FACILITY Association

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May 24, 2018

Public Utilities Board
Automobile Insurance Review
P.O. Box 21040
St. John's, NL
A1A 5B2

Attention: insurancereview@pub.nl.ca

RE: Facility Association Submission

Dear Sirs,

Please find attached the Facility Association submission to the Newfoundland and Labrador Public Utilities Board's Automobile Insurance Review. We appreciate the opportunity to participate in the review process and would be pleased to provide any additional information in relation to our submission.

Respectfully submitted,

David J. Simpson, M.B.A., FCIP, C. Dir.
President & CEO

Facility Association appreciates the opportunity to contribute to the current Newfoundland and Labrador Automobile Insurance Review. For the most part we will frame our comments within the context of our mission and vision:

Mission

Facility Association's mission is to administer automobile insurance residual market mechanisms, enhance market stability, and guarantee the availability of automobile insurance to those eligible to obtain it. We strive to keep the market share of the residual markets as small as possible, so consumers may benefit from the competitive marketplace to the greatest extent possible.

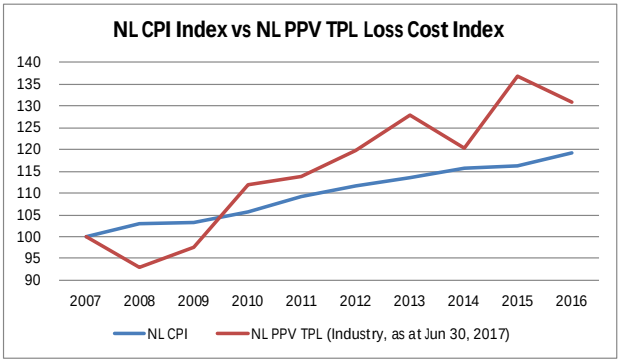
Vision

Facility Association's vision is to be recognized and relied upon as a highly efficient and effective administrator of automobile insurance residual markets, whose objective opinion on residual markets and related issues is respected and sought by stakeholders.

Facility Association guarantees the availability of the automobile insurance required by law to be purchased by consumers in nine Canadian jurisdictions (please see Appendix A for a comprehensive overview of Facility Association in Newfoundland and Labrador and additional information about residual markets generally). We believe consumer choice is maximized, and residual markets minimized, in automobile insurance environments with:

- stability of underlying costs;
- flexibility of pricing and underwriting; and
- flexibility in provision of the associated services.

Over the last decade or more, Newfoundland and Labrador seems to have arrived at something of the opposite: there is an enforced rigidity of pricing and underwriting, and industry-wide automobile insurance loss costs have moved well ahead of the overall Consumer Price Index for many years, as indicated in the chart to the right, comparing a Newfoundland and Labrador CPI index with a private passenger third party liability loss cost index in the province over the same period [1]. The all-too-predictable result is that the private passenger vehicle insurance marketplace is highly concentrated and, on a percentage of exposures basis, the market share of Newfoundland and Labrador's residual market is the fifth-largest in North America.



Although Facility Association guarantees that automobile insurance will always be available to eligible consumers, we believe there are aspects to the design and implementation of the regulatory

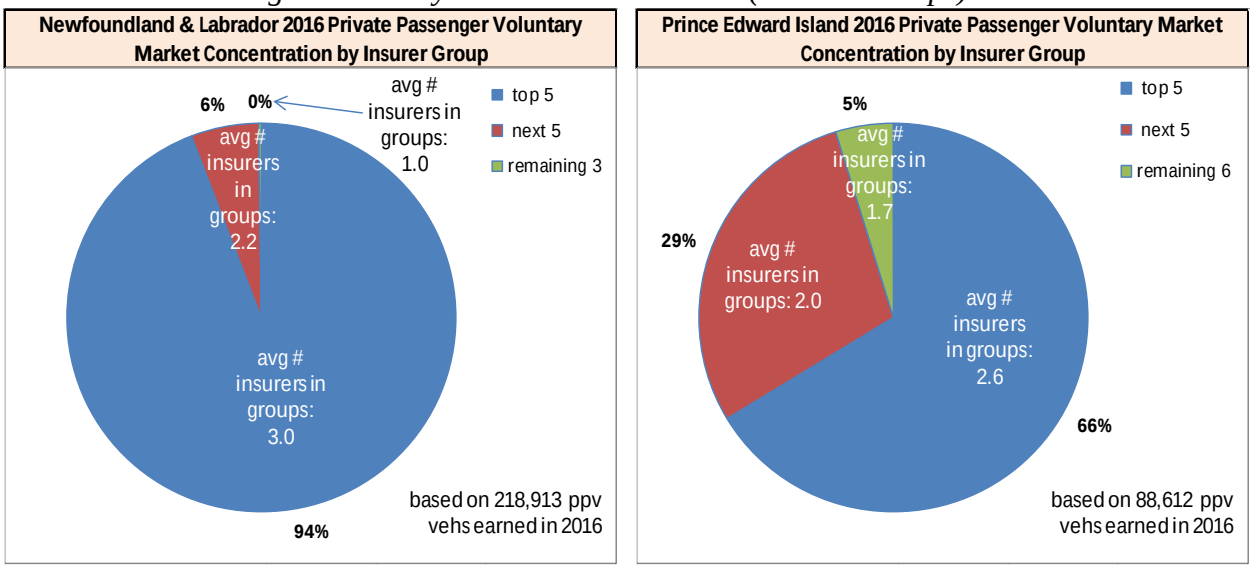
[1]We typically do not comment on the design of the compulsory automobile insurance product unless we believe there to be a specific availability dimension to an aspect of product design. That said, we encourage all stakeholders to keep cost stability in mind as any changes and refinements to the product are considered.

environment in the province which do inhibit consumer choice relative to the other Atlantic Provinces. We will identify what those are, and provide some suggestions for changes that might be explored to enhance consumer choice in the province. By consumer choice we mean both choice of insurance provider and choice of the type and amount of coverage available[2].

Newfoundland and Labrador Market Overview

The Newfoundland and Labrador automobile insurance market is relatively highly concentrated. As indicated in the chart on the left below, the 5 largest insurance providers in the province (taken at the group level), write 94% of the private passenger exposures[3] in the province. By contrast, in Prince Edward Island, despite having fewer than 30% of Newfoundland and Labrador's private passenger vehicles, the 5 largest insurance providers in Prince Edward Island write 66% of the private passenger exposures in that province.

2016 Private Passenger Voluntary Market Concentration (Insurer Groups) – NL vs PE



Source: FA market share information used for sharing PPV results with members; earned vehicle count basis

Another view of concentration is by premium volume and the number of active insurance providers in each jurisdiction as summarized below (per data provided in the 2017 MSA Market Share Report, based on 2016 year-end data). This shows both that Newfoundland and Labrador has a low count of insurance providers, despite having premium volume similar to New Brunswick and Nova Scotia, and

[2] Consumers in Newfoundland and Labrador are required to purchase $200,000 of third party liability protection. However, it is clear that consumers see value in broader insurance coverage to protect them and their financial wellbeing, as almost 99% of individually-rated private passenger vehicles were insured for more than the required minimum third party liability limit, according to 2016 data found in GISA industry data. Further, almost 92% also purchased first party Accident Benefits protection for medical expenses and disability income in the event of bodily harm in an automobile accident (an optional coverage in the province), over 68% purchased protection for their vehicle against collision/upset, and over 81% purchased protection for their vehicle against theft and "Acts of God". We believe these statistics show a clear consumer appetite in the province for automobile insurance across many of the perils that owning or operating an automobile exposes consumers to.

[3] Based on earned vehicle counts used by Facility Association for purposes of sharing results with its membership. This data is based on GISA's AIX data and is provided to Facility Association by IBC annually.

that the FARM premium volume rank is high (6th largest private passenger provider in Newfoundland and Labrador).

2016 Private Passenger Voluntary Market Concentration – Jurisdiction Summary

Direct Written Premium ($000s)

	PPV						
2016	Industry x FARM	# Active Insurers x FARM	FARM	FARM Rank	FARM Percentile	Industry w FARM	FARM market share
ON	10,337,033	33	12,587	23	68	10,349,620	0.1%
AB	3,281,034	24	7,587	11	44	3,288,621	0.2%
NL	337,348	10	20,592	6	55	357,940	5.8%
NB	369,509	18	12,545	10	53	382,054	3.3%
NS	459,430	17	7,561	13	72	466,991	1.6%
PE	68,988	14	2,910	9	60	71,898	4.0%
YT	22,475	10	526	9	82	23,001	2.3%
NT	16,273	9	3,313	2	20	19,586	16.9%
NU	2,562	8	454	3	33	3,016	15.1%
Total	14,894,652		68,075			14,962,727	0.5%

Source: MSA 2017 Market Share Report (based on 2016 premium)

We are concerned about the level of market concentration in Newfoundland and Labrador because the exit of a single large group from the province could leave a significant number of consumers with no other choice than Facility Association for their automobile insurance.

It seems that the current regulatory environment increases the risk of company exit relative to other jurisdictions. A senior executive was quoted publicly to that effect when his company exited the province in 2014:

> *Economical Insurance Senior Vice President and Chief Operating Officer Tom Reikman said the province presented "…. a challenging regulatory environment"*[4]

Regulation of automobile rates (or prices) and underwriting (rules) can impact availability. We will discuss pricing regulation and availability first.

