July 26, 2021

Steven E. Seitz
Director
Federal Insurance Office (FIO)
U.S. Department of the Treasury

Attention: Alex Hart Senior Insurance Regulatory Analyst
FR Doc. 2021-11167

Dear Director Seitz:

On behalf of the Automobile Insurance Committee of the American Academy of Actuaries,[1] I appreciate this opportunity to provide the following comments regarding the Federal Insurance Office (FIO) request for information (RFI) on the FIO Auto Insurance Study, as noticed by the Treasury Department in the *Federal Register* on May 27, 2021. Our comments are organized according to the questions as posed in the Notice.

Data Analysis

1. Please provide your views on FIO updating its 2017 FIO Affordability Study. How could the 2017 FIO Affordability Study methodology and reporting be improved? What time period should be covered in an updated study? Should FIO update the study on a periodic basis, and if so, how frequently?

The insurance marketplace benefits our economy and society, and therefore affordability of insurance is important to consumers and a well-functioning marketplace. One thing different about insurance, compared to other products or services, is that when an insurer quotes a price or insures a vehicle, the insurer does not know in advance what it will ultimately cost to provide coverage. Insurers must estimate what the cost will be. Increased sophistication in this process as well as competition has enhanced the auto insurance market overall, and has been a benefit for consumers. Such cost-based pricing is a fundamental principle of insurance. Therefore, we suggest that any study of affordability also reflect the costs (claims costs, expenses, etc.) and not just the premium charged. We believe that this aspect is more relevant to the healthy functioning of the automobile insurance marketplace than a view solely on price versus income, for example. If any threshold is used to determine affordability in the study (such as the 2% of income threshold), then we believe that the rationale for using any such threshold should be made clear. Any conclusion about affordability as it relates only to insurance premiums as a portion of income and not to underlying loss- and expense-related factors may be incomplete or misleading and could fail to shed light on other fundamental phenomena driving insurance costs (not to mention drivers of income and wages). It is also worth noting that state laws generally require that rates shall not be excessive, inadequate, or unfairly discriminatory.They are regulated for compliance in the jurisdictions where they

[1] The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

are used. Those jurisdictions may intervene on behalf of or respond to complaints by consumers where problems may arise. Some jurisdictions approve personal auto insurance rate increases before they are effective.

An option to consider is to utilize the methodology in the 2017 Missouri Department of Insurance (DOI) study,[2] having the National Association of Insurance Commissioners (NAIC) or states duplicate that methodology. This would require collecting premium and claim cost data, perhaps by ZIP Code. As a result, the study would consider whether rates are cost-based, whether areas with populations of different percentages of protected groups are being overcharged, and whether rates comply with current state law definitions of unfairly discrimination. If exposure data (e.g., number of vehicles insured) is also collected, the study could reflect how average premiums vary by area. This option of focusing on a single state first also reflects the complexity of state differences, which could render doing a federal affordability study impractical.

Again, noting the importance of cost-based pricing on the insurance market, FIO may also want to consider studying a review of trends in average premium vs. trends in average loss costs. Industry data sources could be used, such as Fast Track for loss cost trends and Insurance Information Institute (III) for premium. Similarly, if companies are required to provide premium, loss, and exposure data then such a trending analysis could also be done with that aggregated data.

An additional consideration is to obtain the Highway Loss Data Institute (HLDI) data set (which includes market segments such as non-standard, personal, preferred, etc.) and develop a market model to understand costs. If this were done, it's important to recognize company pricing models use more data than available from HLDI, and thus segment more deeply than would be permitted by this approach.

Due to impacts of COVID-19 on automobile insurance costs and that fact that different carriers reflected cost differences in various ways (premium reductions, expense allocations, dividends, etc.) we suggest avoiding data from 2020 and 2021. The Academy has recently published an issue brief that more fully outlines some of the COVID-19 period challenges for auto insurance data.[3]

2. What data should FIO use to update the 2017 FIO Affordability Study? For example, should FIO proceed with the proposed data collection outlined in the 2016 FIO Notice (i.e., a request for voluntary production of ZIP Code-level premium data limited to large insurers that have a statutory surplus greater than $500 million and that annually collect more than $500 million of premium for personal auto insurance)? Why or why not? What alternate criteria, if any, would you propose if FIO administers a data collection?

Our response to question 1 describes some possible data sources to consider in a study.

