



What do London Market Actuaries Price?

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Agenda

- Background
- What do London Market Actuaries Price? - The Survey
- Expectations placed on (pricing) actuaries
- Impact of key pricing functions on cycle management

Background

- **Focus**
 - Commercial P&C insurance
 - London Market business
- **Pre-2001 – Who needs actuaries?**
 - Few P&C pricing actuaries
 - Mostly reinsurance
 - Main role individual risk pricing
- **2002 & Post – Actuaries as ‘safeguard’**
 - High demand for pricing actuaries
 - Today only 6-7 LM companies no actuaries



‘What do London Market Actuaries Price?’ – Survey Aim

- Understand the role of London Market pricing actuaries
- Understand current pricing actuaries involvement in key areas
- To investigate pricing actuaries (perceived) influence over management of soft market

'What do London Market Actuaries Price?' – Survey Results

- Survey sent to over 30 London Market companies
- Only 6 responses
- Few companies opted not to participate
- Rest ignore it!
- Why?
 - Everyone is doing their own thing
 - Lack of industry wide forums BY PRICING ACTUARIES
 - Real need for sharing ideas

'What do London Market Actuaries Price?' - Survey Areas

- Team time spent on pricing
- Individual time allocation to key areas
- Structure of team/reporting lines
- Influence (and perceived influence) over management of soft market
- Change in influence over cycle management
- Appropriateness of sign-off protocols

The Role of Pricing Actuaries

Reinsurance

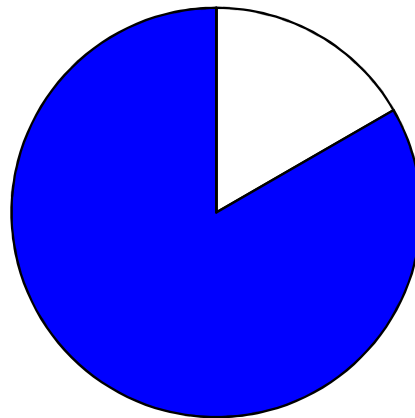
- Account pricing
- Underwriting
- Management reporting
- Benchmarking

Insurance

- Account pricing
- Rating models
- Management reporting
- Outwards reinsurance
- Reserving
- Capital modelling
- Planning and Forecasting

Overall Actuarial Time Spent on Pricing

Percentage of total team time spent on pricing
(based on days per week per total headcount)

