The Actuarial Profession
making financial sense of the future

GIRO - 2011
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Is there madness in our methods

A Reserving Cycle Panel

11-14 October 2011

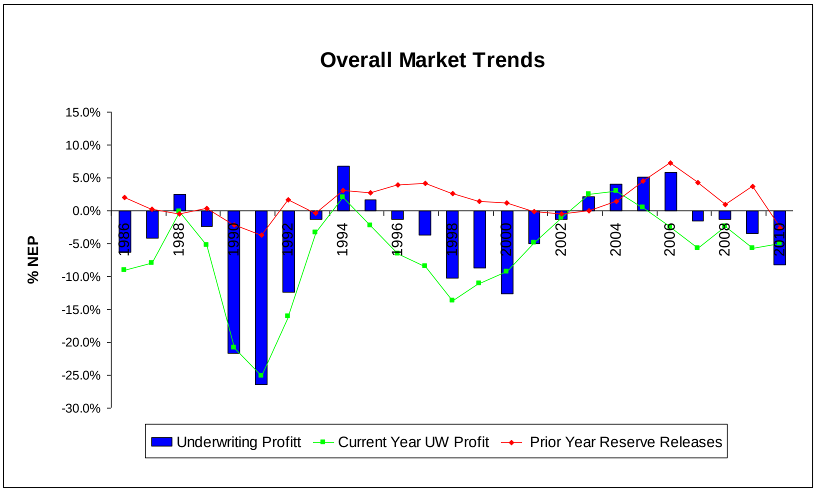
A Little Research

"…causes of reserve deterioration:

- *'Company' actuaries thought that the most important reasons were companies deliberately booking amounts different from the actuarial best estimates…*
- *'London Market' actuaries saw the main reasons for reserve movements as actuarial best estimates being 'insufficiently robust', for example being overly influenced by underwriters…"*
- *"There is overwhelming pressure towards improved controls over, and documentation of, the reserving process…"*
- *"Where significant judgements have to be made, the actuary should usually look for evidence beyond discussion with underwriters, particularly where these are reducing reserves in a soft market."*

"A Change Agenda for Reserving", March 2006 GRIT

The Current Situation



UK Market (ex-Lloyd's) - Accident Year Reporting

Reserve Governance Reviews

- Largely a 1Q2011 exercise reflecting "more intensive and intrusive" supervision strategy
- Prompted by crystallised risks
  - what is the current state of practices?
  - what issues are firms dealing with?
- A series of visits to a sample of insurance firms
  - looking at governance processes
  - how do we get from premium, claims and business system data to booked reserves?
  - what qualitative information feeds into process?
- Visits have led to some RMP (Risk Mitigation Plan) points

Reviews – Some Observations

- Prevalence of companies having *two* numbers
  - "Best Estimate" → the actuarial number
  - "Booked Amount" → (higher) firm number
- Does this split view undermine focus?
  - is this efficient use of resources?
  - is this confusing to actuaries as to their role?
- Complex communication processes may increase risk
  - beware lots of ad-hoc meetings
  - observed inverse relationship between number of meetings and quality / quantity of documentation
- Documentation quality falls short of Solvency II expectations
  - claimed compliance with GN12, not convincing

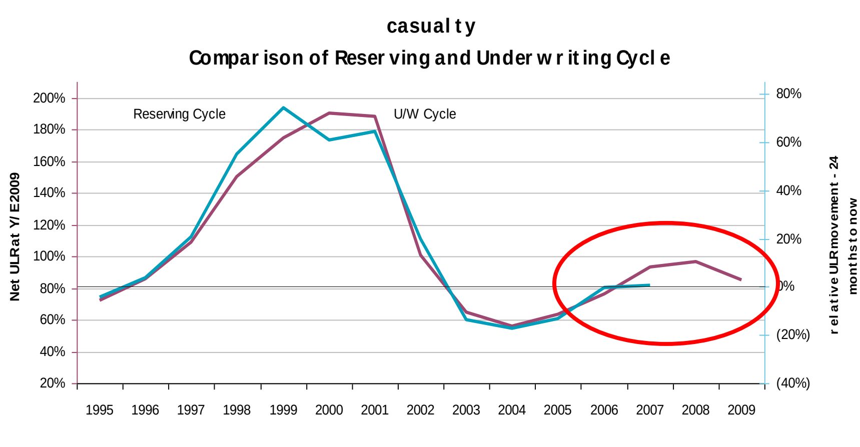
Dear CEO Letter

- Prompted by concerns at state of environment, crystallised risk and some observed practices
- A reminder as to senior management responsibilities
  - must have proper understanding of, and be able to explain, their risk appetite and the consequences of that risk appetite in setting reserves
- Raising awareness of potential pressure on reserving function and that pressure's influence on decision making
- Processes need to: be considered and proportionate; be robust and subject to adequate internal challenge; capture the risks associated with an increasingly challenging claims environment

Future Plans

- Will reflect on findings of the reserve governance reviews
- May repeat exercise across a larger sample of firms
- May use Skilled Persons Reports
  - under Section 166 of Financial Services and Markets Act 2000
  - to gather information or seek validation
  - cost will be borne by firm
  - elsewhere
    - used if identified weaknesses not rectified to the FSA's satisfaction
    - review & make recommendations on practices and processes
- Expect more challenge of firms on reserving issues

