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# Umbrella Price Monitoring Gerard Palisi, FCAS, MAAA



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### Session Agenda

- Overview Palisi
- Common Price Monitoring Approaches Kundrot
- Industry Price Changes, Miscellaneous Issues Palisi
- High Excess Seth
- Questions & Answers All

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- Umbrella pricing generally consists of a collection of factors applied to lower reference layers; there is no Umbrella "rate". The standard notion of a "rate change" is not well defined.
- Umbrella pricing factors are not reviewed/published by industry advisory organizations.
- Broad, non-homogeneous spectrum of classes, attachments, company sizes & niches, marketing approaches (supported vs. unsupported), etc.
- Many variables in the rating, some objective and some subjective ...

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## Current Price Monitoring Issues

- In a softening market, it is particularly critical to monitor price movement for umbrella/excess, due to compounding effect of price decreases by layer (e.g. next slide)
- Many price monitors were implemented or enhanced during recent hard market. For the sake of consistent measurement, we need to continue getting these monitors, even if the news is bad. Beware of tweaks to the monitors.
- Details of price change measurement and monitoring are usually the responsibility of the actuary.



# Compounding effect of a 5% price decrease in Year 2 on each layer

	<u>Layer</u>	<u>Yr 1 Factor</u>	<u>Yr 1 Prem</u>	base	
	Primary	1.00	100,000		
	1 xs P	0.15	15,000	Primary	
	4 xs 1 xs P	1.15	17,250	1 xs P	
_	5 xs 5 xs P	0.35	11,288	5 xs P	
	10 xs P		43,538		
	<u>Laver</u>	<u>Yr 2 Factor</u>	<u>Yr 2 Prem</u>	base	Price Chg
	Primary	0.95	95,000		-5.0%
	1st mil	0.14	13,538	Primary	<b>-9.8</b> %
	4 xs 1 xs P	1.09	14,790	1 xs P	-14.3%
_	5 xs 5 xs P	0.33	9,419	5 xs P	-16.6%
	10 xs P		37,746		-13.3%

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# Industry Price Changes

- There is currently no umbrella/excess pricing support from advisory organizations, so no associated "industry" loss cost changes published
- Other public sources of "industry" rate changes for umbrella:
  - Council of Insurance Agents & Brokers' (CIAB): "Commercial Property/Casualty Market Index Survey"
  - MarketScout<sup>SM</sup>: "Market Barometer"
  - RIMS "Benchmark Survey"

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### CIAB Survey

- Council of Insurance Agents & Brokers (CIAB) releases a quarterly survey of Commercial P&C price changes
- A publicly available source of industry price change data for Umbrella
- Includes distribution by rate change band
- Based on voluntary survey of brokers information may be anecdotal, biased, imprecise, i.e. unlikely to be "actuarially sound"
- However, some argue: "How far off could it be?"

# CIAB Survey – Umbrella Price Changes





CIAB Compared to Sample Mix of Umbrella Insurers

- A premium-weighted "composite" price change was derived for a sample mix of umbrella writers, for years 1995 – 2004
- Composite is dominated by Global/National and larger Regional carriers
- Variance of price changes is very high during recent hard market years (2<sup>nd</sup> Half 2000 - 1<sup>st</sup> Half 2004)
- Purpose of the comparison: to check "reasonableness" of sample price changes, and hopefully to understand the differences.
  - Disclaimer: this sample may not be representative of "industry" results.





# Sample Mix of Insurers -Composite Price Change



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# Sample Mix of Insurers – Showing Individual Company & Combined Price Changes



# CIAB versus Sample Mix

- CIAB rate change estimates are published quarterly; annual averages are not published, and cannot be accurately computed from the available data
- For equivalent experience period, sample composite is similar to the CIAB "max", i.e. the highest quarterly value for the given year.

#### Why the differences?

- Sample composite reflects a different mix of insurers, more skewed to the large, national carriers?
- CIAB Survey includes price changes on "new" business?
- Differences in calculation and adjustments?
- Differences in timing client data lags broker data?

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## CIAB versus Sample Mix

Umbrella Rate Changes: Comparison of CIAB vs. Sample Mix 70% 60% 50% 40% CIAB min CIAB avg 30% CIAB max Sample Mix 20% 10% 0% 2000 2001 2002 2003 2005 200 -10%

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# CIAB vs Sample Mix – CIAB Shifted One Quarter



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#### Idea: rate change info lags "market" info by one qtr

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# Change in Price Per Million (PPM)

- Price Per Million (PPM) is defined as premium divided by policy limit (in millions).
- The average PPM for a given limit-attachment combination can be calculated from limit-attachment profiles in the submission, if both premium and policy count distributions are provided.
- The change in average PPM can proxy the price change, if an exposure change assumption is reflected. Note that the average PPM metric includes both new and renewal business.

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This estimate can be compared to renewal price change, as a measure of the new business effect.

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# Change in Average PPM (with 3% exposure growth) vs. Price Change



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# Price Change Corroboration via Audit

- Individual account price changes are often part of the underwriting file, or can be calculated from the file information. A survey of individual account price changes can therefore be done as part of an underwriting audit.
- This sample of individual changes can be compared to the client's aggregate price change.
- A review of individual files will also indicate whether price changes are primarily due to changes in premium, or changes in exposure.
- Also of interest: the dispersion of price changes around the average. May be surprisingly large for Umbrella/Excess.

## New versus "Lost" Business

- While many companies now monitor their new business price levels, very few track their "lost" business, i.e. renewal accounts that were lost to another carrier. Reliable data on such biz is scarce.
- Note that the price changes for all lost business fall outside of conventional renewal price monitors. In the current market, anecdotal evidence suggests lost business moves for price decreases in excess of -10%, perhaps -20% or more.
- New business price monitors are generally not indicating such decreases (one company's lost biz is someone else's new biz!). This raises the issue of differing standards of price adequacy among insurers.



Umbrella Price Changes – Miscellaneous Rating Issues

- The onleveling process assumes consistency of limit and attachment profile over time. This assumption is often violated for large, national account Umbrella/Excess programs.
- The onleveling process assumes a relatively stable mix of business over time. This assumption is often violated for large, national account Umbrella/Excess programs.

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#### Umbrella Price Change Checklist

- Does calculation adjust for changes in exposure? limit? attachment? If so, how exactly is it done?
- Are any other variables adjusted for, e.g. commission or terrorism?
- Is the calculation done on the total limits premium, or some benchmark layer premium, e.g. 1<sup>st</sup> mil umbrella premium?
- Are any types of policies excluded from the calculation, e.g. minimum premium or high excess policies?
- Are ILF's in limit/attachment adjustment consistent with ILF's used in pricing?
- Is new business pricing monitored? If so, how?
  - Is there a measure of price deviation relative to a benchmark?

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