Pricing regulation and availability

As noted above, widespread availability of automobile insurance to consumers is maximized in an environment where there is stability in the underlying costs of the product, and flexibility in the pricing and underwriting of the product. In general, there is a correlation between residual market size and the degree of price competition permitted in a given jurisdiction. In the United States, rate regulation is under the authority of individual states similar to the provincial authority that exists in Canada. In the last decade or more there has been an increased trend in the U.S. to allow the competitive forces of the marketplace to regulate prices. Interestingly, for 2015 (the most recent year for which data is

[4] Thompson's Daily Insurance News Service June 24, 2014

available), 39 states of the 49 states reporting data had less than 500 private passenger cars insured through residual market mechanisms, and 45 of 49 states reporting data had less than 1% of private passenger cars insured through residual market mechanisms (Texas does not report data).[5]

Research also supports the correlation between pricing freedom and widespread availability. A paper published by the Federal Insurance Office of the United States Department of the Treasury in December 2013 noted that:

> "*…many empirical studies suggest rate regulation, particularly in auto and homeowner insurance, may adversely impact market supply resulting in higher prices and an increase in the market share of the residual market.*"[6]

A 2010 paper by the Property Casualty Insurers Association of America entitled "*Analysis of Property/Casualty Insurance Rate Regulatory Laws*"[7] as another example of the research that is available. This paper concludes:

> *"During the past 35 years, much in-depth research has been conducted to examine the different rate regulatory approaches; all studies conclude that the public benefits more under a system that allows greater rate competition than one that requires state approval.*
>
> *These types of laws operate to curtail excessive profits, improve insurance availability, remove rate regulation from political volatility, and increase regulatory efficiency."*

We have attached the above two papers (and two additional freely available papers on this subject) and we would also recommend the book "*Deregulating Property-Liability Insurance*" (Edited by J. David Cummins) from AEI-Brookings Joint Center for Regulatory Studies – this book is available on their website for a nominal fee. Some of the key findings provided in this book are provided below:

> *"If undisturbed by regulation, competitive market equilibrium will generate auto insurance prices that reflect an unbiased estimate of the expected costs of motor vehicle accidents as well as an appropriate profit for insurers, reflecting the risk they bear."*
>
> *...*
>
> *"... in the long run, rate regulation does not significantly reduce prices for consumers. However, it generally reduces availability of coverage, increases price volatility, and reduces the quality and variety of services available to consumers. The system also subsidies high-cost drivers, sending adverse incentive signals and increasing accident costs. Regulation also increases cash flow volatility for insurers, raising the cost of capital."*

If insurers are not confident in the adequacy of the rates they are permitted to charge, then availability problems will arise. For example, one of the ways rate regulation may lead to "*…an increase in the market share of the residual market*" mentioned above is via the convergence of rates in the marketplace around a single actuarial forecast supported by the rate regulator. Automobile insurance

[5] Insurance Information Institute, https://www.iii.org/fact-statistic/facts-statistics-auto-insurance#The shared/residual market and nonstandard markets

[6] "How To Modernize And Improve The System Of Insurance Regulation In The United States" Federal Insurance Office, U.S. Department of The Treasury, December 2013, p. 54.

[7] https://www.leg.state.nv.us/Session/76th2011/Exhibits/Assembly/CMC/ACMC279L.pdf

rate setting is, by its very nature, a forward looking exercise with actuaries making assumptions about how future events will unfold. In a competitive market place, companies will take a variety of actuarial views, and some will turn out to more closely match the emerging reality than others. In that type of environment, companies with inadequate pricing may reduce their risk appetite while they correct their pricing, while companies with adequate or redundant rates will presumably maintain or increase their risk appetites. Overall, however, market availability for consumers is maintained and residual markets may be expected to be relatively small. In a highly regulated environment, such as Newfoundland and Labrador, where all insurers are required to use similar trends and other factors, if the rates based on those trends and factors turn out to be inadequate, market-wide availability pressures and larger than necessary residual markets are the likely result.

Another way rate regulation may lead to "*…an increase in the market share of the residual market*" is through active rate suppression either at the individual company or industry level. For example, following changes in the underlying automobile insurance product, a jurisdiction might mandate an industry-wide rate reduction. If there is not the appropriate symmetry between the reduction in underlying loss costs and the mandated reduction in rates, availability problems will likely arise.

Facility Association believes that consumer choice is best served in a competitive market place, and that flexibility in rating enhances competition. Perfect competition would have many buyers and sellers acting in the market that has a lack of barriers to entry and exit, a homogeneous product, and perfect information (among buyers and sellers). Where perfect competition (or even "workable" competition, which reasonably approximates the conditions for perfect competition) does not exist, "market failures" are said to exist. The Canadian Competition Bureau recently defined "market failure" in this way:

> *"Market failure refers to a situation in which free markets do not result in an efficient allocation of resources, resulting in a loss of economic and social welfare. Markets can fail for a variety of reasons, including the presence of a natural monopoly, large sunk costs, information asymmetries, and negative or positive externalities (where a private party's production of goods or services leads to a cost or benefit for unrelated third parties)."*[8]

Where market failures exist, consumers are usually negatively impacted (relative to their position without market failure) by lack of product or service, lack of quality, lack of choice, and/or higher prices.

Presumably, there is, or has been, a view that the automobile insurance market place in Newfoundland and Labrador suffers from (or is believed to be at risk of suffering from) one or more market failures and that government remedies (in this case, in the form of rate regulation) improve market efficiency and enhance the welfare of Newfoundlanders. This view is presumably shared in other Canadian jurisdictions, most of which use some form of "prior approval" rate regulation framework. However, not all prior approval frameworks are the same, and we believe our experience in Newfoundland and Labrador relative to Prince Edward Island, which also uses prior approval rate regulation, is illustrative. In the table below, we show the average number of days between our rate filing submission to receipt

[8] http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04007.html

of a decision from the applicable regulator for major rate filings in Newfoundland and Labrador versus Prince Edward Island for the last 4 calendar years.

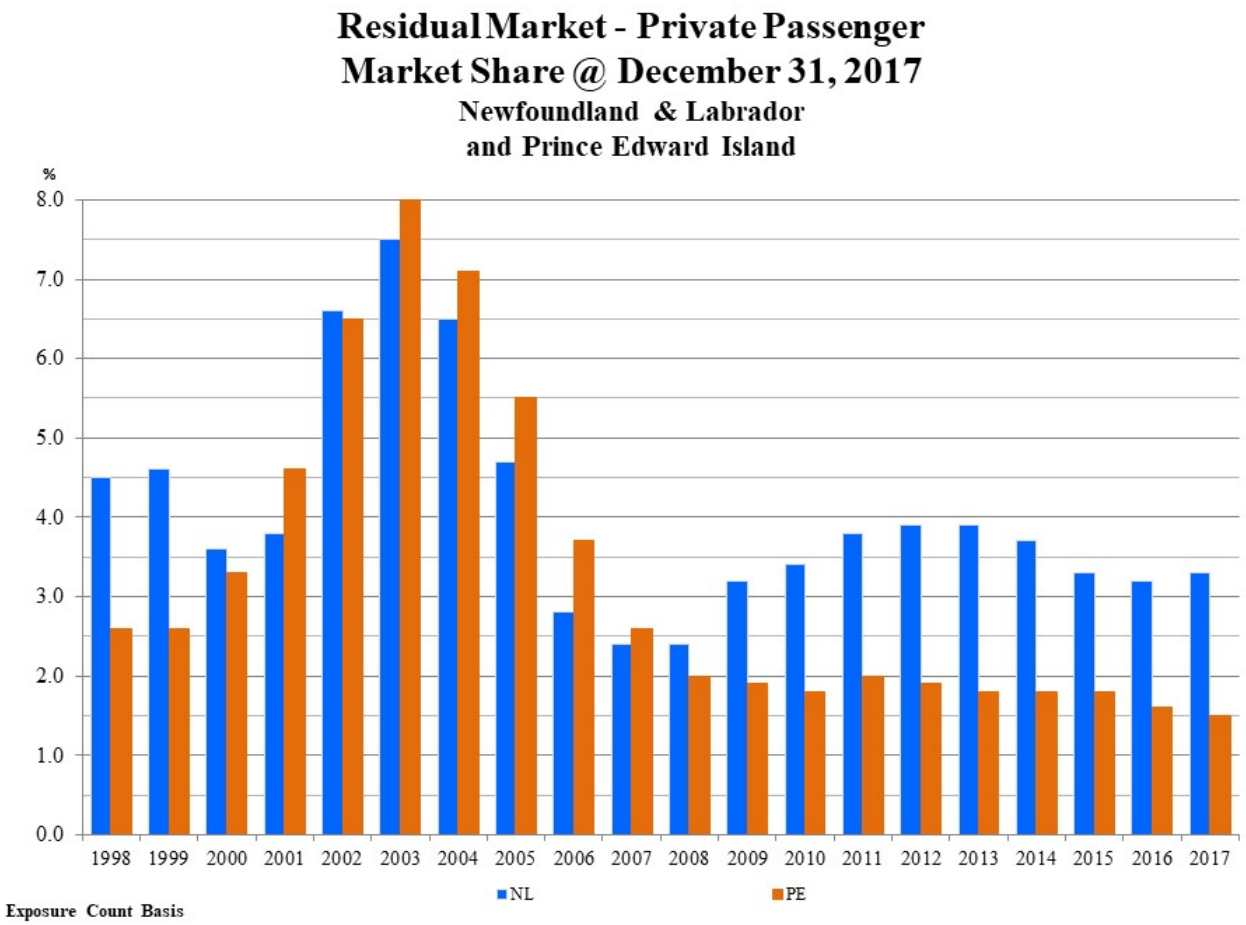
FARM Major Rate Filings – Average "in-process days" by Submission year

	2014	2015	2016	2017*
NL	405	259	232	241
PE	42	115	36	56

Source: FA internal records

A more detailed view of the of the "in-process days" across multiple jurisdictions may be found in Appendix B.