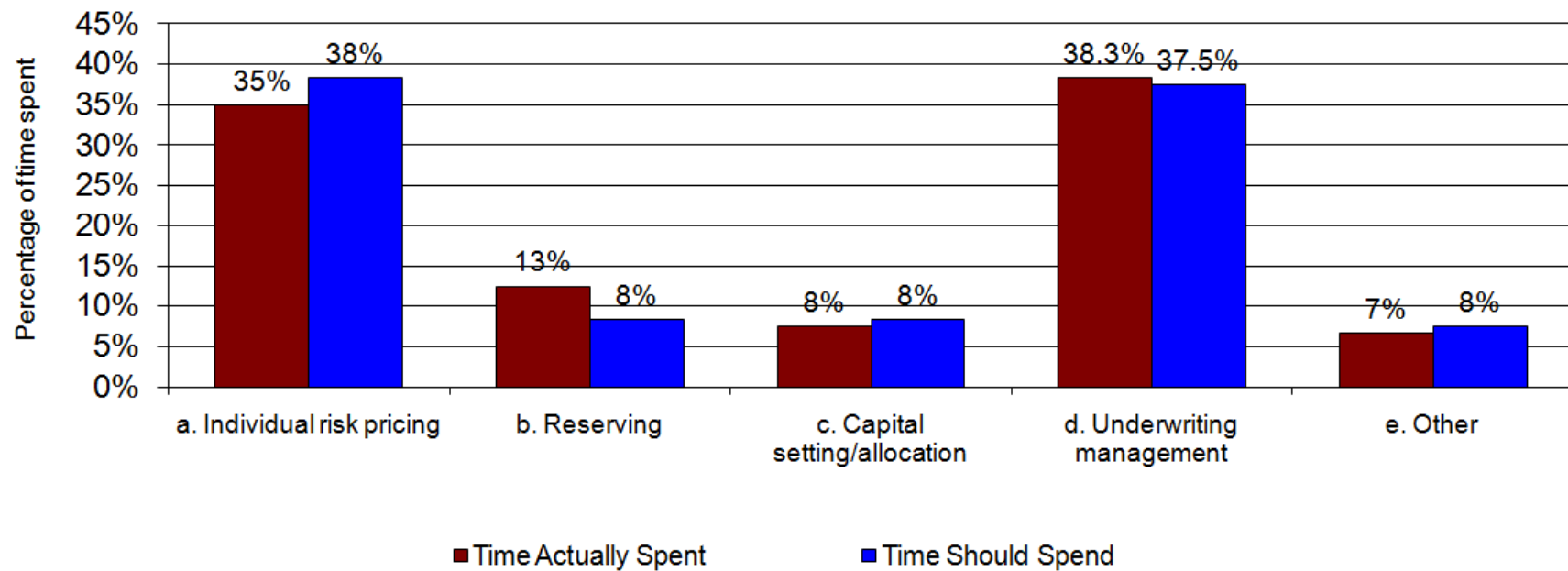


□ a. 0-10%

■ b. 10-50%

■ c. 50-100%

How Pricing Actuaries Spend Their Time?



How Much Influence Will Actuaries Have Managing This Cycle?

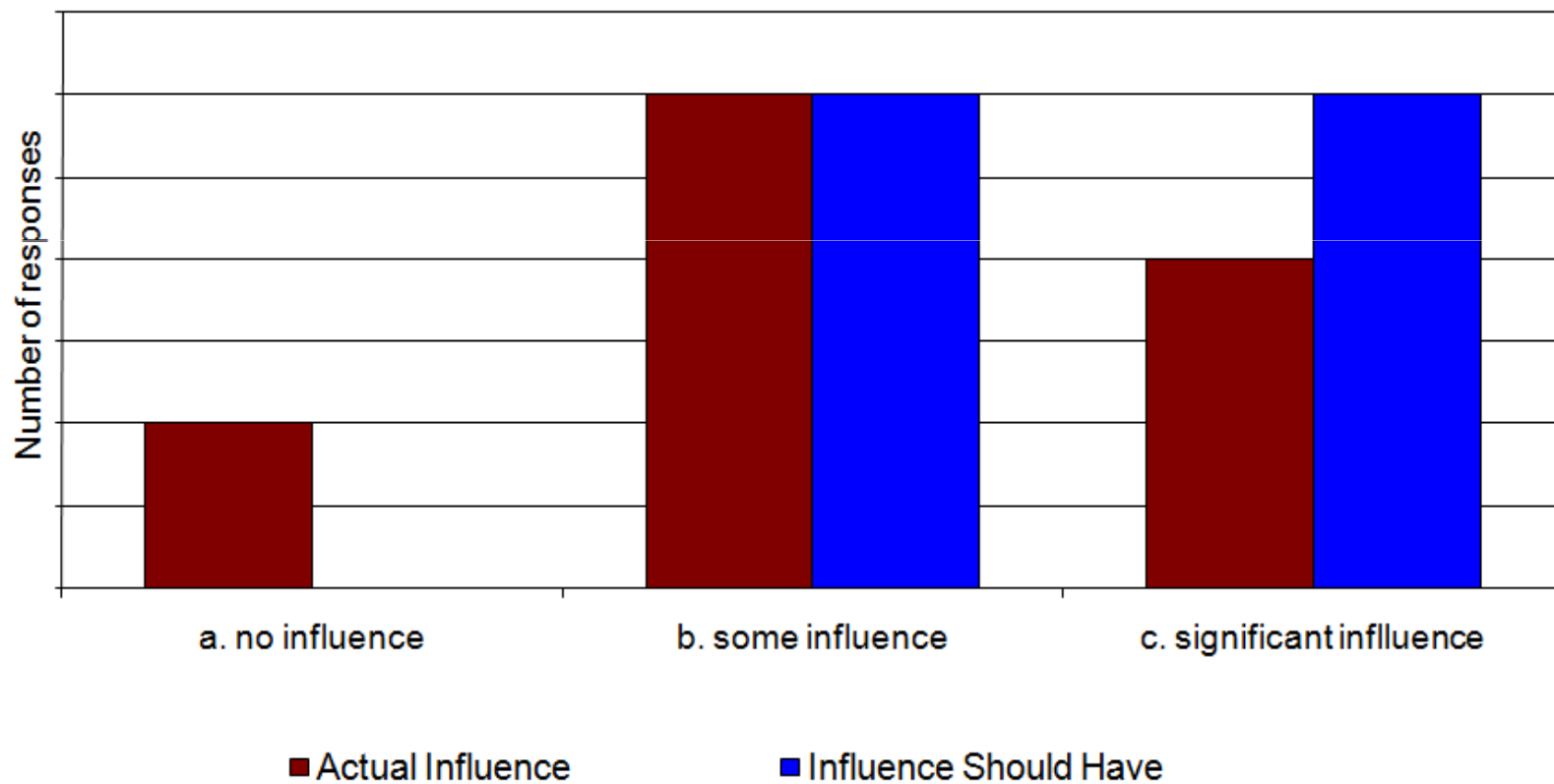
Key Question:

