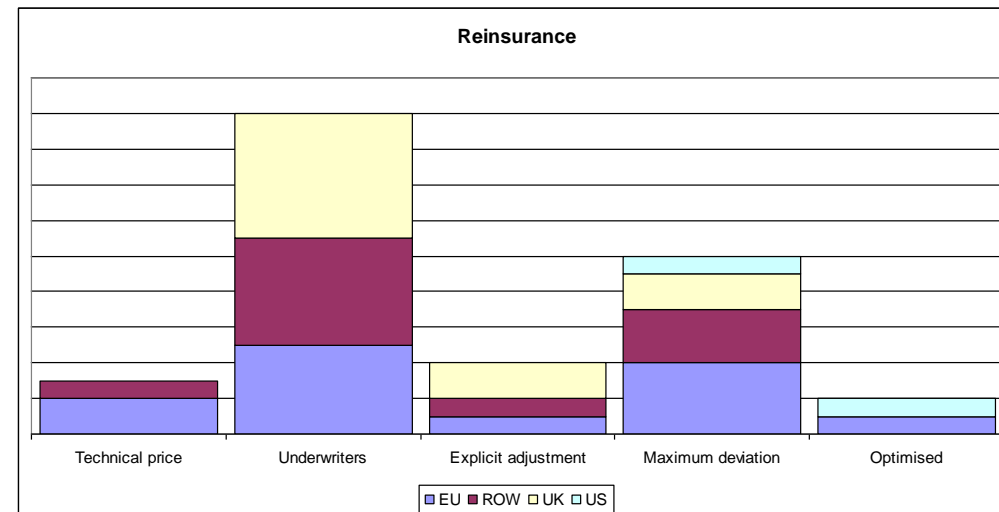
Commercial lines



Liability

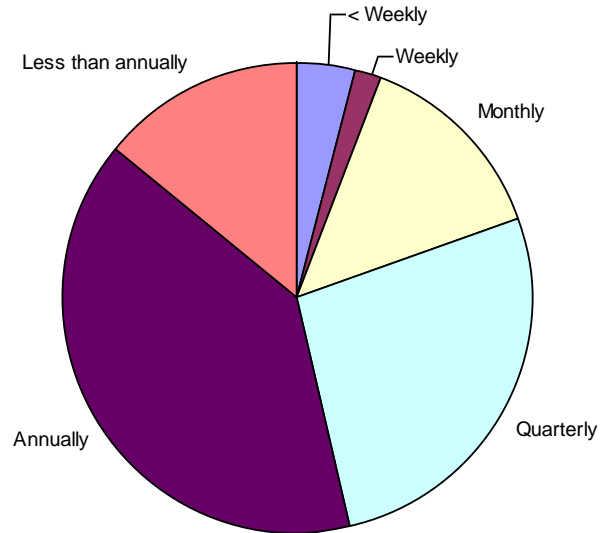


Reinsurance

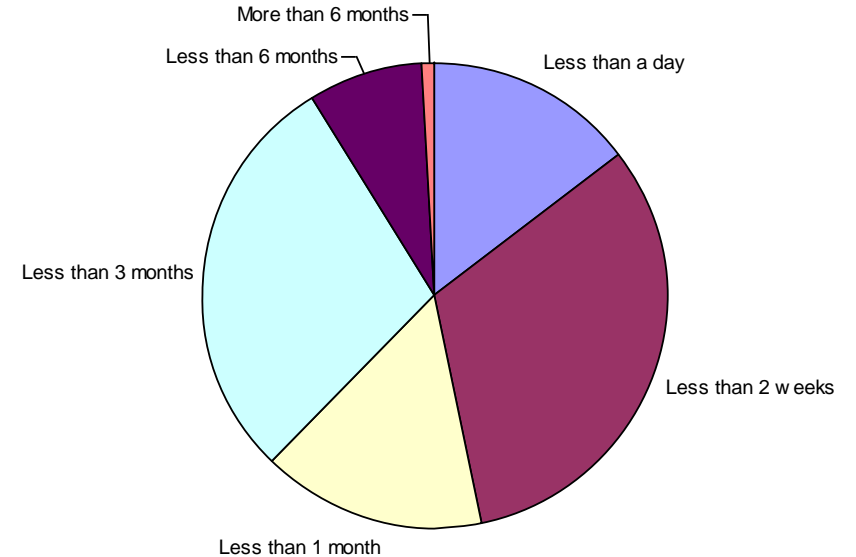


How often do you price, and how long to go live