The lower degree of regulatory intensity in Prince Edward Island is also correlated with lower market shares for the residual market there than in Newfoundland and Labrador:



Because of the potentially adverse consequences of rate regulation on availability for consumers, most United States jurisdictions have moved away from prior approval automobile insurance rate regulation framework to more flexible frameworks such as:

- "Use and file" framework where rates are implemented and then filed with the regulator
- "File and use" rating where rates are filed with the regulator prior to implementation
- "Flex band" rating where insurers can adjust their rates up or down within a certain percentage range with relative ease

Ideally, we believe that the flexible pricing allowed in an open, competitive market (as is used for automobile insurance in the United Kingdom) would be in the best interests of consumers. However, the "use and file", "file and use", and "flex band" approaches to rate regulation offer a far greater degree of flexibility than the current system, again to the ultimate benefit of consumers.

We believe that the U.S. research available highlighted previously does not support, from an economic perspective, rate regulation akin to Newfoundland and Labrador's. However, we do recognize that sometimes political imperatives can override optimal economics. Acknowledging that, our experience and observation leads us to believe that the most significant political risks arise from the costs of private passenger auto insurance. That is, there is a political risk attached to people finding the insurance they need to get back and forth to work, to get their children to their activities, etc., to be unaffordable or subject to sudden and significant increases in price.

Therefore, if Newfoundland and Labrador does not wish to remove pricing regulation from automobile insurance entirely, then we suggest limiting it to private passenger vehicles only, and by preferably moving to a "use and file" rate regulatory framework. If a prior approval rate regulation regime is still to be used, then we would suggest looking to Prince Edward Island, Nova Scotia and New Brunswick for ways in which regulatory objectives can be achieved with significantly less time, effort and cost.

In the absence of a "comprehensive overhaul" of pricing regulation in Newfoundland and Labrador (which we believe would be beneficial to consumers in the province), we would suggest that at a minimum the following changes be considered within the current automobile insurance pricing regulatory framework.

Recommended Changes to Automobile Insurance Rate Regulation:

Newfoundland and Labrador Regulation 81/04, Automobile Insurance Regulations under the Automobile Insurance Act (O.C. 2004-296), has the following:

> ***"Appropriateness of rate***
>
> *7. (1) For the purpose of subsection 49(2) of the Act, the board shall determine if a proposed rate is too high.*
>
> *(2) The board shall vary or prohibit a rate that it determines is too high."*

Similar language appears in sections 8.(1) and 10.(1) of the Regulation as well. This language differs from that used in other jurisdictions where, instead, the language of "just and reasonable" is used as the guide for decision making. The latter are terms that reflect a balance of interest of the policyholder and the interest of the insurer / capital provider, and having meaning beyond insurance, built on decades of judicial action and court decisions in Canada and elsewhere, particularly in the regulated utility

industries. In contrast, "too high" is a subjective construct that tends to be focused more on the policyholder view than a balance view, and has not been subject to that same level of judicial scrutiny to achieve a common understanding, usage, and application. We note that "just and reasonable" is used with respect to risk classification in Section 96.2 of the Insurance Companies Act and we recommend it be adopted with respect to pricing in the Regulation as well.

The Regulation also has:

> *"12. (1) For the purpose of section 53 and subsection 62.1(4) of the Act, the board shall approve, vary or prohibit a rate filed within 90 days from the date the board receives the filing.*
>
> *(2) Notwithstanding subsection (1), where the board determines that it is not reasonably possible for it to comply with the 90 day time frame, the board shall so notify the company involved and provide a time period when a decision may be made."*

When the Board is unable to meet the 90 day time frame, in reality "open-ended" 90 day review extension letters are issued in order to allow the Board an extended period of time to render a final decision, leading to the relatively lengthy approval times when compared to other jurisdictions as noted above. We recommend that the Regulation be amended with a single, specific, time period past the first 90 days by the end of which the Board would be required to provide a decision or the rates would be allowed to be used as filed.

Underwriting regulation and availability

Underwriting regulation is sometimes implemented with the objective of maximizing the widespread availability and choice of voluntary market automobile insurance. However well intentioned, the effect of underwriting regulation is usually the opposite. Underwriting regulation typically places restrictions on the ability of insurance companies to refuse to issue an automobile insurance policy and/or restrictions on the entry into the residual market.

In Newfoundland and Labrador, restrictions on automobile underwriting by companies serving the market voluntarily are captured in the PUB's filing guidelines:

"a) **1.4 Prohibited Elements**

1.4.1 Underwriting Rules

Section 96.1 of the *Insurance Companies Act* and associated regulations prohibits insurers from using underwriting rules based on the following:

a) age, sex or marital status;
b) not at fault losses;
c) insured has inquired as to coverage or has advise of an accident for which no payment of indemnity was made;
d) nonpayment of premium, other than first payment, where a dishonored payment was replaced within 30 days of its original date;
e) insured has been declined or refused insurance by another insurer;
f) lapses in insurance coverage of less than 24 months, with specific exceptions;

g) insured does not have another insurance policy of any kind with the insurer;

h) insured is or was insured through Facility Association;

i) vehicle age, except that the insurer may require a satisfactory inspection certificate be provided where the vehicle is 8 years or older;

j) the length of time the applicant or a person insured under a contract has held a valid driver's license for the type of vehicle being insured;

k) the lack of a driver training program unless otherwise required by law;

l) credit information.

In addition, an insurer is prohibited from using any underwriting rule which;

a) is subjective;

b) is arbitrary;

c) bears little or no relationship to the risk to be borne by the insurer in respect of an insured; or

d) is contrary to public policy.

The Board may from time to time notify insurers in a general circular of specific Underwriting rules it deems to be in violation of these legislative provisions."

We support the recommendation contained in the IBC submission to the current review, i.e. "Prohibited Underwriting and Rating Factors: An insurer is prohibited from using the following factors to refuse to issue a contract or as elements in its risk-classification system: race; colour; creed; national origin; disability; income; education; and home ownership."

Failing that, we suggest Newfoundland and Labrador look to the other Atlantic provinces with a view to regulating underwriting with a "lighter touch". For example, restrictions on automobile insurance underwriting are somewhat less in Prince Edward Island and are correlated with the better market conditions for consumers as previously emphasized (i.e., a much less concentrated market and a smaller residual market).

Restrictions on the entry into the residual market in Newfoundland and Labrador take the form of a "Binder Control Register". Newfoundland and Labrador uses the Binder Control Register to ensure that applications submitted for coverage through Facility Association are not submitted in contravention of companies' underwriting rules, which are required to be filed with the PUB. The process is labour- and cost-intensive with questionable consumer benefit, and it works as follows:

All brokers and agents are required to submit the Binder Control Register on a monthly basis. They do this by collecting information on the risk profile and characteristics of business submitted to the residual market, downloading an approved Excel spreadsheet from the PUB website, entering the details (for both new business and renewals) in the spreadsheet, and then forwarding it to the Facility Association. Brokers and agents are required to complete and submit the Binder Control Register even if no business is written or renewed. Facility Association staff then review each broker submission for completeness and accuracy. Once the review is completed, each individual document is forwarded to the PUB.

The Binder Control Register information collected by brokers and agents and provided to the PUB through the Facility Association includes the following:

- The specific reason for placement of the risk in Facility Association
- Markets that were offered the risk
- The names of all insurers declining insurance and the grounds for refusal
- Confirmation that the rule or ground has been filed with the Board
- The rate at which each declining insurer would have written the risk had it been accepted
- Where the reason for placement in Facility Association is "no other markets", was the insured advised to seek insurance elsewhere
- Where the refusal was based on vehicle age
- Confirmation that the insured was requested to provide a vehicle inspection certificate
- Confirmation that a vehicle inspection certificate was, or was not provided; and
- Where an inspection was provided, the specific reason why the insurer declined the risk
- If the policy is cancelled, the reason why the policy was placed in FA and why it was cancelled.

It is our understanding that PUB staff then review each form to ensure there has been no violation of the filed underwriting rules. If a violation is found, PUB staff then contact the intermediary to determine if the risk should, in fact, be placed in the voluntary market. Anecdotally, we have been advised by PUB staff that they find a relatively minimal number of violations per year.

It is unclear to us if the underwriting rules and the time, effort and cost of monitoring compliance with them through the Binder Control Register are providing any measurable benefits in promoting choice for automobile insurance consumers in Newfoundland and Labrador. By contrast, Prince Edward Island does not have a binder control registry at all and in Nova Scotia and New Brunswick, the binder control registries that exist there serve as market monitoring mechanisms to help identify which classes of business are being insured through the residual market. The Binder Control Registries in Nova Scotia and New Brunswick are significantly less cumbersome than in Newfoundland and Labrador, and we recommend that, if Newfoundland and Labrador wants to continue to use a Binder Control Registry, serious thought be given to taking a harmonized approach with Nova Scotia and New Brunswick.

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BACKGROUND TO FACILITY ASSOCIATION AND RESIDUAL MARKETS

Newfoundland and Labrador
May 23, 2018

David J. Simpson
President & CEO

PART 1: FACILITY ASSOCIATION IN NEWFOUNDLAND AND LABRADOR

Introduction

Facility Association is an organization by means of which voluntary insurers cooperate to provide insurance for vehicle owners and/or drivers who, without this arrangement, would have difficulty obtaining insurance. It was formed as the result of an industry initiative to guarantee the availability of automobile insurance in jurisdictions where coverage is made compulsory by law.