Would companies with pricing actuaries do better than those without pricing actuaries?

- History yet to prove
- Last soft market
 - CO's without actuaries failed
 - CO's with large pricing teams failed
- What could we do different this time?

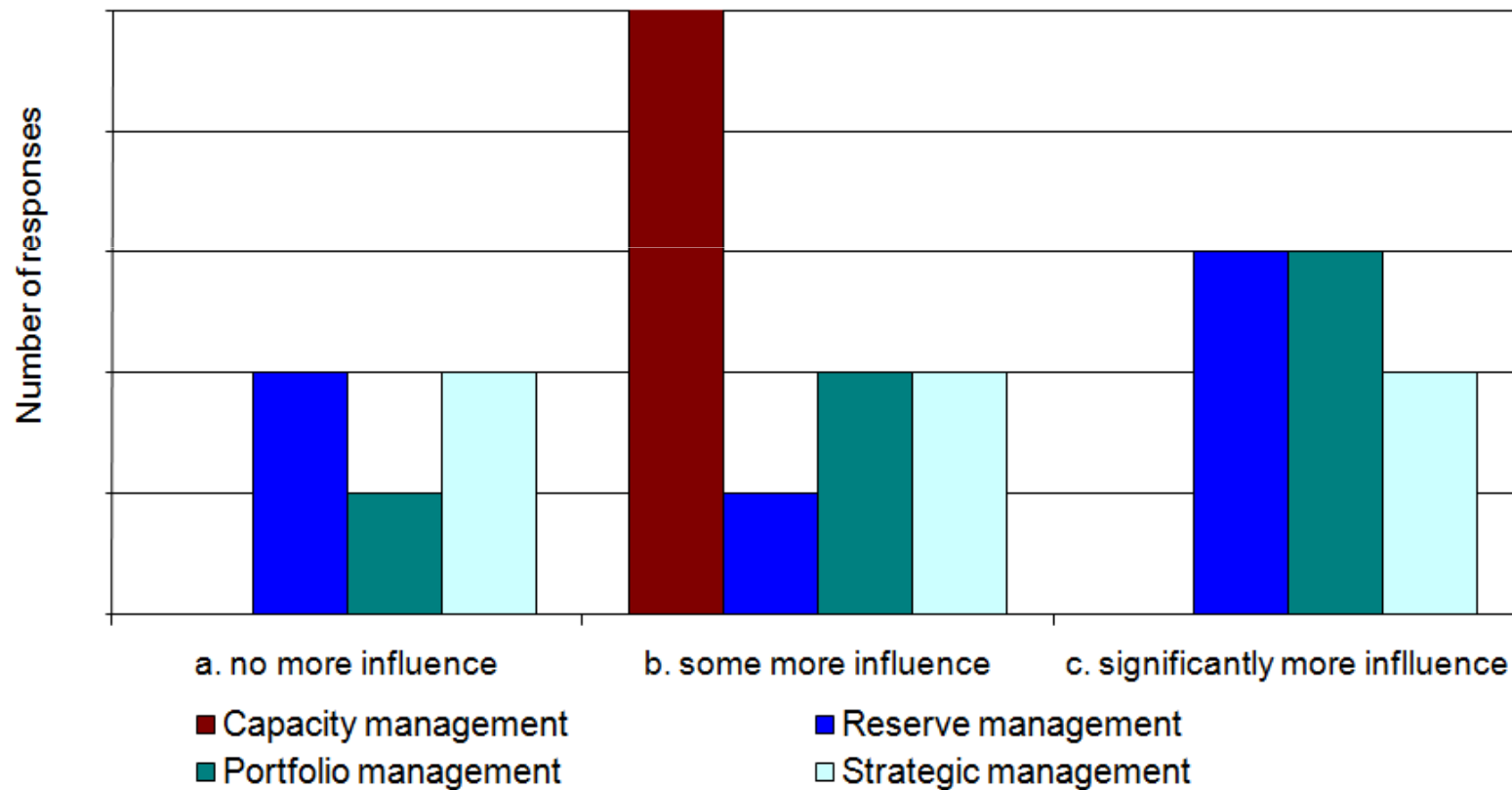
Current Influence vs. Expected Influence

