

2008 CAS Ratemaking Seminar
COM-3: Price Governance:
Comprehensive Approaches to Monitoring Price

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Agenda

Overview

Individual Renewal Price Monitoring

Portfolio Price Monitoring

Testing Your Monitor

Overview



“All models are wrong; some, though, are more useful than others and we should seek those.”

- McCullagh & Nelder, “Generalized Linear Models”

“Oh, people can come up with statistics to prove anything.
14% of people know that.”

- Homer Simpson

Overview

- There is no industry standard for a rate/price change calculation. Which means that all monitors are not the same.
- However, they should all have the same goal: Along with trend, rate/price change should...

HELP EXPLAIN AND PREDICT CHANGES IN EXPECTED LOSS RATIOS AND PROFITABILITY.

Overview

Example

	Red Sox Insurance	Yankees Insurance
2007 ELR	60%	65%
2008 Loss Ratio Trend	2%	2%
2008 Rate/Price Change	-5%	-5%
2008 ELR	Who has the lower 2008 ELR?	

Mechanically, It's the **Red Sox** but...

Overview

Example

Question #1: Do you monitor new and renewal business or renewals only?

Yankees: Renewals Only

Red Sox: Renewals Only

Question #2: What % of your business is renewals?

Yankees: 95%

Red Sox: 70%

Overview

Example

Question #3: Do you adjust your calculation for limits and attachment point (deductible) changes?

Yankees: Yes

Red Sox: No. Any renewal with a limit and/or attachment change is removed from the calculation. 50% of our renewals have a limit and/or attachment change.

Are you still confident that the Red Sox's 2008 ELR is lower?

"Comprehensive Approaches to Monitoring Price"

1. THE MODEL

- Is it reasonably predictive?
- Can it help steer the company towards good decisions?

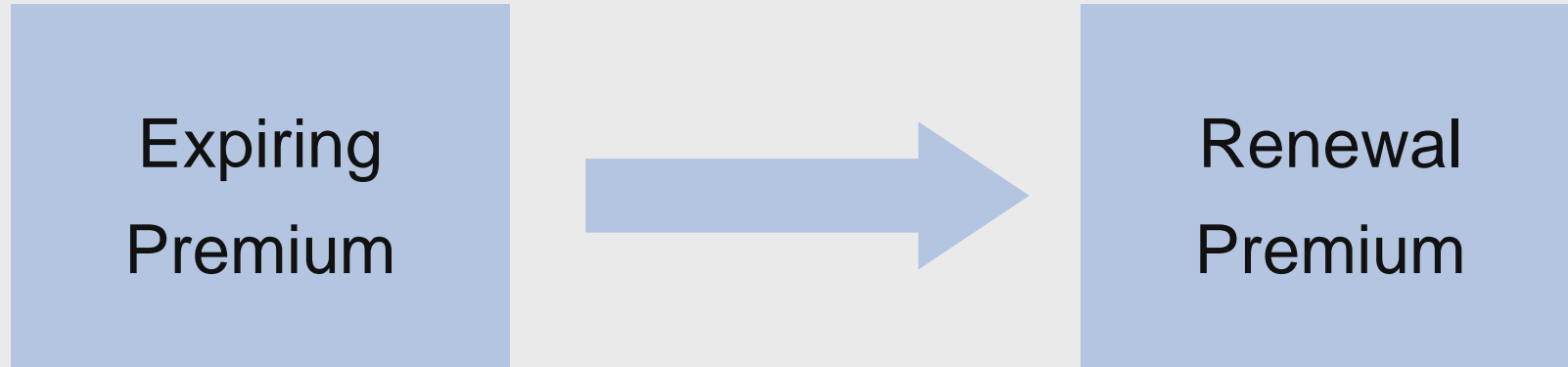
2. THE PROCESS

- Is it engrained in the company's culture?
- Does it influence pricing, reserving, planning, etc.?
- Does it influence individual account decisions?

Individual Renewal Price Monitoring



Individual Renewal Price Monitoring



- Exposure
- Coverage
- Rate

Individual Renewal Price Monitoring

INDIVIDUAL RENEWAL		
(1) 2007 Premium	\$10,000	
(2) 2008 Premium	\$10,500	
<u>Changes:</u>		
(3) Exposure	+4%	
(4) Limits & Attachments	+10%	
(5) Terms & Conditions	-2.5%	
(6) Re-Rated 2007	\$11,154	$= (1) * [(3) + 1] * [(4) + 1] * [(5) + 1]$
(7) Rate Change	-6%	$= (2) / (6) - 1$

Note: Premium may be Gross or Net of Acquisition Costs depending on intended use.

