

CAMAR – 2008 Fall Meeting

Predictive Modeling - Next Steps in Pricing



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Legal disclaimer – These slides and my comments do not necessarily reflect the position of the CAS, CAMAR or the Pa. Ins. Dept.

- Predictive Modeling & Product Innovation
 - Insurance regulation
 - Practical considerations
 - Comments about rate filings
- Price Optimization
 - The next frontier?
 - Thoughts or questions

- Why do insurance specific laws and regulations exist?
 - To codify “good” activities that were already occurring in the market
 - To prohibit “bad” activities that were considered to be abuses in the market
 - ...
 - To protect consumers

- What specific activities do insurance laws or regulations address?
 - Rating **
 - Require filings
 - Establish criteria for rates
 - Underwriting **
 - Other activities – policy provisions, claims, solvency,...

- What purposes do insurance rate filings serve?
 - General purposes
 - Specific/special purposes

- **Rate filings – general purposes**
 - State laws require that rates not be excessive, inadequate or unfairly discriminatory
 - “A rate is reasonable and not excessive, inadequate, or unfairly discriminatory if it is an actuarially sound estimate of the expected value of all future costs associated with an individual risk transfer.” (CAS Statement of Principles Regarding P&C Insurance Ratemaking & ASOP 9)

- Rate filings – specific purposes
 - Characteristics that are forbidden for use
 - Differences between rating & underwriting
 - Characteristics that are required to be used

Note: Even if insurance product filings weren't required, many insurance specific laws & regulations would still likely exist...

- Practical considerations – 1
 - Filing requirements may vary significantly (i.e., prior approval,...)
 - Both by state and by product
 - General rules may have exceptions (Ch. 130)
 - Allow sufficient time for regulatory review

- Practical considerations – 2
 - Regulators, insurers and consumers struggle with competing interests
 - Competition & product innovation
 - Minimal consumer disruption
 - Fairness
 - Disclosure
 - Accurate application of filed rates & rules!

- Practical considerations – 3
 - It may be acceptable or (or even encouraged) to give different treatment to new business and renewal business
 - Renewal business is usually “more” protected
 - Certain accidents and violations restricted
 - Certain financial stability info use restricted
 - Permissible reasons for refusing to write, cancel or non-renew

- Practical considerations – 4
 - Expectations or requirements on the level of filing support may vary
 - Again, by state & by product/line of business
 - By application of the proposed rates (i.e., new business v. renewal business)
 - By level of disruption
 - For other reasons – statutory rating variables

- Practical considerations – 5
 - Know what to file (in PA...) – Pt 1 of 2
 - Rates – file every rule and rate, rating plan and every modification...
 - Underwriting – keep mutually exclusive coverage eligibility criteria on file at the company (i.e., don't file), but may be requested and examined by Market Conduct staff

- Practical considerations – 6
 - Know what to file (in PA...) – Pt 2 of 2
 - Tiers (rating) – new business tier placement
 - Based on mutually exclusive criteria kept on file at co.
 - Not filed for prior review and approval, but may be requested and examined by Market Conduct staff
 - Must not be increased at renewal...
 - Must not be duplicative of other rating criteria
 - All tier factors (with labels) must be filed

- Rate filing review – it...
 - Adds to the level of compliance with other insurance laws & regulations
 - Provides another layer of peer review
 - Allows additional monitoring and sensitivity to less competitive areas
 - Substitutes for a lack of perfect information and/or sufficiently sophisticated consumers

- Rate filing review – types of concerns
 - No support
 - The “support” poorly fits the proposal
 - Premium reversals
 - Odd or large steps between classes
 - Slicing the data too thin
 - Reliance/over-reliance on competitors rates

- Rate filing review – more concerns
 - No support – transparency
 - Confidential and proprietary
 - Rates and rules must be filed & public
 - Company specific data and analysis can be given confidential treatment
 - SERFF facilitates confidential treatment of data
 - Be encouraged to make some level of support publicly available!

- Price Optimization – a summary
 - I understand this concept to involve maximizing profit based on “better” information.
 - I also believe that it is a “newer” concept, not largely in use in U.S. p&c ratemaking.

- Price Optimization – thoughts #1
 - In a way, the concept seems similar to credibility weighting with competitors information, but taken to a new degree.
 - The regulatory standard is not always “not excessive, inadequate or unfairly discriminatory”...

- Price Optimization – thoughts #2
 - How does the idea reconcile with the actuarial ratemaking principle mentioned earlier?
 - How does maximizing profit fit with regulatory review on statutorily required coverages?
 - Is risk segmentation for the sake of competitiveness acceptable?

- **Price Optimization – thoughts #3**
 - For insurers, does the idea of maximizing profit on one set of policyholders to be shared with all policyholders seem consistent with the company's purpose or By-Laws?
 - For many mutual companies, their By-Laws enable their members (policyholders) to share in the earnings of the company...

- **Price Optimization – thoughts #4**
 - How does this concept fit with the Risk Classification Statement of Principles (AAA Committee on Risk Classification)?
 - Enhanced Fairness - “Differences in prices among classes should reflect differences in expected costs with no intended redistribution or subsidy among the classes.”