



Consumer Federation of America

August 29, 2013

RE: Many Auto Insurers Filing Unfairly Discriminatory Auto Insurance Rates
Price Optimization Used to Raise Rates Above the Cost-based Level

Dear Commissioner or Director:

I am writing on behalf of the Consumer Federation of America to express concern about the practice of Price Optimization (PO), a practice where premiums are set based on the maximum amount a consumer is willing to pay, rather than the traditionally accepted methods of calculating premiums based on projected costs, such as claims, overhead and profit. We are particularly concerned about the use of PO in determining premiums for auto insurance.

There is considerable evidence that the practice of Price Optimization is widespread, actuarially unsound and unfairly discriminatory. We request any information you are able to provide on the use of PO in your state. If PO is in use, please provide any information on the steps you are taking to end this practice, which produces unfairly discriminatory auto insurance premiums, illegal in every state.

Background

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.¹ The survey finds that 55 percent of insurers “consider price elasticity” in setting prices.²

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.³

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 cost-plus-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

¹ “2013 North America Auto Insurance Pricing Benchmark Survey,” Earnix, Slide 19.

² Ibid, Slide 14.

³ *From Poverty, Opportunity: Putting the Market to Work for Lower Income Families*. Washington, DC: The Brookings Institution, 2006.

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.⁴

In other words, by using price elasticity models, an insurer can raise the price of auto insurance for some segments of the population who are unlikely to change insurers if the premium price goes up above the cost-based level through application of Price Optimization.

In a webinar “Insurance Price Optimization: Keys to Success,”⁵ a presenter states that “The traditional pricing methodology was cost-centric” and proceeded to explain how to change that. “Pricing optimization engines allow for daily pricing scheme changes...” One example of Price Optimization, using samples to test the price, suggested the insurer could take a 1% sample:

EXAMPLE: On 1% of customers apply the following test model:

- 1st 10% increase price 0.5%
- 2nd 10% increase price 1.0%
- 3rd 10% increase price 1.5%
- Etc....”

Price Optimization Produces Illegal, Unfairly Discriminatory Prices for Auto Insurance

Under Price Optimization, after prices are established using cost-based ratemaking methods, the prices are adjusted within rating segments based on such factors as the competitive situation for that segment. If a segment is unlikely to change insurers if prices go up more, the prices are raised to the “optimum” level. Thus, two policyholders with identical risks as determined by cost-based methods would pay different prices for the same policy. This is classic unfair discrimination. For instance, the NAIC Property and Casualty Model Rating Law [states](#) the following as the primary rating standard “Rates shall not be excessive, inadequate or unfairly discriminatory.” All states prohibit unfair discrimination in insurance pricing.

Price Optimization Clearly Violates Current Casualty Actuarial Society Ratemaking Principles

It is clear that Price Optimization is not actuarially sound and is unfairly discriminatory in that it moves pricing away from its historic cost-based approach. This cost-based approach has been widely accepted as the basis of proper ratemaking. For example, in the Casualty Actuarial Society (CAS) Forum of winter 2009, Mike Miller, FCAS, wrote an article, “Disparate Impact and Unfairly Discriminatory Insurance Rates” Finding that:

⁴ Price Optimization: A Potent Weapon for Innovative Insurers, 2007.

⁵Nicholas Michellod, Insurance Analyst, Celent, May, 2011. Webinar hosted by Earnix

Historic actuarial literature, general insurance literature, and legislative histories reveal ‘unfairly discriminatory rates’ to be a cost-based concept. A rate structure is unfairly discriminatory if the insurance premium differences between insureds do not reasonably correspond to differences in expected insurance costs.

But this historic requirement is under attack by those seeking to set rates using PO, rather than cost-based considerations.

Attempts by Insurers to Surreptitiously Change CAS Principles Have Failed

Using Price Optimization, rather than the cost-based approach fails to meet actuarial standards. On October 18, 2012, the CAS presented an aptly named webinar, “Price Optimization vs. Actuarial Standards” where questions were raised on the practice of adding things to “cost-based analytics,” things such as demand considerations (how much can rates be raised above cost-based price to reflect inertia in certain market segments) and competition.