In a competitive market, most insurers tend not to target the entire universe of automobile risks. Insurers generally each have their areas of expertise and a healthy competitive marketplace tends to allow a proper mix of generalist and specialist/niche automobile writers. Moreover, because it is a practical impossibility to have a perfect price for every risk, most insurers choose to have risk eligibility rules to complement and protect their respective pricing structures. Even with that mix of generalist and specialist insurers, there will be types of risks for which it will be difficult to obtain auto insurance, even though they are legally eligible to do so. The existence of the Facility Association ensures that, although insurers may be able to avoid accepting business on an individual company level (subject to applicable laws and regulations), they cannot avoid accepting those risks at the collective, industrywide level. Somewhat obviously, this also ensures that all drivers and vehicle owners who are eligible for compulsory automobile insurance can always obtain it.

All licensed automobile insurers in the jurisdictions Facility Association serves are required by law to be members of the Association. However, Facility Association itself has never issued a single insurance policy. It is not a licensed insurer. Facility Association is the administrator of this industry-wide collective mechanism, and it is Facility Association's main job to ensure that the guarantee of the availability of compulsory automobile insurance for those eligible to obtain it is met. That is why it is more than semantics to say that a risk is insured *through* Facility Association rather than *by* Facility Association.

The framework for the governance of Facility Association is found in the Facility Association Plan of Operation (the "Plan of Operation" or "Plan"). The Plan is empowered by statute and, in Newfoundland and Labrador, all changes to the Plan must be approved by 51% or more of the total number of votes held by all members and the Superintendent of Insurance. For those subject to its provisions, the Plan has the force of law, and compliance with the Plan must be viewed with the same degree of importance as compliance with laws and regulations generally.

Facility Association Governance

As prescribed by the Plan of Operation, Facility Association is governed by a sixteen-member Board of Directors comprised of:

- ten senior officials from member companies,
- three brokers approved by the Insurance Brokers Association of Canada (IBAC),
- two Independent Directors, and
- the Facility Association President.

Of the three IBAC representatives, one represents Alberta and the Territories, one Ontario, and one the Atlantic Provinces.

The work done by the Facility Association Board, employees, and volunteers is guided by the Association's mission and vision statements:

Mission

Facility Association's mission is to administer automobile insurance residual market mechanisms, enhance market stability, and guarantee the availability of automobile insurance to those eligible to obtain it. We strive to keep the market share of the residual markets as small as possible, so consumers may benefit from the competitive marketplace to the greatest extent possible.

Vision

Facility Association's vision is to be recognized and relied upon as a highly efficient and effective administrator of automobile insurance residual markets, whose objective opinion on residual markets and related issues is respected and sought by stakeholders.

Facility Association fulfills its mandate through a network of outsourcing and professional services arrangements. The Facility Association head office acts as an administrator of those arrangements to ensure that the requirements of the Plan of Operation (and its subordinate manuals) are carried out, and that all regulatory requirements are met. Facility Association has a full-time staff of thirty-seven people supported by over eighty volunteers in a variety of committees (please see Exhibit 1 for our current organization chart).

In Newfoundland and Labrador, Facility Association administers the Facility Association Residual Market (FARM) and the Uninsured Automobile Fund (UAF).

The Facility Association Residual Market (FARM)

To the extent that people think of Facility Association at all, they typically think of the Facility Association Residual Market (FARM). The FARM provides availability of automobile insurance for all automobile classes, such as private passenger vehicles, commercial vehicles, public vehicles, recreational vehicles, and garages. To understand how a risk can come to be placed through the FARM, it is necessary to understand how private/voluntary market insurers work[1]. When auto insurance customers shop for an automobile policy, they do so by seeking out voluntary market insurers (i.e. those companies which compete in the market voluntarily). Those companies have an array of insurance rates which are linked to an array of underwriting criteria (or rules) – e.g. type of vehicle, type of use, geographic location, number of drivers, claims history, driving record, etc.

If an applicant does not fit within the voluntary market underwriting criteria, they must still be provided with an insurance policy under the requirements of the applicable jurisdiction's Insurance Act.

An intermediary (typically a broker or agent) determines how the driver then fits into a separate array of Facility Association rate categories and sends the application to a Facility Association Servicing Carrier for a policy to be issued.

Because Facility Association is not an insurance company, it must therefore contract with some of its members to actually do the business of insurance, i.e. underwrite insurance applications, bill policies, and adjust claims. Members contracted in this manner are referred to as Servicing Carriers, and this contractual arrangement is one of the outsourcing arrangements mentioned above. The Servicing Carrier underwrites the applications and produces the documentation (policies) and distributes them directly to the Brokers. The Facility Association is not involved in policy processing.

Broadly speaking, Servicing Carriers are required to provide the same level of service to those insured through the FARM as they provide to their voluntary market customers and are audited to ensure they maintain that standard. More formally, the Servicing Carriers are required to follow the rules of the Facility Association as set out in the Plan of Operation and Servicing Carrier contract. Policies underwritten by the Servicing Carriers must be underwritten according to the rates and rules authorized by the relevant regulators (in Newfoundland and Labrador they are the Newfoundland and Labrador the Board of Commissioners of Public Utilities (PUB) and the Superintendent of Insurance). Authorized rates and rules may be found in the Facility Association Manual of Rules and Rates available on www.facilityassociation.com.

[1] Because Facility Association guarantees the availability of automobile insurance to those who are unable to obtain it through normal competitive market activity, it is sometimes known as a residual market, or market of last resort. It can also be known as an "involuntary" market. Brokers refer to their underwriting companies as markets. Because those companies compete in the market voluntarily, they are known as "voluntary" markets. Because, under the law, Facility Association must always offer a policy to qualifying applicants, it is known as an "involuntary" market.

This manual provides detailed instructions and rules for determining how a risk is to be classified and how premiums are to be calculated.

Prior to seeking regulatory approval, the rules in the manual are developed by Facility Association staff with input from by the Rules and Rates Committee (which is comprised of member company volunteers and a broker representative) and receive internal approval from the Governance and Human Resources Committee of the Facility Association Board of Directors.

Similarly, prior to seeking regulatory approval, the rates in the Manual are first developed by Facility Association's actuarial staff and/or Facility Association's external actuarial services provider. Changes to rating methodologies are also reviewed by Facility Association's Actuarial Committee. Initial rate proposals are then put forward by management for review by the Facility Association's Rules and Rates Committee. Final recommendations are then sent to the Facility Association Board of Directors. Only the Facility Association Board of Directors (or the President and CEO under authority delegated by the Board) have the authority to authorize that rate applications be submitted on behalf of Facility Association to the appropriate provincial regulatory body for review and approval.

With respect to claims handling, Servicing Carriers must adjust claims in an efficient and practical manner, using the same standards of service they would apply to claims of their voluntary market customers as well as following the Facility Association Claims Guidelines. Compliance with Facility Association claims reporting is administered through the Facility Association Head Office with the support of the Facility Association's Claims Committee, a volunteer committee which is comprised of senior claims management from member companies.

The Servicing Carriers are compensated through formulas specified in the Plan of Operation. Certain underwriting and claims expenses are eligible for specific reimbursement as specified in the Plan and relevant Facility Association manuals.

Audits of each Servicing Carrier are conducted periodically to ensure proper compliance with Facility Association rules, regulations and procedures. These audits review the underwriting policy issuance operations and the claims operations of the Servicing Carriers.

Premiums charged by the Servicing Carriers are recorded by the Facility Association head office. Again, because Facility Association is not an insurer, it is important to note that all premiums collected through Facility Association are re-allocated to (or "shared with") member companies. Member companies are then required by regulation to record those premiums in their books as direct written premiums, i.e. they must record them in a way that is equivalent to the way that they record business produced through their own efforts. Member companies must pay premium taxes, health levies, dues, regulatory assessments, etc., based on their share of Facility Association premiums. In addition, member companies must maintain capital to support their obligations to the FARM. The results of operations for Facility Association are included in member companies' income for tax assessment purposes. Because of the

way member companies are required to treat the balances received from Facility Association, the audited financial statements of Facility Association do not fully reflect the impact of Facility Association operations on the members. For more details about this, please see Note 2 of the audited financial statements of the FARM/UAFs available in the member section of the Facility Association website.

Facility Association has limited interactions with intermediaries. An intermediary will apply for a contract which is then set up between Facility Association, the Servicing Carrier and the intermediary. Servicing Carriers perform all intermediary administration-related tasks including accounting and paying commissions or service fees. Intermediary compensation, like Servicing Carrier Compensation, is specified in the Plan of Operation. If an intermediary needs guidance on a particular risk or policy, they contact the Servicing Carrier directly.

The Uninsured Automobile Fund (UAF)

Facility Association administers four UAFs (one in each of the Atlantic Provinces). Each UAF is governed by the relevant provincial Act. The UAFs fund valid claims for damages made by persons who cannot obtain satisfaction for damages under a contract of automobile insurance and where there is no other insurance or where other insurance is inadequate with respect to the damages claimed.

The responsibilities of the Association are to manage claims recording, claims adjustment, and payment processes; to allocate to members their share of the experience; and to assess members to fund operating deficits. Members share in the experience of the UAF in accordance with their participation ratio, reflecting their share of the market in Newfoundland and Labrador by accident year. The day-to-day handling of UAF claims is contracted to a dedicated law firm in each province.

Facility Association Central Office Activities

As noted above Facility Association conducts its activities with a fulltime staff of thirty-nine people located at its central office in Toronto, Ontario (please see the current organization chart enclosed). The organization is structured across four departments: Actuarial, Finance and Member Services, Underwriting and Claims, and Internal Audit and Enterprise Risk Management ERM).