Frequency of rerate



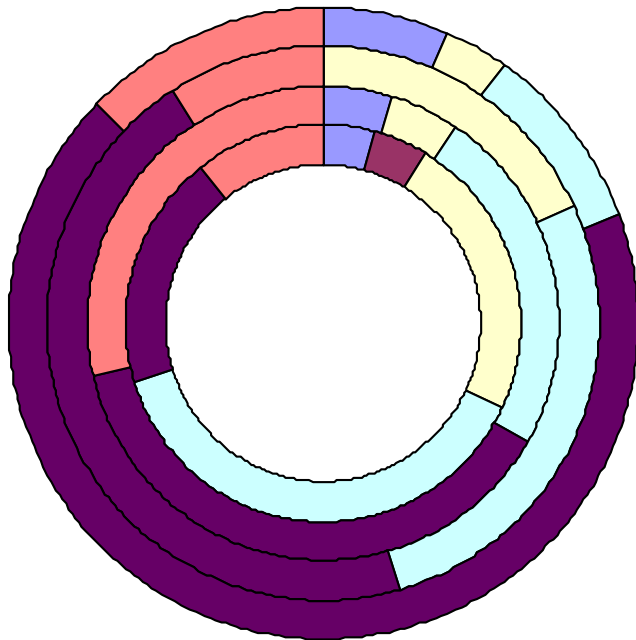
Time to go live



How often do you price, and how long to go live

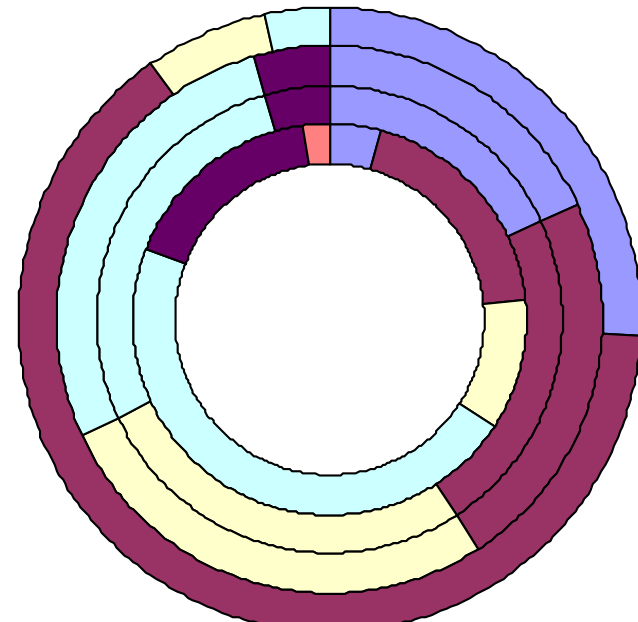
RI annual but quick, PL regular but slow

