Ratemaking, Product and Modeling Seminar March 20-21, 2018 Recent Developments and Common Pitfalls in Property and Casualty Rate Filings Richard N. Piazza Chief Actuary Louisiana Department of Insurance

Outline Insurance Regulation Rating Subjects Regulators May Be Sensitive Toward Changing Insurance Landscape InsureTech State and Federal News

Types of Regulation Across the United States Typical filing statutes (often have exceptions): Prior Approval (15; Louisiana) File and Use (20) Use and File (9) Flex (4) No File (2)

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Rate Regulation in Louisiana La. R.S. Title 22 • §1452. Purpose of rate regulation: construction; definitions • A. The purpose of this Subpart is to promote the public wellare by regulating insurance rates to the purpose of this Subpart is the purpose of the Subpart is the discriminatory and to authorize and regulate cooperative action among lineares in ratemaking and in other matters within the scope of this Subpart. Nothing in this Subpart is Intended: • (1) To prohibit or encurage, except to the extent necessary to accomplish the adrenmentioned purpose, uniformity in insurance rates, rating systems, rating plans, or practices. • §1454. Rating standards and methods • A. Rates shall not be inadequate or unfairly discriminatory in a competitive market. Rates shall not be accessive, indeequate, or unfairly discriminatory in a noncompetitive market. Rates shall not be accessive, indeequate, or unfairly discriminatory in a noncompetitive market. Rates shall not be accessive, indeequate, or unfairly discriminatory in a noncompetitive market. Rates shall not be accessive, indeequate, or unfairly discriminatory in a noncompetitive market. Rates shall not be accessive, indeeduced as a standard office. • §1464. Rate filing • §115 Every insurer whose rates are subject to regulation under the provisions of this Subpart shall file with the commissioner, except as to individually rated excess insurance coverages which are not written according to manual rates or rating puls and every modification of any other thread and shall indice the text-excert and extend of the excerce potential pulsed. Specific inland marine rates on risks specifically rated, made by a rating organization, shall be filed with the commissioner.

Sensitive Rating Subjects Model Complexity Policyholder Protections Model Input and Sources of Data Intuitiveness of Results Loss Based Results Optimization – Not Cost Based Rate Capping Time Sensitive Rating Characteristics Lack of Adequate Support/Documentation in Rate Filing – (ASOP 41)

Changing Insurance Landscape Autonomous Vehicles Cyber/Data Security Drones User Based Insurance On Demand Insurance Disruptive Business Models Blockchain Technology Changing Demographics Private Flood Insurance

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InsureTech Regulatory Sandboxes

- Mechanisms to lower barriers to bringing innovative products and services to market.
- "Safe place", within a regulatory environment, to test, facilitate response pilots and ensure regulatory obligations are reasonably adhered to.
- · Designed to:
 - Improve access to innovative products
 - Assist companies in navigating the regulatory landscape
 - · Create collaboration between insurtech firms and regulatory
- Ensure safety and soundness of the regulatory system.





InsureTech Big Data

- No generally accepted definition:
 - Structured data: data in tables, well defined fields
 - Unstructured data: social media postings, free form documents, pictures, video, recorded audio and more represents majority of data
 - Unstructured and/or structured data being used to influence underwriting, rating, pricing, forms, marketing and claims handling.





InsureTech Big Data - Insurance Implications

- Insurance Benefits of Big Data
 - · Better underwriting, lower prices, faster claim settlement, ability to do online business and instant communication, enrich customer experience and detect potential fraud
- Regulatory Concerns related to Big Data
 - Privacy and sensitive, confidential data protection
 - General Data Protection Regulation (GDPR-EU)
 - Transparency related to data use
 - Is ability to segment risk good? Will it lead to improved behaviors, lowering cost and/or affordability issues?
 - Ability to analyze complex filings for regulatory compliance





InsureTech Big Data (EX) Working Group Charges Review current regulatory frameworks and determine if changes are necessary. • Provide resources to facilitate states' collaborative review of complex models used by insurers • State regulators maintain rate regulatory authority · Collecting comments on exposure draft • Assess data needs and required tools for regulators to monitor marketplace

- Gain better understanding of currently available data and tools and recommend additional data and tools as appropriate
- Draft background document distributed



InsureTech Autonomous Vehicles - Insurance **Implications**

- Applicability of the current tort system
- Assumes a person will be driving and assignment of blame to a driver
- Who is at fault if a person is not driving?
 - Technology provider?
 - · Auto manufacturer?
 - Infrastructure?
- Default to product liability?





InsureTech Autonomous Vehicles – Insurance "Company" Implications

- If 94% of accidents are "driver error" claims will be drastically reduced
- Will not happen overnight; will be gradual
- Will it start with commercial fleets and TNCs?





Cyber/Data Security

- WP projected to grow from 4.3B in 2017 to 7.5B in 2020
- NAIC Adopted Insurance Data Security Model Law 10/24/17
- NAIC Developed Principles for Effective Cybersecurity and Roadmap for Cybersecurity Consumer Protections
- NAIC Developed Cybersecurity updates to the Financial Condition Examiners Handbook
- NAIC Developed the Cybersecurity and Identity Theft Coverage Supplement
- State or Federal regulation
 - Treasury recommends prompt state adoption of uniform data security model law or Congress pass law setting requirements for insurer data security





Flood Insurance

- NFIP extended reauthorization expires 9/30/2017, 12/8/2017, 12/22/2017, 1/19/2018, 2/8/2018, 3/23/2018, ???
- House: H.R. 2874, 5-year reauthorization
 11/14/17 passed (237-189) 5-year reauthorization package of seven reform bills (Duffy): long-term reauthorization, mitigation, private flood, repetitive loss properties, improved flood mapping, cap annual premium increases, continue grandfathering.
- Senate:
 S. 1571 (Crapo/Brown)
 S. 1368 (Menendez/Kennedy)
 S. 1313 (Cassidy/Gillibrand)
- NAIC supports facilitating greater growth in the private flood insurance market as a complement to the NFIP