The Actuarial department is responsible for pricing for the FARM, supporting valuation work for the FARM, RSPs, and UAFs (including work supporting the annual Financial Statements and associated Appointed Actuary's Report), determining actuarial provisions for monthly results, and preparing projected monthly operating results details for Facility Association members. The Actuarial department works in a hybrid actuarial model with the firm of Ernst and Young utilizing their resources with respect to capacity and expertise as needed. Facility Association's appointed actuary is currently Liam McFarlane of E&Y.

The Finance and Member Services department is responsible for monthly member reporting, annual

financial statements, and ensuring that the necessary data is received from and by the members for the administration of all residual market mechanisms.

The Underwriting and Claims department is responsible for rates and rules for the FARM and general oversight of claims administration.

The Internal Audit and ERM department is responsible for ensuring that member companies, servicing carriers and the central office staff are abiding by the rules laid out in Facility Association's Plan of Operation and its subordinate manuals:

- the RSP Procedures Manual,
- the Rates and Rules Manual, and
- the Accounting and Statistical Manual.

The Plan and manuals (along with our financial statements and monthly reporting bulletins) may be found on our website.

Additionally, the leader of Internal Audit and ERM is responsible for coordinating and administrating Facility Association's Enterprise Risk Management program.

Head Office staff are assisted in their roles by the following Advisory Committees:

- Actuarial
- Accounting
- Claims
- Rates and Rules

Provincial Operating Committees assist with the resolution of issues unique to a given jurisdiction.

PART 2: RESIDUAL MARKET MECHANISMS

A. WHY IS A RESIDUALMARKET NEEDED?

Residual Markets are needed to guarantee the availability of required insurance coverage in a competitive market. Sometimes a distinction is made between guaranteeing availability on a market-wide basis and on a point-of-sale basis.

In Canada, legislated residual market mechanisms for auto insurance were introduced concurrently with the introduction of mandatory automobile insurance. That is, the government essentially said to industry, "If we are going to make it mandatory, you must guarantee availability."

Prior to automobile insurance being made mandatory, availability was enhanced (not necessarily guaranteed) through voluntary indemnity arrangements.

Note: the presence of mandatory auto insurance does not necessarily imply the need for a residual market mechanism. The U.K. is an example of a jurisdiction with mandatory auto insurance but no auto insurance residual market mechanism.

Why do availability problems arise?

In the absence of a macroeconomic "shock" that dramatically reduces the capital available to support underwriting, availability problems typically arise at the market level when companies are constrained from matching price to risk, typically through rate regulation, underwriting regulation or both. Even in an unregulated environment there is not always a "willing buyer" matched to a "willing seller" 100% of the time, so the presence of a residual market guarantees there will always be a "willing seller". For example, "high risk" drivers and vehicles can have difficulty obtaining insurance although the rise of non-standard insurers since the 1990s has greatly enhanced availability for this segment.

B. WHAT ARE THE GOALS/OBJECTIVES OF A RESIDUAL MARKET?

1. To guarantee the availability of insurance
2. To reduce the size of the uninsured population
3. To subsidize premiums, i.e., enable departures from risk-based pricing

C. WHAT RISKS ARE RESIDUAL MARKETS MEANT TO ADDRESS?

Automobile insurance in Canada is always a political, as well as an economic, phenomenon. Guaranteeing availability through residual market mechanisms mitigates the public policy risk of the public calling for government to guarantee market-wide availability of auto insurance through

the creation of a government monopoly. Market-wide availability of mandatory auto insurance is provided by government sponsored monopolies in Quebec, Manitoba, Saskatchewan and British Columbia.

Residual markets may help to mitigate the risk of motorists driving without insurance, but the evidence on that is mixed. In the United States, all states have residual market mechanisms of some type and the estimated percentage of uninsured motorists in 2012 ranged from 3.9% in Massachusetts to 26% in Oklahoma[2]. Guaranteeing that auto insurance is available does not guarantee that it will be purchased.

The presence of residual market mechanisms can also mitigate the financial risks posed to insurers by rating and/or underwriting regulation. For example, in a rate-regulated "take all comers" market, insurers may be required to accept business which does not match their risk appetite and/or tolerance.

D. WHAT RISKS CAN RESIDUAL MARKETS CREATE?

1. If residual market rates are not risk-based, there is also the potential for drivers to engage in higher risk behavior than they would otherwise because the price signal that would encourage them to improve their driving behavior is "muted".

2. The existence of a residual market mechanism and the guarantee of availability creates the potential for drivers to engage in higher risk behavior than they would otherwise knowing that, regardless of their behavior, they will always be able to obtain insurance.

3. If residual market rates are not risk-based, that implies that the residual market population will be subsidized by drivers in the voluntary market. This creates the potential that good drivers will pay more than they would otherwise to increase the probability that they will be in a collision with a higher risk driver.

E. SHOULD THE RESIDUAL MARKET BE IN THE PUBLIC OR PRIVATE SECTOR?

Without entering into the debate about the proper role for government in a capitalist society, we will note that the availability of auto insurance is guaranteed by the government in only five of sixty-four North American jurisdictions (four Canadian provinces and one state in the U.S.) suggesting a public policy preference that auto insurance residual markets be in the private sector.

[2] Insurance Research Council, 2012.

F. TYPES OF RESIDUAL MARKETS

There are seven types of automobile insurance residual market mechanisms in use in North America and Europe:

1. Facility Association Residual Market (FARM) / Joint Underwriting Association (JUA)
2. Risk Sharing Pool (RSP) / Reinsurance Facility
3. Assigned Risk Plan
4. Market Assistance Plan (MAP)
5. State Fund
6. "Stand alone" insurer
7. Fronting arrangements

Key design features of each type of residual market:

1. Facility Association Residual Market (FARM) / Joint Underwriting Association (JUA)

   Intermediaries send applications to a few companies who, for a fee, act as Servicing Carriers. Servicing carriers perform the "business of insurance": they issue policies; handle administration, and settle claims. Financial details are forwarded to a central office and are shared with all member companies. All licensed automobile insurers in a given jurisdiction are required by law to be members and their financial liability for association business is unlimited.

2. Risk Sharing Pool (RSP) / Reinsurance Facility

   Essentially, a Risk Sharing Pool is a residual market that acts as an industry-wide reinsurance mechanism that is largely invisible to consumers and intermediaries. A consumer buys insurance in the normal way, and the application is forwarded to a company underwriter. The underwriter assesses the risk and decides whether to keep it on the company's own books or to transfer it to the Risk Sharing Pool (subject to the operational rules and eligibility guidelines of the RSP).

   Companies receive an expense allowance to cover costs such as those incurred for acquisition, policy issuance, policy administration and claims servicing. The expense allowance can be based on the member company's own expense structure, an industrywide average expense, a combination of the two, or a simply arbitrary number.

   Financial results are shared among member companies based on an approved formula (usually market share or a combination of market share a pool usage). Market share may be based on premium volume or exposure counts.

   Other design parameters of a risk sharing pool include the proportion of premium and claims that

can be transferred to the pool and the limit on the number of exposures or amount of premium volume which may be transferred to the pool.

3. Assigned Risk Plan

   Applications are forwarded to a central office and are then assigned at random to companies based on their share of the voluntary market (for example, a company with 10% of the voluntary market will receive 10% of the assigned risk plan applications). The company then writes the risk at Assigned Risk Plan rates but retains responsibility for servicing the policyholder and paying any associated claims. In practice, some jurisdictions allow companies to "by their way out of" their assignments.

4. Market Assistance Plan (MAP)

   A market assistance plan is usually an informal arrangement established by intermediaries to alleviate availability issues which are usually of a temporary nature (for example, see the article on signposting in the UK). Applications are forwarded on a rotating basis to a group of insurers who have agreed to take them. In the case of a signposting arrangement, the applicant is referred to an intermediary who has the capability to write the business.

5. State Fund

   A state fund residual market acts in the same manner as an insurer: it performs underwriting, claims handling, and policy issuance and administration functions. If the fund experiences a loss, it is generally charged back to automobile insurers in the state which may or may not recoup it from drivers.

6. Stand-alone insurer

   In this model, applications are sent to a capitalized and licensed insurer to which all intermediaries have access. This is the model employed in the Netherlands where the insurer, Rialto, is owned by insurance companies there.

7. Fronting arrangements

   In this type of arrangement, applications are forwarded to the residual market administrator's central office. The applications are sent on to a licensed insurer which issues policies on behalf of the residual market administrator for a fee but takes on none of the underwriting risk which is borne by voluntary market insurers. The licensed insurer may also agree to handle claims for a fee or, alternatively, a separate claims handling agreement may be made with a claims adjusting firm.

G. MARKET CONTEXT VS. TYPE OF RESIDUAL MARKET

1. Rate Suppression

   Practical experience suggests some types of residual markets are more suited to specific regulatory environments than others. For example, in environments where rates are deliberately suppressed, at least for some classes of business, Risk Sharing Pools seem to be the preferred response e.g. Alberta, New Brunswick, North Carolina, Massachusetts (prior to market reform).

2. Underwriting Restrictions

   Risk Sharing Pools have also been the preferred response (Ontario, Alberta) to "take all comers" legislation which requires companies to accept risks they would otherwise reject. A "take all comers" environment does not necessarily imply the necessity for a risk sharing pool. Michigan has a modified "take all comers" environment but uses a JUA for its residual market. Germany has a "take all comers" environment but no pooling mechanism.

3. Line of Business

   An Assigned Risk Plan (ARP) seems to be better suited to risk types that are relatively homogeneous, such as private passenger cars. If the ARP encompasses all types of risk, a company specializing in serving private passenger vehicles (for example) could be challenged by being required to service heavy commercial risks.