The panel addressed the following questions:

- “Price Optimization – How does it fit with the actuarial profession?” (Noting that “cost-based analyses are clearly actuarial,” but not saying the same about demand and competitive considerations.)
- “Is putting the three considerations together an actuarial exercise?”
- “Is it ratemaking?”
- “Is it in compliance with the Statements of Principles and Actuarial Standards of Practice?”
- Do the ratemaking standards cited above “mean that Price Optimization is NOT ratemaking” (Emphasis in original)
- “Should (or may) an actuary consider outcomes other than cost when making rates?”

One panelist said that insurance regulators have a duty to control the use of Price Optimization but that the CAS and the industry do not have a duty to warn them that it is developing PO or that PO is currently in use. One panelist noted that state insurance regulators are “at an incredible disadvantage” when they attempt to analyze things like Price Optimization.

Another panelist said (twice) that the use of Price Optimization “could be unethical.” Another said state laws requiring that rates not be unfairly discriminatory leads to tension since “Price Optimization does advantage one segment over another...”

Some of the panelists admitted that there is a tension between the CAS Standards and the use of Price Optimization. One said that the CAS must revisit the Standards to “get up to date.” When asked if the actuarial Standards had to be changed so Price Optimization could comply, one panelist answered, “Yes. The tension is there and must be relieved. We need a safe harbor.”

So, without explaining that PO was involved, The CAS proposed changes to the Statement of Principles Regarding Property and Casualty Ratemaking, with comments due from members of the CAS by June 10, 2013.

CFA filed a statement in Opposition to the CAS Move to Alter the Actuarial Principles

I filed the attached [comments](#) with the CAS President on May 17, 2013, copies to the NAIC President and CEO and some leaders of the C and D Committees. In it, I explain in detail why the proposed changes to

the Principles open the door to making PO meet actuarial Standards' muster, though this goal is not stated in the draft or other materials I have read pertaining to the release of the draft.

California Commissioner Jones Has Termed PO to Be Unfairly Discriminatory and the CAS Actuarial and Statistical Task Force Has Expressed Concern That PO Could Conflict with State Laws

On May 21, 2013, Commissioner Jones of California sent the attached [letter](#) to the CAS in which he highlighted that the proposed language “appears to open the door to allow new pricing schemes such as ‘price optimization’ to enter the discussion of actuarially sound ratemaking.” Commissioner Jones went on to say that “There are no differentials allowed (in California) based on whether the applicant or insured is more or less likely to look elsewhere for a lower price; we would consider such distinctions to be unfairly discriminatory” (Emphasis added).

On May 22, 2013, the Chair of NAIC’s Casualty Actuarial and Statistical (C) Task Force, Richard Piazza (LA), wrote to the CAS President regarding the proposed Principles as follows: “Many on the Task Force are concerned with the shift of emphasis from loss based ratemaking principles to principles that encompass subjective market driven ratemaking.” He also questioned, “how this concept would not conflict with state rating laws that require rates not to be excessive, inadequate and unfairly discriminatory.”

The CAS has indicated to me that it is reconsidering the changes in Principles and will reissue any changes for further comment.

Half of Large Insurers Are Already Using PO, Requiring Immediate, Strong State Action

The survey quoted above tells us that almost half of large insurers are already using PO in this country. So we ask you:

- Is PO in use in your state?
- Have you approved any such use of PO?
- Have you researched any behind-the-scenes, unapproved use of PO in your state?

In addition, please send us copies of any filings you have received where PO is proposed for use, including any action you have taken on such filings.

In the insurer survey, insurers listed the seven “top challenges in their pricing process.” The first (most important) challenge is “Effectively Incorporating Knowledge of Consumer Price Elasticity.” The sixth challenge is “Ensuring Regulatory Compliance.”⁶ It is time to make “ensuring regulatory compliance” number one. You must act to stop the use of PO in your state since it is both actuarially unsound under current CAS Principles and produces rates that clearly are unfairly discriminatory.

Sincerely:



J. Robert Hunter
Director of Insurance

⁶ “2013 North America Auto Insurance Pricing Benchmark Survey,” Earnix, Slide 16.