Lloyd's reserve cycle graph also tells a story – start at year-end 2009



Source: Lloyd's SRD database

…we felt it necessary to take actions prior to the 2010 year-end…

- In Dec 2010 Henry Johnson wrote to the CFOs of all Managing Agents before the year-end reserves were set
  - reminded Managing Agents to ensure standards of governance are met
  - includes telling Boards that Lloyd’s level of concern exists
  - expecting CFOs to discuss with Boards
- Signing Actuaries must also play a part
  - Lloyd’s ask signing actuaries to explain allowances for reserving cycle
  - for year-end 2010, 91% state the reserving cycle has been considered

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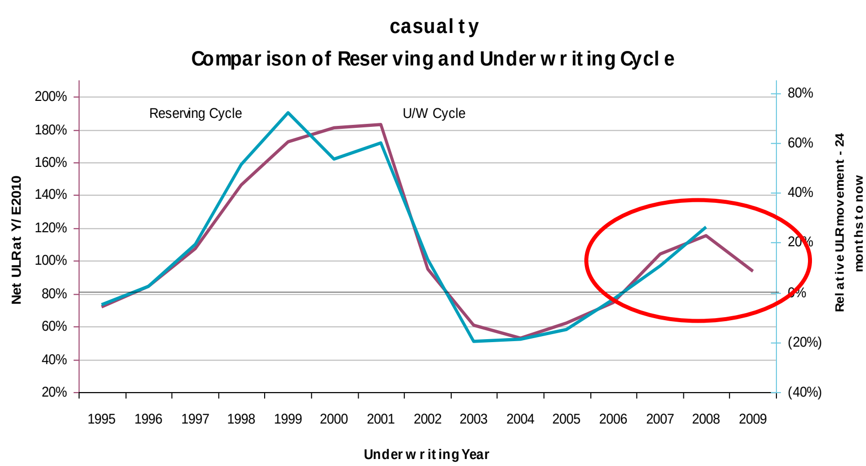
…can now roll forward to year-end 2010



Source: Lloyd’s SRD database

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Reserving is complex: but are some things actually quite obvious?

- For starters, how many reserve cycle graphs does it take to convince you?
- And we all know “good years get better and bad years get worse”
- This is supported by history
  - can look at movements in Lloyd’s “low level” Casualty classes:

		Average ULRs			% of years that got	
	Years of Account	@ Yr 2	Latest	Rel. Movement	worse	better
"BAD"	1998-2001	115%	171%	49%	94%	
"GOOD"	2003-2006	69%	55%	(20%)		79%

Source: Lloyd’s SRD database
Note: 10 low level classes for each year of account. So 80 data points in total.

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And what about actual claims experience in the early years?

- Actual versus expected analyses are valuable
  - but are we sometimes too quick to dismiss?
- Can consider other simple measures like IBNR burn

	Years of Account	Average IBNR burn during yr 3
"BAD"	1998-2001	61%
"GOOD"	2003-2006	23%

- All part of Lloyd’s regular reserve monitoring exercise

Source: Lloyd’s SRD database

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Do actuaries have selective sight at times?

- I'm proposing that simple indicators do exist and reliable flags of potential reserving "issues" are available. For example:
  - high initial ULRs
  - high IBNR burns during early years
  - unfavourable Actual vs Expected
- Don't be afraid to use the full history….including the cycle

"Concern should drive us into action and not into a depression"
Pythagoras

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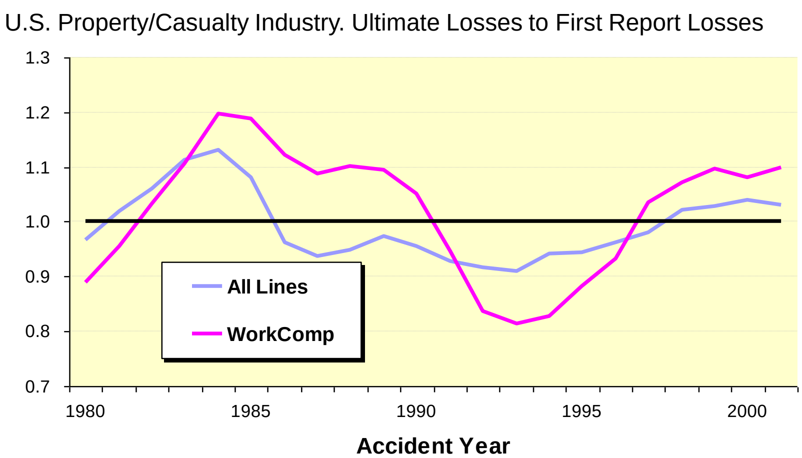
Why did we write the paper?



Presented by Bob Conger at GIRO 2002

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Why did we write the paper?

- Was there a similar cycle in the UK?
- What caused it? Actuaries or Directors?
- Soft-market-related reserve deteriorations
- Personal, bitter experience
- Could it be stopped?

What happened to the paper?

- GRIT, ROC, Working Parties
- Reading for SA3
- Reserving Cycle (700 hits)
- SAO reports
- Efforts to adapt methods

What has happened since 2003?

- Hard market ended
- Reserve surpluses persist but are being eroded, fast
- "Cheating Stage" of the cycle
- Personally surprised that the Lloyd's and FSA letters were not sent several years ago

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What do we think now?

- Nobody believes the problem has gone away
- Means and motives remain: Human behaviour, biases, pressures, fear and greed, analysts, investors etc
- It's not just about the cycle – other issues can catch you out and cause expensive reserve movements
  - Med Mal
  - Motor
- Understanding the business better
- The Dunning-Kruger effect
- You're not that smart, and that's really dangerous!

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Plato's Cave

The Reserving Actuaries' Cave