4. Size of Market

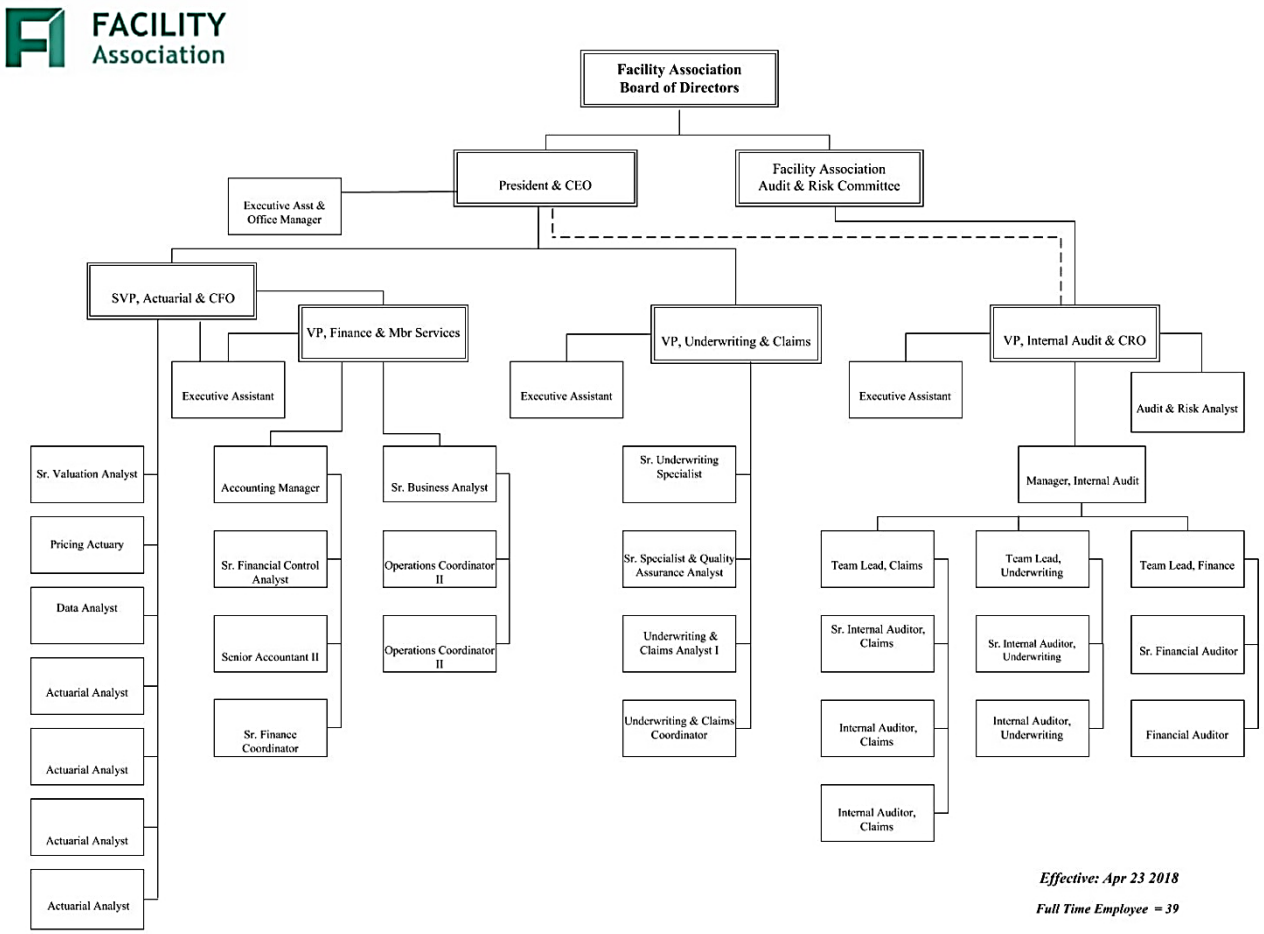
   The size of the market can have a bearing on the type(s) of residual market to be employed. For example, Nova Scotia and New Brunswick have Risk Sharing Pools to support discounts for inexperienced drivers with clean records. A similar pool was considered for Prince Edward Island, but the initiative was abandoned when the costs of establishing, maintaining, and interacting with the Pool were determined to outweigh its benefits.

5. Characteristics of Compulsory Automobile Insurance

   In jurisdictions where the compulsory automobile insurance product has relatively low limits, Assigned Risk Plans and Market Availability Plans may be relatively more acceptable to insurers. In jurisdictions with relatively high limits, insurers may be resistant towards these mechanisms in the absence of the ability to pool risks placed via the plans.

H. A SURVEY OF AUTOMOBILE INSURANCE RESIDUAL MARKET MECHANISMS OUTSIDE CANADA

Jurisdiction	Approach	Notes
United Kingdom	Open market. No formal residual market mechanism. A signposting agreement for some segments is in place.	No rate and underwriting regulation in the marketplace. The industry funds uninsured motorist claims.
United States	Varies by state. Assigned Risk Plans in over forty states. Reinsurance Facilities or Joint Underwriting Associations in the remaining states. State fund in Maryland.	Separate plans for every state. Rating and underwriting regulation varies by state.
Germany	"Take All Comers" for mandatory third party liability. No pooling	"File and use" rating regime.
Austria	Assigned Risk Plan voluntarily arranged by insurers.	Companies may charge up to 50% more for assigned business, or deduct up to one year's premium from a claim. No pooling mechanism.
Belgium	Pool for high risk drivers	Losses shared among insurers based on market share.
France	Assigned Risk Plan for mandatory civil liability coverage only.	Rates are also assigned. Typically range from 50% to 400% of the voluntary market rate. No pooling mechanism.
The Netherlands	Standalone insurer owned by insurers.	
Spain	State Fund	


FACILITY Association
Facility Association Board of Directors
President & CEO
Facility Association Audit & Risk Committee
Executive Asst & Office Manager
SVP, Actuarial & CFO
VP, Finance & Mbr Services
VP, Underwriting & Claims
VP, Internal Audit & CRO
Executive Assistant
Executive Assistant
Executive Assistant
Audit & Risk Analyst
Sr. Valuation Analyst
Pricing Actuary
Data Analyst
Actuarial Analyst
Actuarial Analyst
Actuarial Analyst
Actuarial Analyst
Accounting Manager
Sr. Financial Control Analyst
Senior Accountant II
Sr. Finance Coordinator
Sr. Business Analyst
Operations Coordinator II
Operations Coordinator II
Sr. Underwriting Specialist
Sr. Specialist & Quality Assurance Analyst
Underwriting & Claims Analyst I
Underwriting & Claims Coordinator
Manager, Internal Audit
Team Lead, Claims
Team Lead, Underwriting
Team Lead, Finance
Sr. Internal Auditor, Claims
Sr. Internal Auditor, Underwriting
Sr. Financial Auditor
Internal Auditor, Claims
Internal Auditor, Underwriting
Financial Auditor
Internal Auditor, Claims
Effective: Apr 23 2018
Full Time Employee = 39

Appendix B – FARM Rate Filing "in-progress days" by Submission Year and Jurisdiction

The table below shows our (FARM) experience with the time it takes from submission of a filing to approval from the regulator in each jurisdiction.

2014	count			avg in-process days	
	all	x RGs	major only	x RGs	major only
ON	7	6	6	105	105
AB	4	2	2	76	76
NL	4	2	2	405	405
NB	7	6	1	52	147
NS	4	3	3	227	227
PE	2	1	1	42	42
YT	-	-	-	-	-
NT	-	-	-	-	-
NU	-	-	-	-	-
TOTAL	28	20	15	131	164

average

2015	count			avg in-process days	
	all	x RGs	major only	x RGs	major only
ON	16	15	6	114	121
AB	2	1	1	56	56
NL	3	2	2	259	259
NB	7	5	2	92	124
NS	2	1	1	126	126
PE	5	5	5	115	115
YT	1	1	1	126	126
NT	1	1	1	43	43
NU	1	1	1	42	42
TOTAL	38	32	20	114	123

average

2016	count			avg in-process days	
	all	x RGs	major only	x RGs	major only
ON	3	3	3	170	170
AB	9	7	7	53	53
NL	6	4	4	232	232
NB	9	7	4	215	343
NS	5	3	3	180	180
PE	3	1	1	36	36
YT	-	-	-	-	-
NT	-	-	-	-	-
NU	-	-	-	-	-
TOTAL	35	25	22	156	171

average

ONLY SUBMITTED & APPROVED as at May 15, 2018

2017	count			avg in-process days	
	all	x RGs	major only	x RGs	major only
ON	6	5	5	128	128
AB	4	4	4	67	67
NL	5	3	3	241	241
NB	12	12	4	82	171
NS	6	6	6	170	170
PE	5	3	3	56	56
YT	-	-	-	-	-
NT	-	-	-	-	-
NU	-	-	-	-	-
TOTAL	38	33	25	115	140