Overall influence relative to last soft market



Current Influence vs. Expected Influence

Influence by area

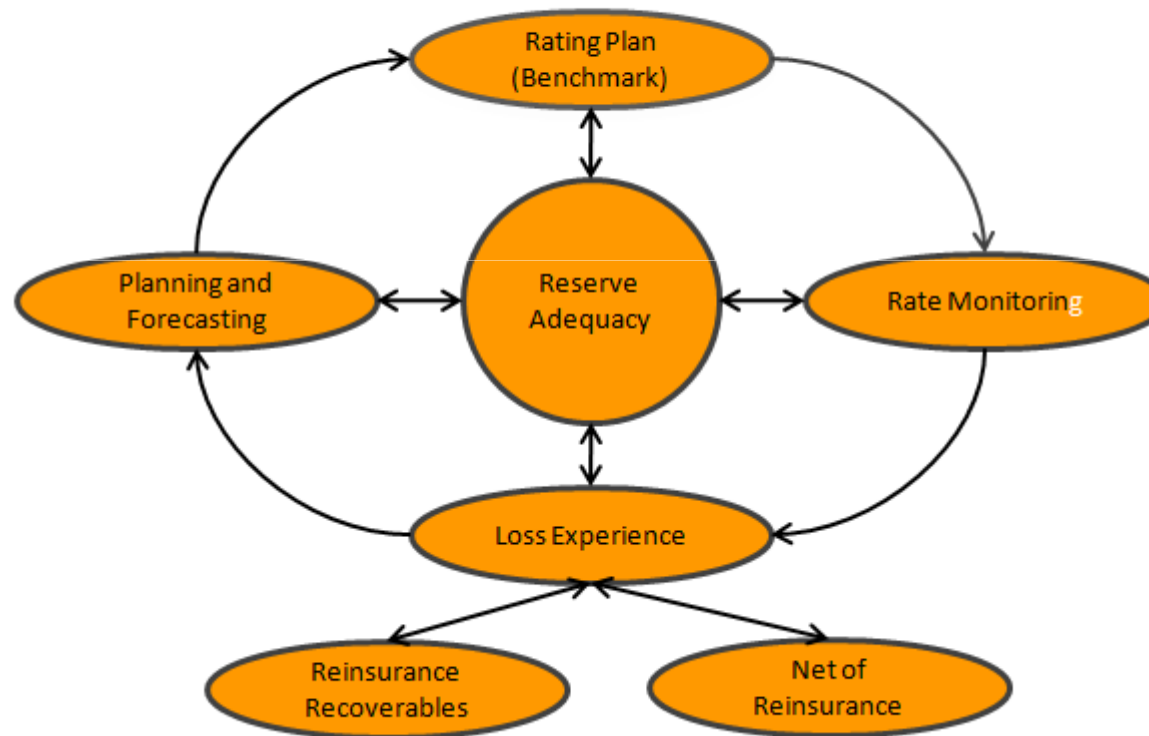


What Are We Doing Differently?