While the $500 million threshold would capture a considerable amount of market share, it does raise the question of how that threshold was selected and whether a lower figure ($100 million, for example) would be more optimal to capture a broader range of companies and market share. This could make the study more comprehensive, representative, and reliable overall. Another option would be to consider choosing companies based on market segment (non-standard, standard, preferred) as opposed to total premium volume alone. This is because a dollar threshold may underrepresent non-standard and preferred markets. Similarly, a dollar threshold may not properly capture regional insurers that could be important in certain markets. Also, any study on affordability would ideally separate standard and non-standard

[2] *Private Passenger Automobile Insurance: A Review of the Market in Missouri*; Missouri Department of Insurance, Financial Institutions & Professional Registration; July 2018.
[3] *Considerations for Handling Auto Insurance Data in the Era of COVID-19*; American Academy of Actuaries; March 2021.

risks to normalize cost/premium structure differences across such carriers. An additional consideration could be to also select companies that serve lower limit customers or low- to moderate-income (LMI) customers, because the definitions of non-standard, standard, and preferred can be somewhat varied among carriers.

The FIO may also want to consider a review of the California Low Cost Auto Program[4] regarding aspects like average premiums, take-up rates by consumers, and profitability.

Finally, we suggest the FIO also review trends in uninsured motorist populations in conjunction with any affordability study aspects.

3. Some recent auto insurance affordability analyses have leveraged rating databases to study how quoted policy pricing varies based on demographic and geographic inputs. Should FIO consider an analysis of affordability using premium quotations? Why or why not? If yes, what data sources are available?

We caution against incorporating quote data into any affordability study because quote info can be distorted, not necessarily being what consumers actually pay and not necessarily incorporating complete data. Prospective insureds may request quotes for vehicles they do not own as they consider the total cost of ownership of the vehicle, and they may never actually purchase the vehicle or the insurance so the quote is not completely representative of any actual policy written. One way insurers reduce the cost of insurance during the quoting process is by asking customers for key information to provide an initial estimate of the policy cost, and if the insured chooses to proceed with the underwriting process then the insurer may order more expensive reports for information like accident and violation history, which may have an impact on the final premium charged to the customer as it differs from the initial quote. In addition, different carriers may default to different coverage levels with their quotes, which can distort the results. A way to address such issues would be to gather quotes for specific customer profiles from all carriers to gain more uniformity. This would also be a way to eliminate the impact of individual consumer choices (coverages, vehicles, etc.) on an affordability study. However, with such broad arrays of rating and underwriting plans across carriers, there still would be many aspects that make this comparison difficult and could be cumbersome for FIO to administer.

If there is strong desire by FIO to incorporate quotes, then some options can include using real quote data from a vendor to best understand prices actually being quoted as well as policies bound. Similarly, FIO could acquire market basket data of actual risks from a vendor and use competitive rating tools to generate premiums. However, this could be burdensome from a cost standpoint for FIO relative to the incremental benefit it could provide. Also, it should be recognized that some carriers' underwriting models may not be reflected accurately in certain rating tools due to those models being proprietary information.

4. Are there other quantitative approaches that FIO could take to effectively study auto insurance affordability? If yes, what are the approaches and their corresponding, available data sources?

We believe that a loss ratio approach (similar to what was done for the Missouri DOI study) would be of sufficient detail, as described in our response to question 1. Also, see the comments in question 1 about using HLDI data.

[4] "California's Low Cost Auto Insurance"; California Department of Insurance; 2019.

The FIO may also want to consider a review of the Consumer Price Index (CPI) for auto insurance and such trends over time as part of any affordability study.[5]

Non-Driving-Related Factors in Personal Auto Insurance Underwriting and Pricing

5. What should be the role of non-driving related factors (such as a consumer credit history, homeownership status, census tract, marital status, professional occupation, and educational attainment) in personal auto insurance underwriting and pricing?

We believe that non-driving-related rating factors are important to personal auto insurance underwriting and pricing because non-driving-related factors have long been proven to be strongly correlated to expected future claim costs. In addition, many states are reviewing factors such as these via legislation and resolving any public policy matters accordingly. It is critical to note that factors with strong correlation to expected losses, such as these, ensure that—to the extent it is possible to identify, differentiate, and quantify risk—the premium charged corresponds to the exposure being underwritten and that lower-risk groups generally do not subsidize higher-risk groups, so each grouping thus "gets what they pay for" in terms of rates matching risks. Refined pricing and underwriting, in part through using these types of factors, has helped with availability of automobile insurance for consumers overall. A measure of availability is the size of the residual market, which has decreased significantly since the early 2000s and can be attributed in part to the automobile insurance industry's more refined pricing and underwriting practices. Finally, eliminating some of these factors can increase prices for many through things like losing discounts (good student, multiline, etc.).