Individual Renewal Price Monitoring

(3) Changes in Exposure

- If exposure base is inflation sensitive (e.g. TIV), is it keeping up with inflation?
- Inflation vs. True Growth
- Are shifts in class codes captured?
- Is there a process in place to catch "cheating" (e.g. misclassifications, changes in insurance-to-value)?
 - Loss Control Inspections, Audits, Review of Financial Statements, etc.

Individual Renewal Price Monitoring

(4) Changes in Limits & Attachment Points

- ILF and Deductible Factor Tables
- If not adjusted, are policies with changes removed from the calculation? Is it material?

(5) Changes in Terms & Conditions (Coverage)

- Coverage extensions and exclusions
- The impact is often judgmental
- Is there an explicit premium charged for the coverage?
- If not, can an overall impact for the book be estimated?

Portfolio Price Monitoring



Portfolio Price Monitoring

INDIVIDUAL RENEWAL	
(1) 2007 Premium	\$10,000
(2) 2008 Premium	\$10,500
Changes:	
(3) Exposure	+4%
(4) Limits & Attachments	+10%
(5) Terms & Conditions	-2.5%
(6) Re-Rated 2007	\$11,154
(7) Rate Change	-6%



ALL RENEWALS
\$10,000,000
\$10,300,000
+3%
+2%
+3%
\$10,821,000
-5%

What about changes in Portfolio Mix?

Portfolio Price Monitoring Change in Portfolio Mix

Why it matters:

1. New business may be priced at a different level than renewal business.
2. Even if priced at same level, may have different loss ratios than renewals.
 - Less information on new business
 - Why are they moving carriers?
 - Manual rates for different class codes have different adequacies
3. Important that underwriters know they will be judged on new business adequacy.

Portfolio Price Monitoring Change in Portfolio Mix

Phase of the Cycle

SOFT / SOFTENING

HARD / HARDENING

Loss Ratios

New Business worse than
Renewal (may be
significant)

New Business may be
close to or better than
Renewal

Portfolio Price Monitoring Change in Portfolio Mix

Has the mix changed?

- Retention Ratios (renewal / prior year total)
- New Business Ratios (new / total)

Has the adequacy of new business changed?

- Compare to a benchmark (average renewal, expiring or manual rate)
- How do recent loss ratios for new and renewal business compare?
 - Long-tail lines – compare frequencies
 - Short-tail lines – compare loss ratios or frequencies

Portfolio Price Monitoring Change in Portfolio Mix

Are there indications that new business adequacy may change going forward?

- Change in Underwriting Guidelines
 - Change in Classes and/or Territories
 - Change in definition of an acceptable risk
- Change in Risk Selection Process
 - Declination Ratios, Hit Ratios
- Change in Loss Control Usage
- Where are we in the cycle?

Portfolio Price Monitoring Other Considerations

- Excess Policies
 - Is excess premium a percentage of underlying premium? If so, is it manual, final or re-rated premium? Has it changed over time?
 - Minimum Premiums
- Experience Rating
- What if it's all new business...

Portfolio Price Monitoring Other Considerations

What if it's all new business (e.g. Builders Risk, Contract Surety Bonds)?

- Create homogeneous segments based on the most important risk characteristics:
 - Builders Risk – Location (CAT areas), COPE, etc.
 - Surety – Credit quality, type of contractor/project, etc.
- Weigh together the average rate changes for individual segments.
- Works best if there is a stable mix among the segments.

Portfolio Price Monitoring

- Building a comprehensive price monitor takes time.
- In the meantime, capture the following:
 - Approved Loss Cost Changes
 - Approved Loss Cost Multiplier Changes
 - Average Discretionary Mod Changes
 - Impact of Shifts between Multi-Tiered Companies