- Actuaries cannot prevent market cycle
 - No one can!
- More accurate management reports
- Ensure clear understanding of data provided
- Ensure understanding of impact of business decisions
- Active interaction with other business units

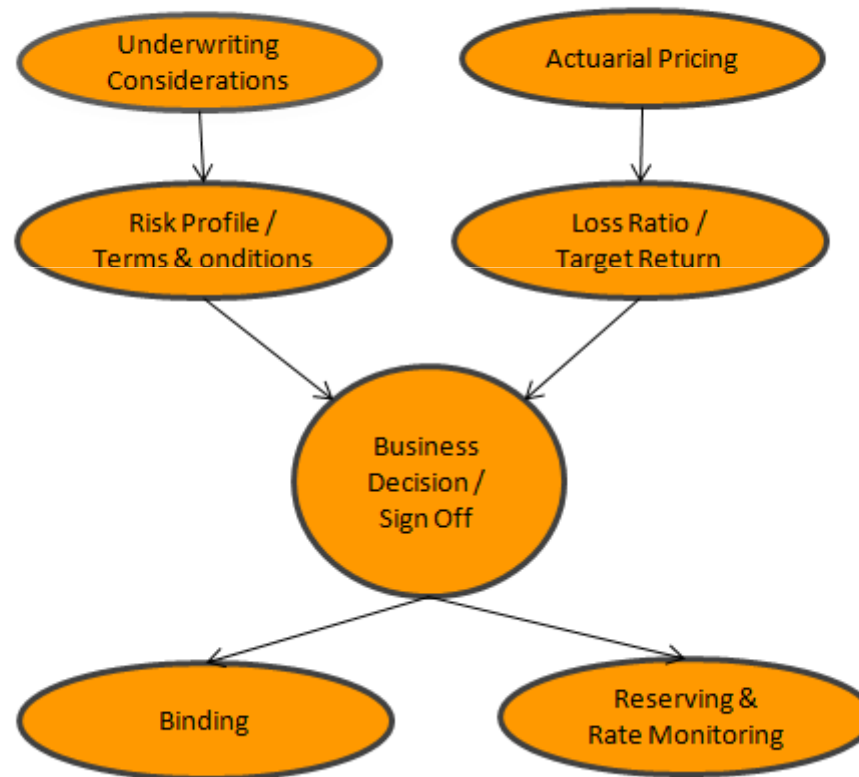
It All Comes Down to Reserving!

Insurance Context



It All Comes Down to Reserving!

Reinsurance Context



What Could We Doing Differently?

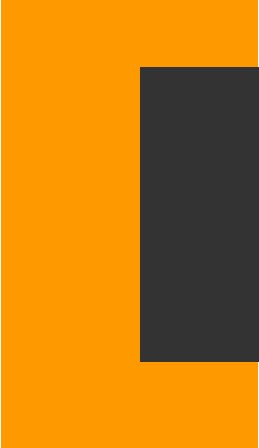
- Ensure all actuarial areas are joined up
 - Reserving isolated from pricing
 - Pricing isolated from capital modeling
 - Planning isolated from pricing
 - Capital modeling uses input from plan
- Raise awareness of actuarial concepts and methods within company
- Raise awareness of impact of change in assumptions

Whose Decision Is It Anyway?

- Binding individual risks
- Benchmarks
- Rating plans
- Rate monitoring
- Held reserves
- Plan loss ratios

Who do Pricing Actuaries Report to?