6. How should FIO assess the use of such non-driving related factors? What principles should be used to distinguish between appropriate and inappropriate use of non-driving related factors in personal auto insurance underwriting and pricing? What metrics could FIO use to assess the impact of non-driving related factors on the affordability and accessibility of auto insurance? What data sources are available to help assess these factors?

To really address the questions posed in this item, it is important to have a clear definition of "fairness." Fairness is defined many different ways, and what may seem "fair" to some will seem "unfair" to others. For U.S. actuaries, when we focus only on the question of fair insurance rates, we are guided by actuarial standards of practice (ASOPs). Guidance on this topic is included in ASOP No. 12, *Risk Classification (for All Practice Areas).*[6]

Using ASOP No. 12 as guidance, rates within a risk classification system would only be considered fair or equitable if differences in rates reflect material differences in expected cost for risk characteristics. This is demonstrated if it can be shown that the variation in actual or reasonably anticipated experience correlates to the risk characteristic. For the purposes of rate setting guided by risk classification, it is important to note that it is not necessary for an actuary to establish a cause-and-effect relationship between the risk characteristic and expected outcome. ASOP No. 12 recognizes that there can be significant relationships between risk characteristics and expected outcomes where a cause-and-effect relationship cannot be demonstrated. ASOP No. 12 also includes important considerations on practicality, applicable law, and data quality (among others).

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[5] "Measuring Price Change in the CPI: Motor vehicle insurance"; U.S. Bureau of Labor Statistics; Nov. 25, 2020.
[6] ASOP No. 12, *Risk Classification (for All Practice Areas)*; Actuarial Standards Board; December 2005.

As noted in our response to question 5, the states have domain in making public policy for automobile insurance. "Non-driving" factors can still (and are required by state law to) reflect the expected losses and costs of consumers.

It is important to note that use of "non-driving factors" also does not significantly impact overall insurance marketplace cost one way or the other. The use of the "non-driving factors" is intended to more equitably allocate premiums to consumers who represent a greater risk of loss. Overall costs are driven by a variety of other factors, some of which are described in the issue brief *Consumer Cost of Automobile Insurance* recently released by the Academy.[7] In part, fraud has continued to play a greater role in the higher costs that all consumers bear.

Structural Market Changes in Personal Auto Insurance

7. What drivers of change (e.g., specific technology advances, consumer preferences, the entrance of auto manufacturers in underwriting and issuing insurance policies, etc.) are currently having, or likely to have, significant effects on the structure of the personal auto insurance business? Please describe these likely impacts and why they are occurring.

Innovation of insurance products, partly driven by technology, can increase competition and benefit the consumer. Related to the "big data" question below, newer data sources and the ability to collect and utilize them (cloud technology, etc.) are also having an impact on the industry. The use of more and new information—including consumer report data and telematics data, for example—are helping insurers to set prices more accurately and fairly by refining the match of prices to the expected claim costs associated to different consumers. Another example of change resulting from technology is the increasing availability of "pay per mile" insurance.

In addition to insurer technological impacts is recent and ongoing improvement in vehicle safety, with more safety equipment/sensors, and various degrees of automated driving. Cars on the road may be able to communicate with one another electronically in the future, expected to further improve vehicle safety. While these evolutions should have a beneficial effect on auto accident frequency, it is also possible that such equipment will result in short-term increases to the cost of repairing and replacing damaged vehicles when there is an accident. It is unclear how these technologies will ultimately affect prices and affordability, though one would expect that as more vehicles have these advanced safety features, reductions to frequency should dominate any impacts to accident severity and would lower overall costs, especially as these technologies become less expensive to deploy. Self-driving cars are also shifting liability to manufacturers with the cost of liability a component of car prices.

Entrance of auto manufacturers in issuing insurance policies, as with all competition, is welcomed and is beneficial to the consumer. Competition is one of the best regulators of price. In addition, trends being seen in direct versus agent versus emerging channels (car dealers, start-ups, insurtechs, etc.) could ultimately make it easier and cheaper for consumers to obtain automobile insurance coverage.

There has also been a trend of mergers and acquisitions among carriers recently. Overall, more market share is being consolidated in the Top 10 insurance groups.[8] With still-strong competition and various emerging carriers, these trends in and of themselves do not mean impacts on availability or affordabilty though.

Particularly during the COVID-19 pandemic, people have been driving less due to working from home. There have been expanded delivery options. Also, over the years there has been the emergence and

[7] *Consumer Cost of Automobile Insurance*; American Academy of Actuaries; April 2021.
[8] "Facts + Statistics: Insurance company rankings"; Insurance Information Institute; 2020.

increased usage of ride-sharing and transporation network companies such as Uber and Lyft. This could have an impact of changing the demographics on the road with more professional drivers and perhaps fewer experienced nonprofessional drivers.