average

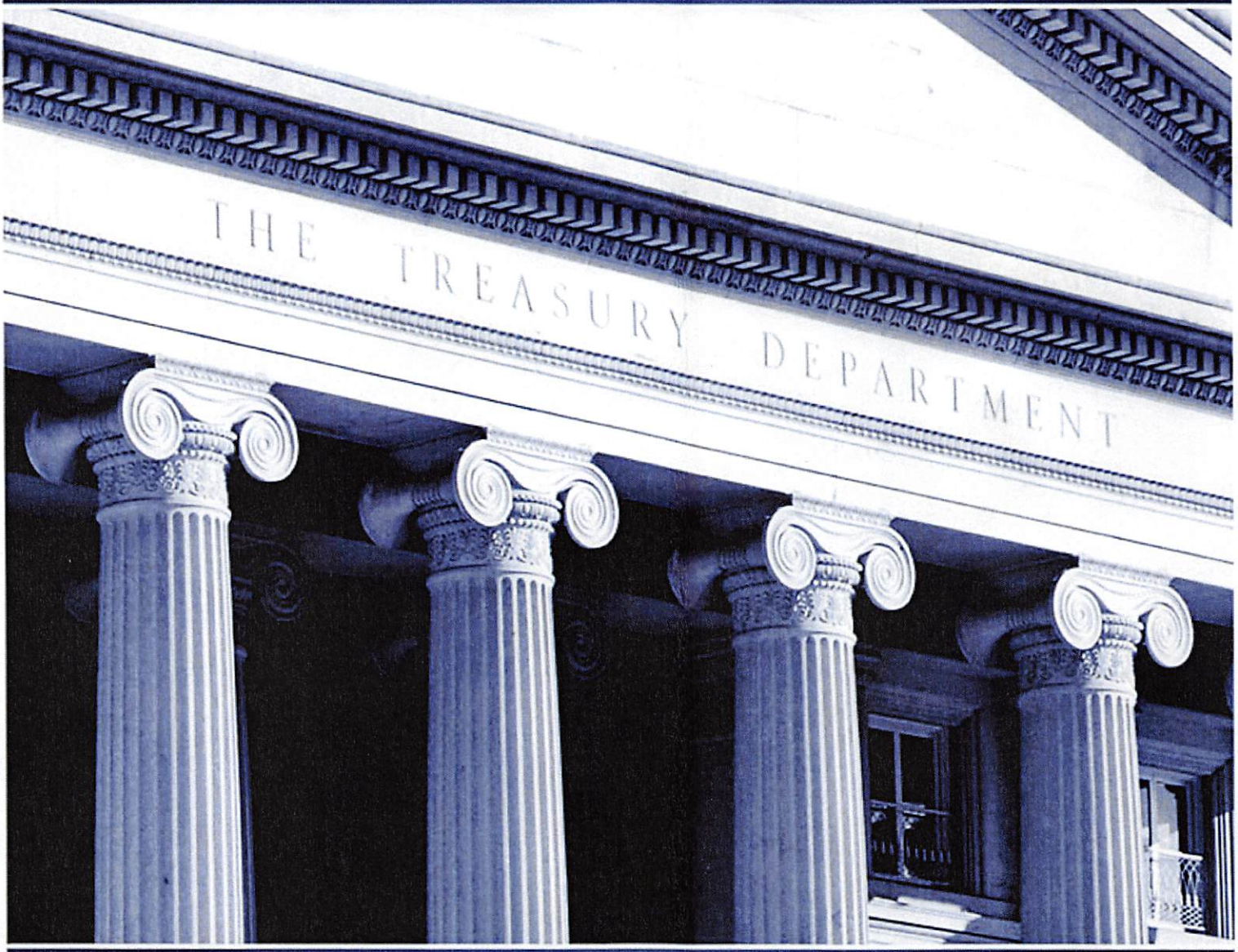
Note that for submissions in calendar year 2017, 4 submissions remain outstanding (i.e. have not had a decision rendered) – all 4 are with the Newfoundland and Labrador Public Utilities Commission, and have been "in-process" an average of 166 days as of May 15, 2018.

HOW TO MODERNIZE AND IMPROVE THE SYSTEM OF INSURANCE REGULATION IN THE UNITED STATES

FEDERAL INSURANCE OFFICE, U.S. DEPARTMENT OF THE TREASURY

Completed pursuant to Title V of the Dodd-Frank Wall Street Reform and Consumer Protection Act

DECEMBER 2013



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Actuarial Guideline 38	AG 38
AIG Financial Products	AIG FP
AIG Securities Lending Corporation	AIGSLC
American Council of Life Insurers	ACLI
American International Group, Inc	AIG
Board of Governors of the Federal Reserve System	Federal Reserve
California Earthquake Authority	Authority
Capital Purchase Program	CPP
Commercial Paper Funding Facility	CPFF
Common Framework for the Supervision of Internationally Active Insurance Groups	ComFrame
Consumer Financial Protection Bureau	CFPB
Council of Insurance Agents and Brokers	CIAB
Credit Default Swap	CDS
Credit Rating Agencies	CRAs
Defense of Marriage Act	DOMA
Department of Housing and Urban Development	HUD
Department of the Treasury	Treasury
Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010	Dodd-Frank Act
European Insurance and Occupational Pensions Authority	EIOPA
European Union	EU
Federal Deposit Insurance Corporation	FDIC
Federal Emergency Management Agency	FEMA
Federal Insurance Office	FIO
Federal Insurance Office Act of 2010	FIO Act
Financial Analysis Working Group	FAWG
Financial Stability Assessment Program	FSAP
Financial Stability Board	FSB
Financial Stability Committee	FSC
Financial Stability Oversight Council	Council
Global Receivership Information Database	GRID
Global Systemically Important Insurers	G-SIIs
Government Accountability Office	GAO
Government Sponsored Enterprises	GSEs
Gramm-Leach-Bliley Act	GLBA
International Association of Insurance Supervisors	IAIS
International Monetary Fund	IMF
Interstate Insurance Product Regulation Commission	IIPRC
Life and Health	L/H
National Association of Insurance Commissioners	NAIC
NAIC Credit for Reinsurance Model Law and Regulation	Model Collateral Law
NAIC Financial Regulation Standards Accreditation Program	Accreditation Program
NAIC Model Insurance Holding Company System Regulatory Act and Regulation	Holding Company Model Act
NAIC Suitability in Annuity Transactions Model Regulation	Model Suitability Regulation
National Association of Registered Agents and Brokers	NARAB
National Conference of Insurance Guaranty Funds	NCIGF
National Flood Insurance Program	NFIP

National Insurance Producer Registry ..... NIPR
National Organization of Life & Health Insurance Guaranty Associations ..... NOLHGA
New York Department of Financial Services ..... NYDFS
Non-admitted and Reinsurance Reform Act ..... NRRA
Office of Thrift Supervision ..... OTS
Own Risk and Solvency Assessment ..... ORSA
Principles Based Reserving ..... PBR
Producer Licensing Model Act ..... PLMA
Property and Casualty ..... P/C
Qualified Financial Contracts ..... QFCs
Quantitative Capital Standard ..... QCS
Residential Mortgage Backed Securities ..... RMBS
Risk-based capital ..... RBC
Secretary of the Treasury ..... Secretary
Securities and Exchange Commission ..... SEC
Securities Valuation Office ..... SVO
Solvency Modernization Initiative ..... SMI
Special Purpose Vehicle ..... SPV
Standard Valuation Law ..... SVL
Statutory accounting principles ..... SAP
State Modernization and Regulatory Transparency Act ..... SMART Act
System for Electronic Rate and Form Filing ..... SERFF
Term Asset-Backed Auction Loan Facility ..... TALF
Terrorism Risk Insurance Act ..... TRIA
United States Trade Representative ..... USTR
Value at Risk ..... VaR

I. INTRODUCTION

By any measure, insurance is a significant sector of the U.S. economy. Insurance premiums in the life and health (L/H) and property and casualty (P/C) insurance sectors totaled more than $1.1 trillion in 2012,[1] or approximately 7 percent of gross domestic product.[2] In the United States, insurers directly employ approximately 2.3 million people, or 1.7 percent of nonfarm payrolls.[3] More than 2.3 million licensed insurance agents and brokers hold more than 6 million licenses.[4] Moreover, as of year-end 2012, the L/H and P/C sectors reported $7.3 trillion in total assets[5] – roughly half the size of total assets held by insured depository institutions.[6] Of the $7.3 trillion in total assets, $6.8 trillion were invested assets.[7]

The business of insurance in the United States is primarily regulated at the state level. Insurance laws are enacted by state legislators and governors and are implemented and enforced by state regulators. Broadly speaking, state regulation is divided into prudential regulation (frequently referred to as "solvency" regulation) and marketplace regulation. Prudential regulation consists of oversight of an insurer's financial condition and its ability to satisfy policyholder claims. Marketplace regulation governs an insurer's business conduct, such as the pricing of premiums, advertising, minimum standards governing the terms of insurance policies, licensing of insurance agents and brokers (producers), together with general issues of consumer protection and access to insurance.

Although reforms to solvency and marketplace regulation are continually discussed, for over a century a centerpiece of the debate among policymakers and industry leaders over modernizing insurance regulation has been the extent to which the federal government should be involved in insurance regulation. These conversations have generally focused on the question of whether a state-based system can answer the regulatory demands of a national, and increasingly global, insurance market. Proponents of modernizing insurance regulation through federal involvement have noted that the current state-based system does not impose the uniformity necessary for the U.S. insurance market to function efficiently. They explain that state regulation is often duplicative or inconsistent, that the multiplicity of jurisdictions makes state regulators more prone to "capture," and that differences in standards between the states provide opportunities for arbitrage, if not a race to the bottom. Moreover, proponents of federal involvement contend that limitations on the jurisdictional reach of states' legal authority impede effective regulation of entities whose businesses span multiple jurisdictions and sectors.

Those who favor continuation of the current regime of state regulation counter that much of the business of insurance is local in nature and generally does not lend itself to uniform national regulation, and that states are better positioned to respond to consumer complaints. They add that mechanisms for cooperation and achieving uniformity already exist among the states, and that a state-based system provides better opportuni-

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1 SNL Financial LC (April 25, 2013).

2 *See* Department of Commerce, Bureau of Economic Analysis, http://www.bea.gov/national/index.htm#gdp (reporting – via the "Current-dollar and 'real' GDP" hyperlink – 2012 nominal GDP of $15,684.8 billion).