- Chief actuary (3)
- Chief underwriting officer (1)
- Line of business underwriter
- Finance officer (1)
- Other (1)

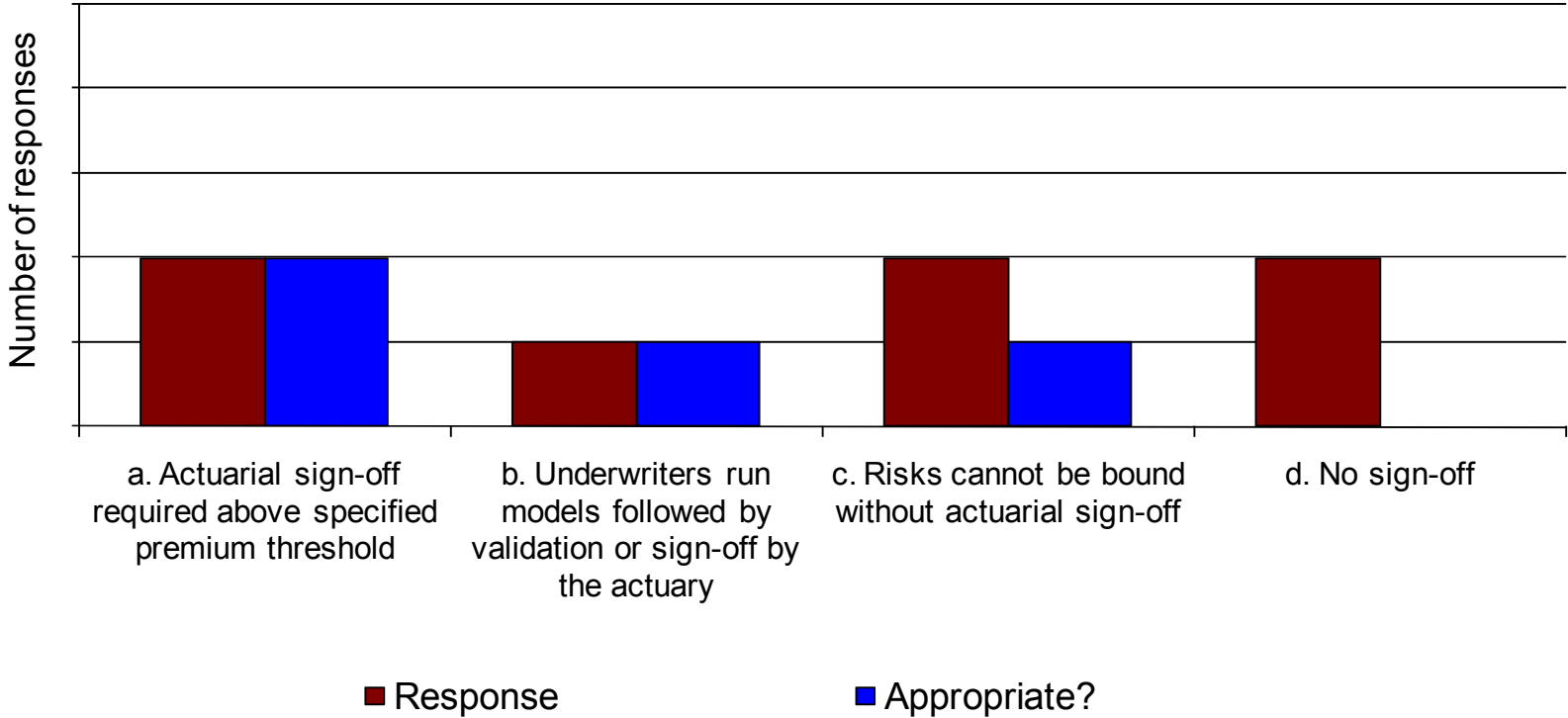


**Actuarial Influence and Value Added
Across Key Areas of Involvement**

Individual Risk Pricing

- Common actuarial sign off protocols
 - No sign off
 - Premium threshold
 - Risk type
- Who has final say?
- Who should have final say?
- Proportion of premium priced
- Where are results reflected?

Sign Off Protocols: Survey Results



Rating Models or Rating Tools?

- Increased need for rating tools
 - Ease of workflow
 - Automated calculations
 - Documentation
 - Lloyd's reporting requirements
- Rating model – actuarial value
- Rating tool – IT value

Rating Models or Rating Tools?