Frequency of rerate
RI, Liability, CL, PL



< Weekly Weekly Monthly Quarterly Annually Less than annually

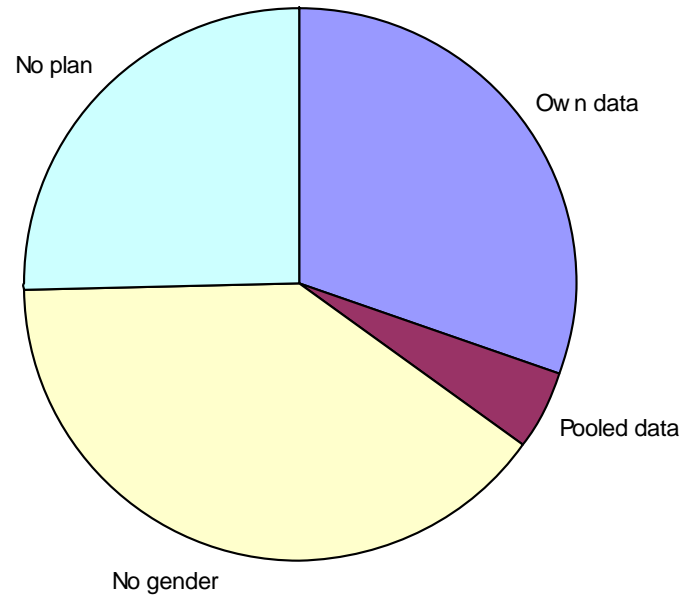
Time to go live
RI, Liability, CL, PL



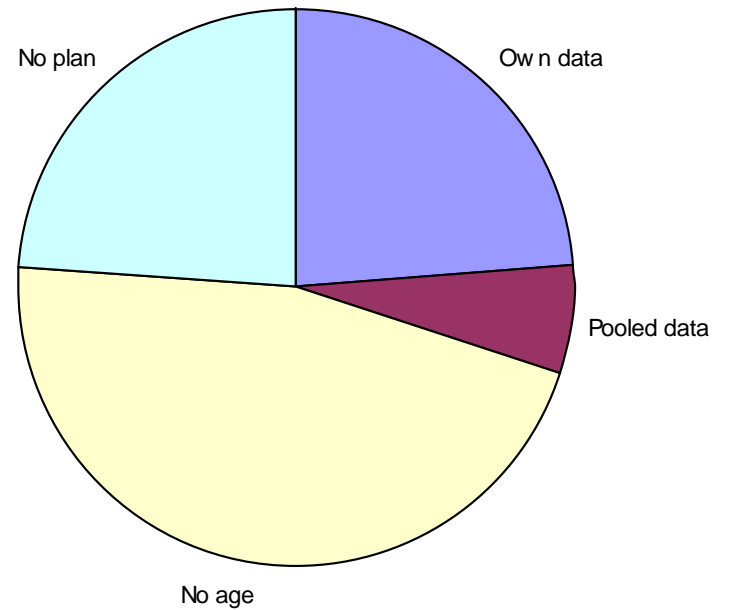
Less than a day Less than 2 weeks Less than 1 month
Less than 3 months Less than 6 months More than 6 months