8. What responses to the COVID-19 pandemic—whether by consumers, the insurance industry, or insurance regulators—have the greatest likelihood of leading to long-term structural change in auto insurance? How can FIO evaluate the potential long-term or permanent effects of the pandemic on the personal auto insurance business?

As noted in our response to question 7, increased usage or availability of telematics/usage-based insurance/pay-per-mile could have an impact on what consumers pay (higher or lower) depending on driving habits. The insurance industry has also seen changes in driving behaviors due to COVID-19 as noted previously, though by some measures mileage driven has returned to pre-COVID-19 levels.[9] It may also be that more individuals will work from home or partially work from home more permanently in the coming years than was seen pre-COVID-19. This could have an impact also on vehicle use classification and overall mileage driven.

It is also worth noting that, while miles driven decreased, there was also a simultaneous increase in behaviors like excessive speeding noted in some cases.[10] So, there were factors that had potentially differing impacts on auto insurance costs due to COVID-19.

Our response to question 2 contains more details regarding handling of automobile insurance data in the era of COVID-19, including the related Academy issue brief.

9. What are the biggest challenges and opportunities for the personal auto insurance business resulting from current and anticipated structural changes? How are ongoing structural changes affecting underwriting and pricing practices?

As described in responses to prior questions, new variables and data allow insurers to potentially price and underwrite a wider range of consumers more accurately. If constraints are imposed on rating plans (variables allowed) that can mean that companies can't cover or properly evaluate costs on certain individuals. This can lead to affordability and availability issues or residual market disruption, to the detrimental impact on consumers.

It is important not to lose sight that automobile insurance has a strong state regulatory system with NAIC oversight already.

It is expected that public embrace of telematics usage will grow. Also, the expectation is that competition will grow unless governments restrict rating/underwriting factors and telematics usage. A challenge, though, with more sophisticated and new pricing and underwriting practices (models) is the consumer/regulatory expectation of transparency that must be balanced with a carrier's need to protect trade secrets (which helps foster competition).

10. Please describe how big data is being used in the personal auto insurance business. What are the benefits and risks to both consumers and insurers in the use of big data, particularly as it relates to auto insurance underwriting and pricing?

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[9] "Daily Vehicle Travel During the COVID-19 Public Health Emergency"; Bureau of Transportation Statistics; July 21, 2020.
[10] "2020 Fatality Data Show Increased Traffic Fatalities During Pandemic"; National Highway Traffic Safety Administration; June 3, 2021.

The Academy monograph *Big Data and the Role of the Actuary* released in June 2018 provides various insights into this question.[11]

As discussed in responses to previous questions, models are necessary and result in a more accurate analysis of expected losses and costs. Without that, there is no matching of price to the risk. Matching of price to risk/cost is a fundamental tenet of the successful functioning of the insurance market. It fosters competition which ultimately benefits consumers from an affordability and availability standpoint. Also, insurers do not collect income, racial, ethnic, and other protected class data; nor would insurers enable this irrelevant data to seep into models. The focus is proper matching of price to risk, to ensure the greatest level of fairness across all consumers.

11. Please provide your views on how FIO can quantify structural changes to the personal auto insurance market and their potential effects.

The drop in auto residual market populations illustrates a highly competitive auto insurance market, and that certainly is quantifying how the marketplace is meeting demand. The relationship of rates to CPI likewise illustrates how, when states enable it, competition has regulated insurance pricing effectively.

General

12. Please provide any additional comments or information on other issues or topics that may be relevant to FIO's work on personal auto insurance, the 2017 FIO Affordability Study, or other related matters.

Personal auto insurance is slowly being disrupted by manufacturers, changes in vehicle usage and behaviors, improvements in safety equipment and ultimately self-driving vehicles. The data for the past several years reflects these ongoing changes. With the impacts of COVID-19, if a study is undertaken, we recommend not using data from the years 2020 and 2021 as supported in responses to prior questions.

We believe that allowing insurance companies to compete fairly and equitably via cost-based pricing, with appropriate regulations and consumer protections, is in the greatest interest of consumers. This allows the insurance marketplace to function effectively and provides for coverage and price options for consumers.

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The American Academy of Actuaries appreciates this opportunity to provide comments to the FIO. We hope these observations are helpful, and we welcome further discussion. If you have any questions about our comments, please contact Rob Fischer, the Academy's casualty policy analyst, at fischer@actuary.org.

Sincerely,

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Vice Chairperson
Automobile Insurance Committee
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[11] *Big Data and the Role of the Actuary*, American Academy of Actuaries; June 2018.