- Actuarial Goal – consistent benchmark
 - Objective rate monitoring
 - Market price vs. benchmark
- Rating database
- Link rating plan to loss ratio
- Over time develop technical rates

Renewal Rate Monitoring

- Process in place 2002 and post
- Need to distinguish between
 - Good process – run by actuaries
 - Accuracy – calculated by underwriters
- What is included?
 - Change exposure
 - Change limit / attachment
 - Other rating factors
 - “Soft issues”

Renewal Rate Monitoring: Real Need for Actuarial Accuracy

Rate Monitoring Using Exposure Changes

Benchmark premium assumes 20% commission

Min in Range	Max in Range	Max Premium in Range	Implied Load Per Million
0	1,000,000	46,750	46,750.00
1,000,001	5,000,000	60,775	3,506.25
5,000,001	25,000,000	100,775	2,000.00
25,000,001	50,000,000	138,275	1,500.00
50,000,001	100,000,000	183,275	900.00
100,000,001	200,000,000	233,275	500.00
200,000,001	500,000,000	308,275	250.00
500,000,001	1,000,000,000	358,275	100.00
1,000,000,001	2,000,000,000	408,275	50.00
2,000,000,001	5,000,000,000	498,275	30.00
5,000,000,001	10,000,000,000	548,275	10.00
10,000,000,001	15,000,000,000	585,775	7.50
15,000,000,000	Unlimited		5.00

Rate change = -13.06%

Answers = -13% to -27%

	Expiring (2007)	Renewal (2008)	Change
Turnover	150,000,000	250,000,000	18.01%
Deductible	50,000	50,000	0.00%
Deductible Factor	0.8	0.8	0.00%
Limit	10,000,000	15,000,000	
Attachment	10,000,000	15,000,000	
Excess Factor	1.50	2.00	33.33%
Commission	20%	20%	
Benchmark Gross Premium	249,930	393,240	57.34%
Benchmark Net Premium	199,944	314,592	57.34%
Bound Gross Premium	275,000	395,000	43.64%
Bound Net Premium	220,000	316,000	43.64%
Change in T&C			5%

Renewal Rate Monitoring: Actuarial Value

- Highly linked to reserve (in)adequacy
- Achieve consistency and accuracy
- Only add objective factors
- Understand “soft issues” included
 - Remove as much as possible!
- Link to benchmark or technical pricing
- Train underwriters!

New Business Monitoring: The Myth

Why is new business rarely monitored?

Going Soft by Stewart Mitchell, The Actuary
Magazine, 1/3/2008

“[...] In practice it is easier to ignore new business because details of the previous year’s risk may be incomplete. However, new business is typically written on worse terms than renewal business since the business needs to be attracted from the previous insurer, usually by offering a lower price or better terms.”

New Business Monitoring: Actuarial Value

- Expiring price is irrelevant
- Key question:
Relative to benchmark pricing, what is the difference between new and renewal business rates?
- Actuarial value – include new business in overall rate monitoring
 - New business monitoring significant impact managing this cycle

Rate Monitoring: Actuarial Value

- Rate change “seen” as target
- Target often “achieved”
- Underwriters’ perceptions
 - Rate increase = good
 - Rate decrease = bad
- Not linked to rate adequacy
- Not linked to loss experience

Who Assists Underwriters to Prepare the Plan?

- Reserving actuaries (0)
- Pricing actuaries (2)
- Chief Actuary (2)
- Other (2)

Planning and Forecasting

- Plan 4-6 months before year end
- Difficult to plan next month!
- Optimistic assumptions
- Recent 3-4 years booked at plan
- Compound effect
 - Optimistic rate monitoring
 - Low pegs
 - No new business rate index

Impact of Plan on Reserves

Year	Plan RC	Plan LR	Actual RC	Revised LR
2009	5%	81.5%	-7.5%	92.5%
2010	5%	84.8%	-5%	93.7%
2011	5%	95.2%	-5%	105%

- Further impact
 - Actual RC accuracy
 - New business monitoring

Would Actuaries Influence Results?

- Time will tell
- Reputational risk
- Operational risk – inadequate processes
- Pricing role evolving
- Actuarial value added
 - Impact on company's reserves
 - Management reports
 - Company business strategy