UK Gender and Age regulation

Gender



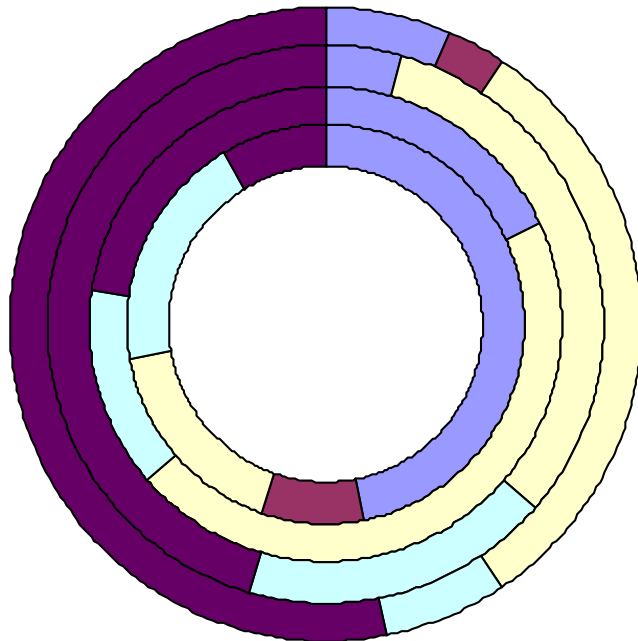
Age



UK Gender and Age regulation

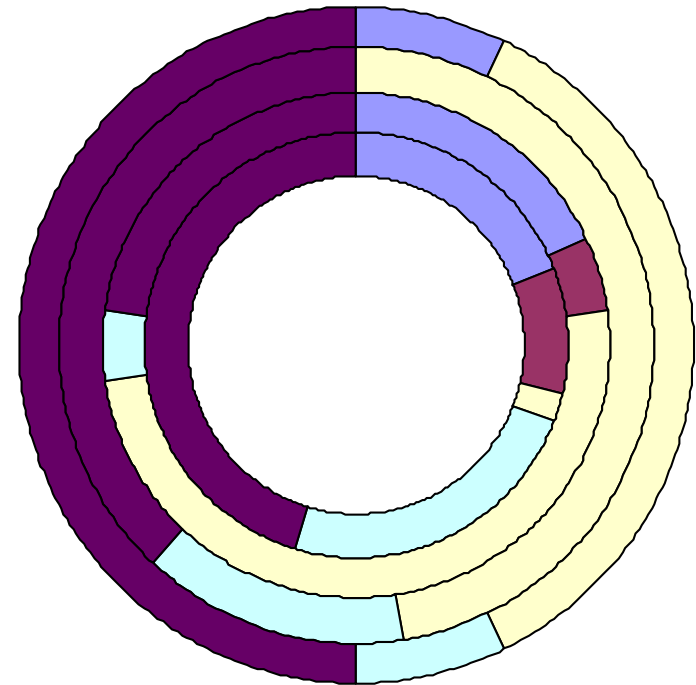
PL uses own data more

Gender: RI, Liability, CL, PL



Own data Pooled data No gender No plan N/A

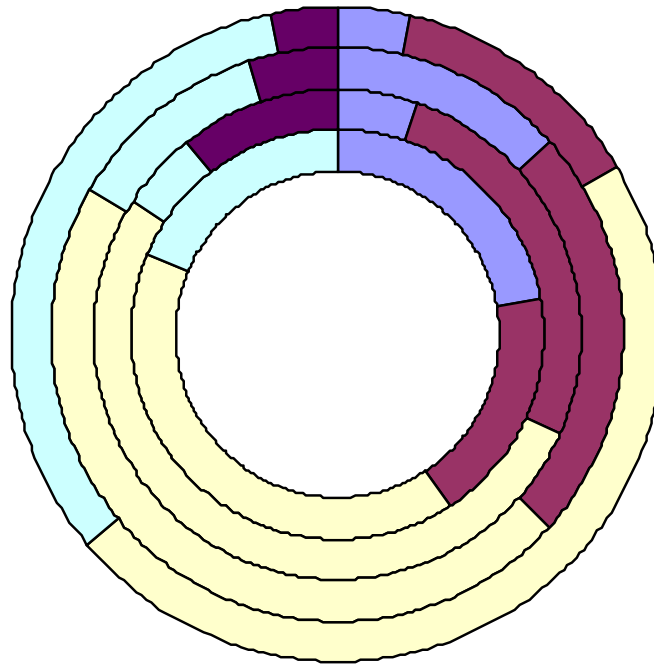
Age: RI, Liability, CL, PL



Own data Pooled data No age No plan N/A

US seem to lead in education

Education support: US, UK, ROW, EU
1= Bad, 5=Good



1 2 3 4 5

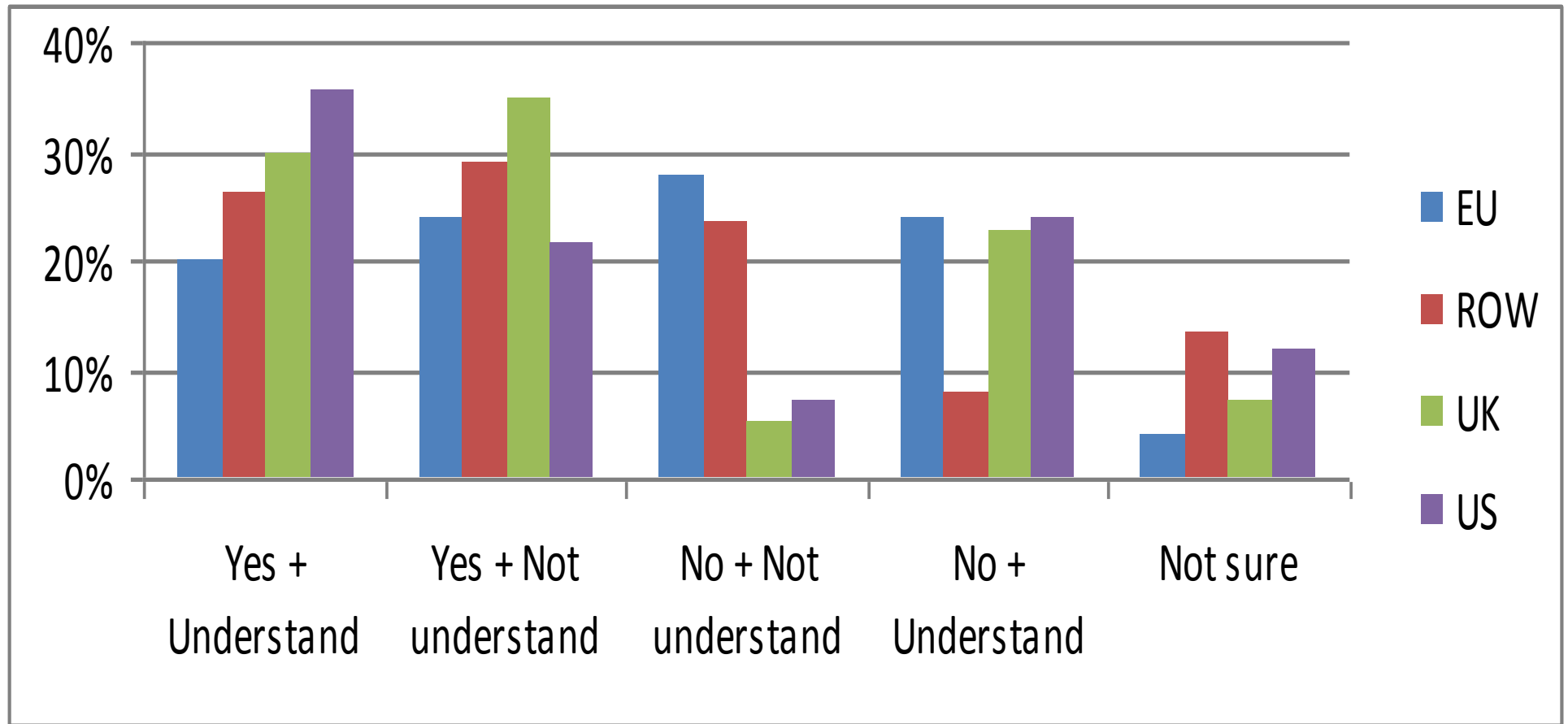
How can the professional organizations improve educational opportunities for pricing actuaries?

- Seminars (preferably webinars) that cover a detailed technical example
- More hands on training (e.g., computer lab sessions)
- Downloadable spreadsheets that work through a particular method/ approach
- Publication of a pricing handbook
- More information on methods that are being used overseas
- Sessions at (CAS) meetings tend not to be balanced (too focused or too general) and are too short.

What is the role of various members in producing the pricing deliverable?

