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IRES Career Development Seminar 2017

Price Optimization: Is It Still a Thing?

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August 15, 2017

The Center for Economic Justice

CEJ is a non-profit consumer advocacy organization dedicated to representing the interests of low-income and minority consumers as a class on economic justice issues. Most of our work is before administrative agencies on insurance, financial services and utility issues.

On the Web: www.cej-online.org

Why CEJ Works on Insurance Issues

Insurance Products Are Financial Security Tools Essential for Individual and Community Economic Development:

CEJ works to ensure ***fair access*** and ***fair treatment*** for insurance consumers, particularly for low- and moderate-income consumers.

Insurance is the Primary Institution to Promote Loss Prevention and Mitigation, Resiliency and Sustainability:

CEJ works to ensure insurance institutions maximize their role in efforts to reduce loss of life and property from catastrophic events and to ***promote resiliency and sustainability*** of individuals, businesses and communities.

In August 2013 Letter, CFA Calls on Insurance Regulators for Action on Price Optimization[1]

CFA: According to a recent survey of 78 major insurance companies, 45 percent of insurers with gross written premiums over $1 billion currently optimize their prices for auto insurance and an additional 29 percent are planning such action in the near future. Among smaller insurers, 12 percent are now using price optimization for auto insurance with 41 percent planning adoption of Price Optimization soon.

The survey finds that 55 percent of insurers "consider price elasticity" in setting prices.

Another study found that pricing strategies like PO weaken the buyer's position when shopping for cars, may make them more susceptible to overpaying for car insurance since many lower income consumers are less likely to compare prices before buying goods and services.

[1] http://consumerfed.org/pdfs/price-optimization-letter-state-auto-insurance-commissioners.pdf

CFA cites marketing material of Towers Perrin and Earnix

Towers Perrin defines Price Optimization as follows: Traditionally, many industries, including the insurance industry, have priced their goods and services based on supply-side factors (cost to produce the product plus a margin for profit). However, this costplus-profit approach leaves a lot of money on the table in the form of lower margins from existing customers and lost revenue from prospective customers. According to AMR Research, between 1% and 5% of value is lost across all industries because companies do not know enough about their customers' willingness to pay or don't have the ability to profit from this knowledge. Pricing can be the most potent weapon companies have. When a more sophisticated pricing approach is implemented, operating profit increases significantly, much more than when other factors such as variable cost, volumes or fixed costs are adjusted....

Effective price optimization allows a property/casualty insurer to increase and decrease premium prices based on a combination of marketplace variables, including (but not limited to) product demand, certain customer characteristics and the competitive landscape.... The final step and culmination of this work is to develop a new pricing structure that optimizes profit per customer — in other words, that maximizes profitability subject to a minimum volume of business.... Having established the optimal load for base profit, the impact of varying profit loadings on certain segments of the portfolio can be tested in subsequent iterations. For example, the company may wish to target segments that show above-average conversion rates and/or lower-than-average competitiveness, which may benefit from increased profit loadings and vice versa.

Maryland Issues Price Optimization Bulletin, October 2014:

"Unfair Discrimination in Rating"

It has come to the attention of the Maryland Insurance Administration that some insurers are using "price optimization" to rate insurance policies in Maryland. Price optimization refers to the practice of varying rates based on factors other than the risk of loss, such as the likelihood that policyholders will renew their policies and the willingness of certain policyholders to pay higher premiums than other policyholders. The MIA has determined that the use of price optimization results in rates that are unfairly discriminatory. . . .

24 States and the District of Columbia Have Issued Bulletins Regarding Price Optimization and Unfair Discrimination

Most Issued Prior to NAIC White Paper on Price Optimization

NAIC White Paper – Contradictory Messages

Deviating from Cost-Based Pricing is Bad, Unless Regulators Like It.

Rate Capping, Transition Rules acceptable.

Rate Capping is not a deviation from cost-based pricing, but skepticism about actuarial indications.

Transition Rules – different treatment of existing versus new policyholders of the same risk and hazard. Regulators do not have authority for such rules, although no legal challenge will come from industry.

Industry Arguments: This is Nothing New, We've Always Done It

Reality: Historical deviation based on broad risk classes, rate selections below suspect actuarial indication.

Reality: In era of big data, detailed personal consumer information for granular – individual – deviations from cost-based pricing.

Why regulators have limited tools and resource

Massive pricing models with third party algorithms

Limited technical and computational resources at the state

Regulatory framework created for different era

Reliance on insurer representations

Not a criticism of state regulators – statement of facts

Proposal for NAIC technical resource for states on complex models

In response to Big Data Working Group charge, NAIC should add resources to provide technical assistance to states' regarding complex models used by insurers for pricing, fraud detection, claims settlement, marketing and other purposes identified by the states.

1. An actuary experienced with new and emerging property-casualty pricing models and modeling software;
2. A data scientist experienced with data mining and predictive analytics of large data sets;
3. An economist or statistician experienced with economic and statistical models and testing of data sets and data models ;
4. Data storage and processing capability and computer hardware and software to support the work of the three additional staff. And
5. An existing or new NAIC staff member to serve as the primary contact with the states to accept, coordinate and organize the above resources for states' request for technical assistance related to complex models.

While the variety and scope of states' requests for technical assistance related to complex models may be broad, the following prohibitions are part of the proposal and should be clearly understood.

1. NAIC staff will not accept and will not respond to any request for a regulatory opinion, including, but not limited to requests regarding a model's compliance with state law.
2. NAIC staff will not initiate contact with or respond to an inquiry from any insurer or company whose model for which a state has asked NAIC staff for assistance. The state is responsible for requesting information from and communicating with an insurer or company.
3. NAIC staff will provide the results of any review – the answers to the questions posed by a state to the NAIC staff – only to the state requesting the assistance. If a state wants to share information with another state, such disclosure is the state's decision consistent with the state's responsibility to comply with requirements regarding sharing of non-public information with other regulators.

Claims Optimization

Same technology – consumer demand models based on individual personal consumer information – used in claims settlement as pricing.

Example: First Notice of Loss provided by vehicle with near instantaneous claim settlement with 75% likelihood of acceptance by claimant.