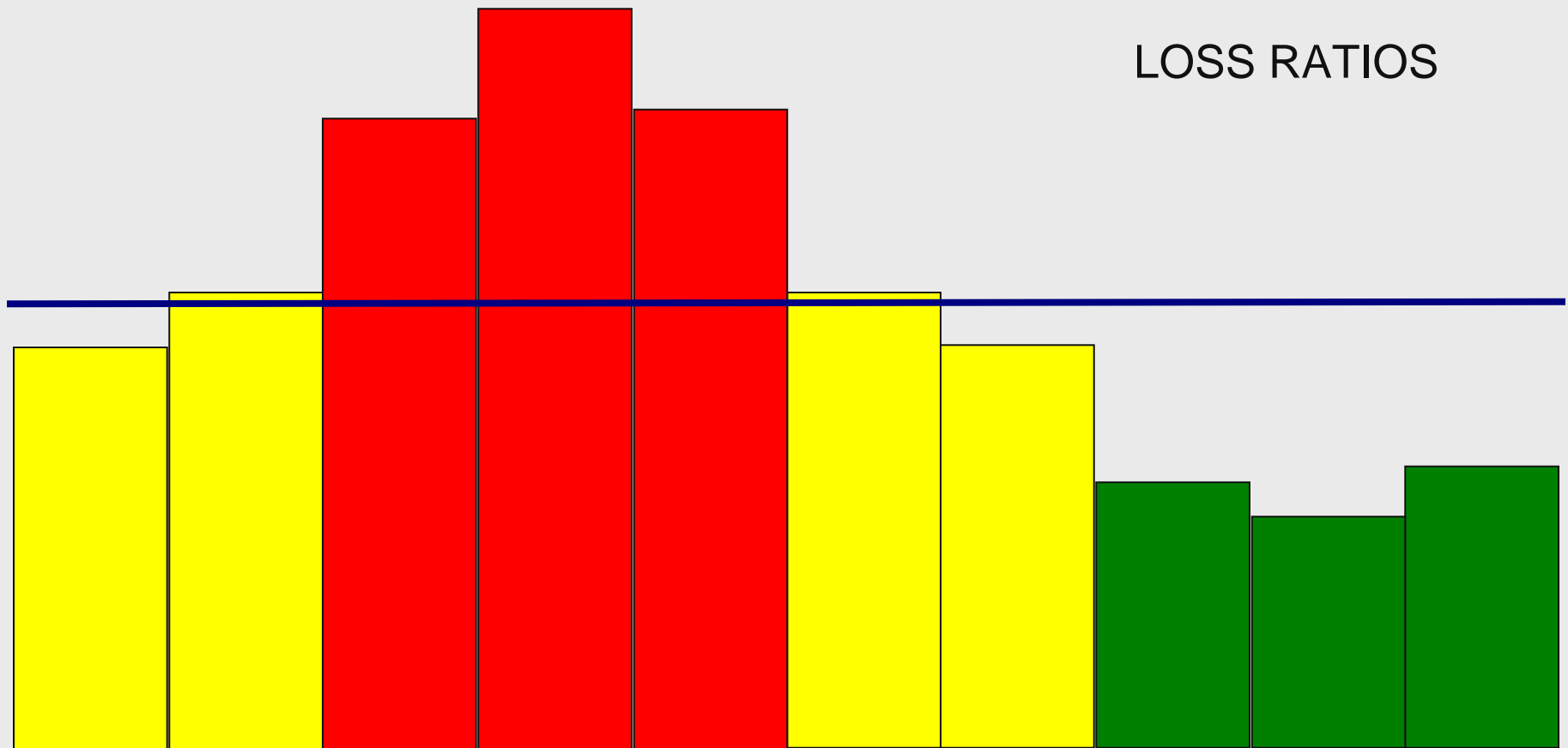
And Test the Monitor...

Testing Your Monitor



Testing Your Monitor

LOSS RATIOS



ON-LEVELING = BRINGING EVERY
YEAR TO THE CURRENT LEVEL

Testing Your Monitor

What if there's a residual cycle?



- Monitor may not be capturing all of the factors that influence changes in loss ratios
- Were catastrophe losses removed or normalized?
- What's missing from the monitor that may be material?
- When selecting a prospective ELR, know where you are in the cycle

What if there's a residual trend?



- Review trend factors
- Do you have a full cycle's worth of data?

Testing Your Monitor

Other tests:

- How does changes in Average Rate and Average Premium / Policy track with rate change? Can differences be explained (e.g. increase/decrease in limits or deductibles, shifts in mix of business)?
- How does rate change compare to industry benchmarks? Know your benchmark:

Account Size	CIAB (3q07)	Marketscout (August 2007)	Tillinghast CLIPS (3q07)
Small	-9%	-13%	not available
Medium	-15%	-13%	not available
<u>Large</u>	<u>-16%</u>	<u>-16%</u>	<u>-9%</u>
Average	-13%	-14%	-5%

Sources: CIAB (www.ciab.com), MarketScout (www.marketscout.com), Tillinghast CLIPS (www.towersperrin.com)

Testing Your Monitor

CIAB (www.ciab.com)

- The Barometer
- Survey of members (agents and brokers)

Marketscout (www.marketscout.com)

- Interviews with agents, brokers, insurers and reinsurers
- Surveys completed by agents

Tillinghast CLIPS (www.towersperrin.com)

- Data provided by insurers
- Participants receive a detailed report

Thank you very much for your attention.

Cameron J. Vogt

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