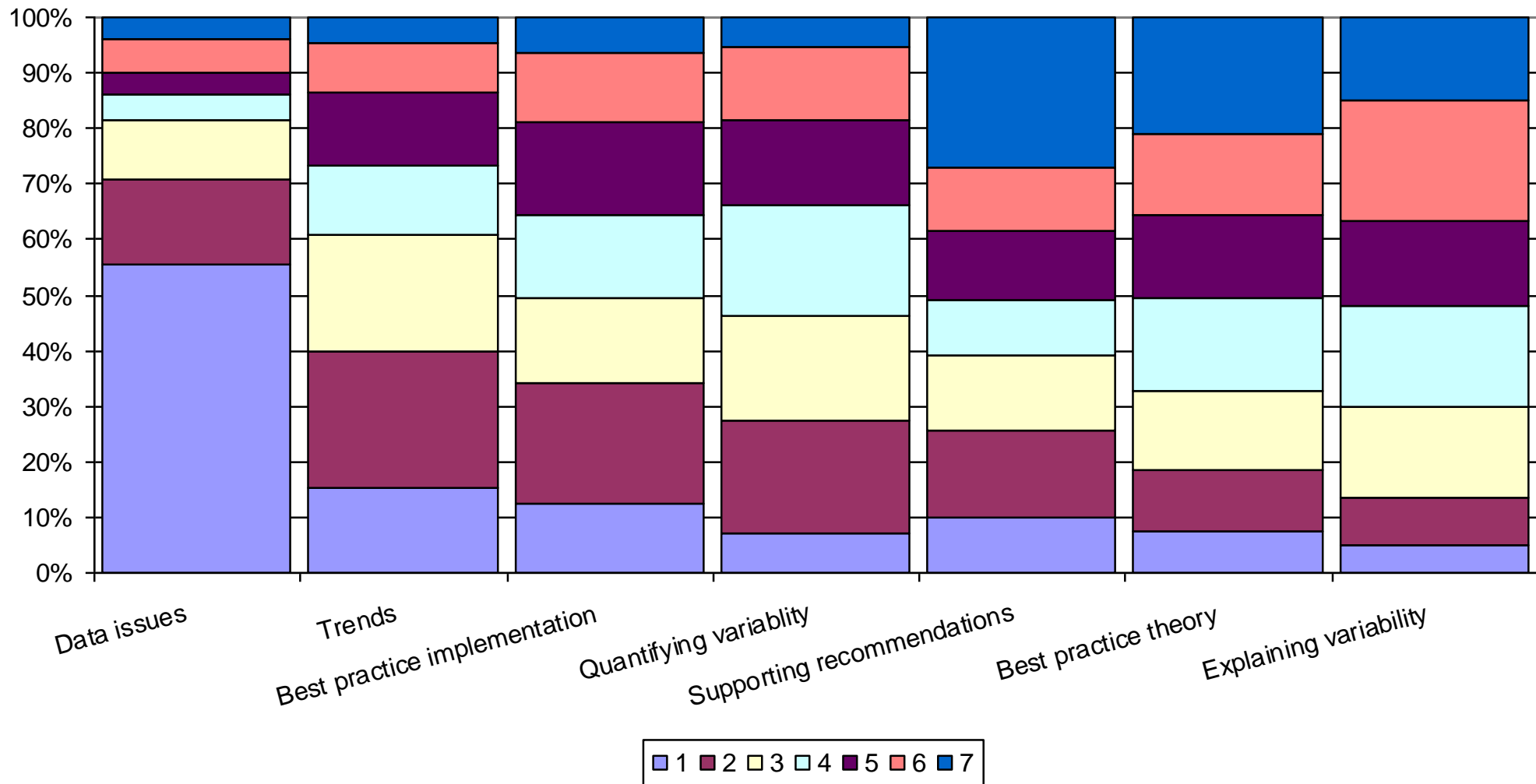
- Underwriters - Leads Process (UK-26%, US-10%)
- Statisticians - Core Member or Leads Process (approximately 20% globally)
- Senior Mgmt - Core Members or Leads Process (UK-29%, US-45%)
- Brokers - No Involvement (UK-45%, US-58%)
- Actuarial Consultants - No Involvement (UK-79%, US-59%)

Do you believe that the price monitoring process at your company/client is sufficiently robust and reasonable enough for the intended purpose and the clients/senior management have sufficient understanding of the uncertainty inherent in the results?

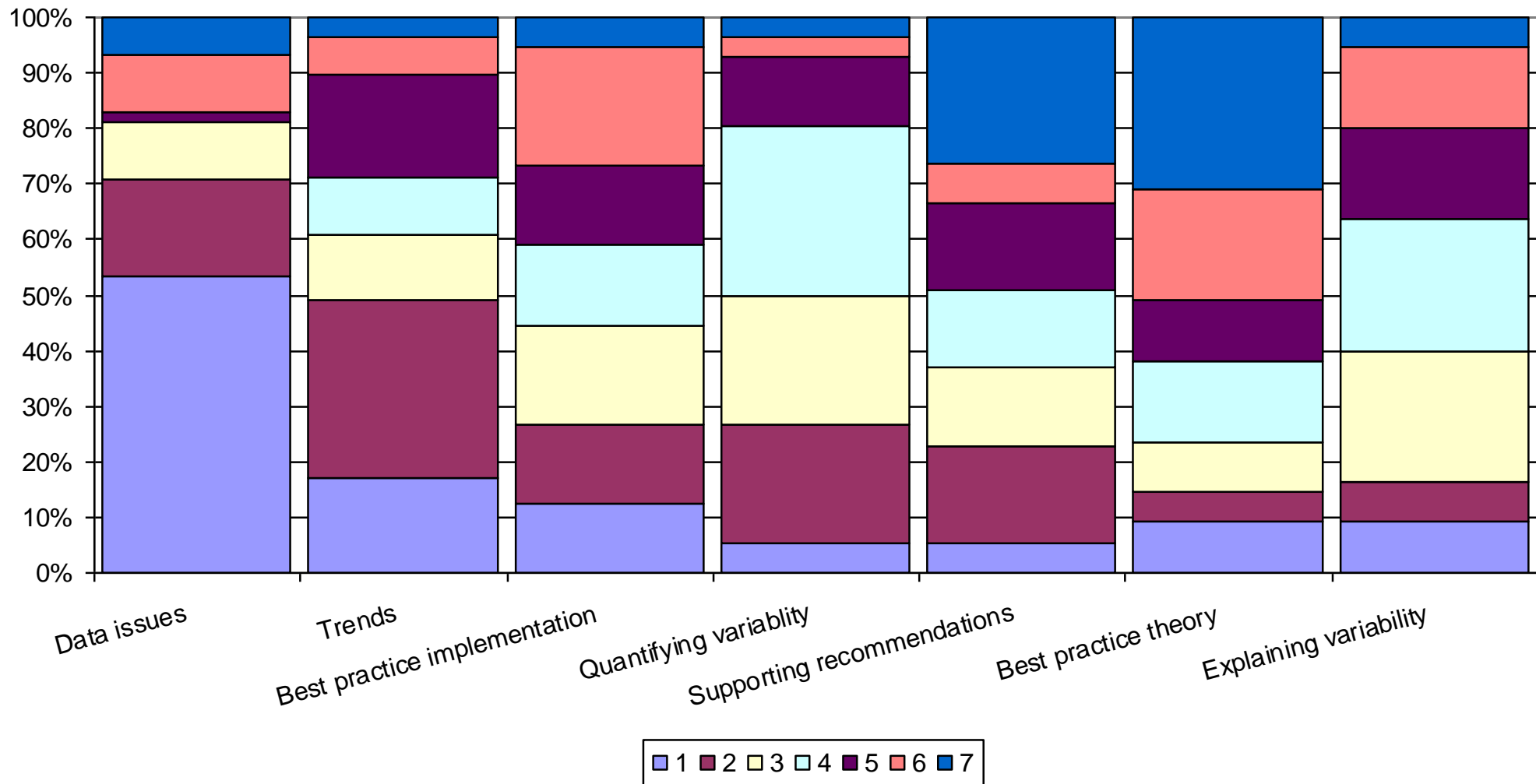


Major challenges: 1 = most important

Global view



Major challenges: 1 = most important UK view



Next steps

- Full survey will be analysed, sliced, diced and write-in responses analysed
- Long report written up and published
- Further presentations booked
 - CAS Annual meeting
 - CAS RPM Seminar
- Further presentations considered:
 - Staple Inn
 - UK Pricing Seminar