3 Department of Labor, Bureau of Labor Statistics, http://data.bls.gov/timeseries/CES5552400001?data_tool=XGtable (data extracted on April 5, 2013).

4 National Insurance Producer Registry (NIPR), *2012 Annual Report, 9, available at* http://www.nipr.com/documents/2012_NIPR_Annual_Report.pdf.

5 SNL Financial LC (April 25, 2013).

6 Federal Deposit Insurance Corporation (FDIC), *Quarterly Banking Profile,* 7 (Fourth Quarter 2012), *available at* http://www2.fdic.gov/qbp/2012dec/qbp.pdf (reporting $14.5 trillion of total assets held by FDIC-insured institutions.

7 SNL Financial LC (April 25, 2013) (the $6.8 trillion of invested assets includes separate account assets held by L/H insurers).

ties for experimentation so that the best ideas developed in one jurisdiction can be adopted and replicated in others. They also assert that, by and large, state regulation works well.

By drawing attention to the supervision of diversified complex financial institutions such as American International Group, Inc. (AIG), the financial crisis added another dimension to the debate on regulating the insurance industry. The crisis demonstrated that insurers, many of which are large, complex, and global in reach, are integrated into the broader U.S. financial system and that insurers operating within a group may engage in practices that can cause or transmit severe distress to and through the financial system. AIG's near-collapse revealed that, despite having several functional regulators, a single regulator did not exercise the responsibility for understanding and supervising the enterprise as a whole.[8] The damage to the broader economy and to the financial system caused by the financial crisis underscored the need to supervise firms on a consolidated basis, to improve safety and soundness standards so as to make firms less susceptible to financial shocks, and to better understand and regulate interconnections between financial companies.[9]

As part of the federal government's response to the financial crisis, Congress passed and President Obama signed into law the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) (Pub. L. 111-203) in July 2010. The Dodd-Frank Act established the Financial Stability Oversight Council (Council), which has the responsibility for monitoring emerging risks to the U.S. financial system and has the authority to determine that nonbank financial companies shall be subject to supervision by the Board of Governors of the Federal Reserve System (Federal Reserve) and prudential standards. Subtitle A of Title V of the Dodd-Frank Act, entitled the Federal Insurance Office Act of 2010 (31 U.S.C. §§ 313-14) (FIO Act), established the Federal Insurance Office (FIO) in the U.S. Department of the Treasury (Treasury). The statute provides FIO with the following authorities:

1. Monitor all aspects of the insurance industry, including identifying issues or gaps in the regulation of insurers that could contribute to a systemic crisis in the insurance industry or the United States financial system;

2. Monitor the extent to which traditionally underserved communities and consumers, minorities, and low- and moderate-income persons have access to affordable insurance products regarding all lines of insurance, except health insurance;

3. Recommend to the Council that it designate an insurer, including the affiliates of such insurer, as an entity subject to regulation as a nonbank financial company supervised by the Federal Reserve;

4. Assist the Secretary of the Treasury (the Secretary) in administering the Terrorism Insurance Program established in the Treasury under the Terrorism Risk Insurance Act of 2002;

5. Coordinate Federal efforts and develop Federal policy on prudential aspects of international insurance matters, including representing the United States, as appropriate, in the International Association of Insurance Supervisors (IAIS) and assisting the Secretary in negotiating covered agreements;[10]

8 AIG was regulated at the holding company level by the former Office of Thrift Supervision.

9 For discussion of consolidated supervision of U.S. insurance groups, see: IMF, United States: *Publication of Financial Sector Assessment Program Documentation — Detailed Assessment of Observance of IAIS Insurance Core Principles (2010).*

10 In the FIO Act, 31 U.S.C. § 313(r)(2), a "covered agreement" is defined as a "bilateral or multilateral agreement regarding prudential measures with respect to the business of insurance or reinsurance that – (A) is entered into between the United States and one or more foreign governments, authorities, or regulator entities; and (B) relates to the recognition of prudential measures with respect to the business of insurance or reinsurance that achieves a level of protection for insurance or reinsurance consumers that is substantially equivalent to the level of protection achieved under State insurance or reinsurance regulation."

6. Determine whether State insurance measures are preempted by covered agreements;

7. Consult with the States (including State insurance regulators) regarding insurance matters of national importance and prudential insurance matters of international importance; and

8. Perform such other related duties and authorities as may be assigned to FIO by the Secretary.

In addition, the Dodd-Frank Act assigns certain duties to the Director of FIO. Pursuant to Title I of the Dodd-Frank Act, the Director serves as a nonvoting member of the Council. Under Title II, the affirmative approval of the Director, along with a vote of two-thirds of the Governors of the Federal Reserve, is required before the Secretary may make a determination on whether to seek the appointment of the Federal Deposit Insurance Corporation (FDIC) as receiver of an insurance company.

Title V of the Dodd-Frank Act also requires the FIO Director to "conduct a study and submit a report to Congress on how to modernize and improve the system of insurance regulation in the United States."[11] This Report responds to the Congressional directive.

To support this study and Report, FIO has consulted extensively with various stakeholders. On October 17, 2011, FIO published a notice in the Federal Register asking the public to submit comments on the considerations and factors listed in Title V:

- Systemic risk regulation with respect to insurance.
- Capital standards and the relationship between capital allocation and liabilities, including standards relating to liquidity and duration risk.
- Consumer protection for insurance products and practices, including gaps in State regulation.
- The degree of national uniformity of State insurance regulation.
- The regulation of insurance companies and affiliates on a consolidated basis.
- International coordination of insurance regulation.

In addition, Title V states that the Report must also examine:[12]

- The costs and benefits of potential Federal regulation of insurance across various lines of insurance (except health insurance).
- The feasibility of regulating only certain lines of insurance at the Federal level, while leaving other lines of insurance to be regulated at the State level.
- The ability of any potential Federal regulation or Federal regulators to eliminate or minimize regulatory arbitrage.
- The impact that developments in the regulation of insurance in foreign jurisdictions might have on the potential Federal regulation of insurance.
- The ability of any potential Federal regulation or Federal regulator to provide robust consumer protection for policyholders.
- The potential consequences of subjecting companies to a Federal resolution authority, including the effects of any Federal resolution authority -
    - On the operation of State insurance guaranty fund systems, including the loss of guaranty fund coverage if an insurance company is subject to a Federal resolution authority;
    - On policyholder protection, including the loss of the priority status of policyholder claims over other unsecured general creditor claims;

11 31 U.S.C. § 313(p).

12 31 U.S.C. § 313(p)(3).

  - In the case of life insurance companies, on the loss of the special status of separate account assets and separate account liabilities; and
  - On the international competitiveness of insurance companies.
- Such other factors as the Director determines necessary or appropriate, consistent with the principles set forth in the prior paragraph.

FIO received nearly 150 written comments, which are available online at treasury.gov/initiatives/fio. In November and December 2011, FIO had an initial round of consultations with nearly 40 different insurance sector participants, ranging from insurance regulators, to insurers, to consumer advocates. On December 9, 2011, FIO hosted a conference at the Treasury where participants representing the interests of consumers, insurers and reinsurers, producers, and academics discussed regulatory modernization. Topics included marketplace oversight and licensing, international developments, and prudential oversight. FIO's study and consultations continued throughout 2012 and 2013. This Report reflects some of the many issues and topics raised by stakeholders throughout the consultative process, including through written comments, at the Treasury conference, and also through FIO's direct engagement with federal, state, and international supervisors.

Structure of the Report

This Report is divided into five principal sections. Section I, the introduction, presents the recommendations for modernizing insurance regulation in the United States. This discussion also includes a general assessment of whether federal involvement is necessary in the regulation of insurance and, if so, what manner that involvement should take.

Section II describes the history of insurance regulation in the United States, highlighting significant events in its development. The historical perspective helps frame the current debates on modernization by illustrating the continuing debate, raised in different contexts and time periods, as to whether federal or state insurance regulation would best address the need for improved uniformity and oversight. This section begins by discussing the advent of state insurance regulation in the 19th century, key Supreme Court decisions such as *Paul v. Virginia* (1868) and *United States v. South-Eastern Underwriters* (1944), the passage of the McCarran-Ferguson Act in 1945, the reaction of state regulators and Congress to insolvency crises in the 1960s through the early 1990s, and the passage, in 1999, of the Gramm-Leach-Bliley Act (GLBA). This section also explores state regulators' reaction to Congressional interest in insurance regulation and outlines recent proposals for federal oversight. It concludes by discussing the financial crisis, reforms enacted under the Dodd-Frank Act, and the creation of FIO.

Section III presents the analysis underlying the recommendations regarding prudential oversight issues. It reviews the framework by which insurers are evaluated and regulated for solvency as these topics are currently being discussed by the U.S. and the international regulatory communities, including the European Union (EU) and the IAIS. More specifically, this section analyzes the approaches state regulators use to assess an insurer's capital adequacy, together with discretionary practices and emerging issues on reserving and the regulation of captives. This section also discusses corporate governance matters and group supervision in the context of national and international reforms. Finally, this section evaluates current approaches to insurer resolution and guaranty fund processes.

Section IV presents the analysis supporting the recommendations concerning marketplace oversight, focusing on market and consumer issues that have been the subject of the recurring debate on national regulatory uniformity. Some of the principal topics in this area are: (1) multi-state licensing for insurance producers; (2) the state-based insurance product approval processes; (3) examinations of an insurer's market conduct; (4) rate regulation; and (5) insurance scoring and risk classification practices for personal lines insurance consumers. This section also reviews the states' regulatory treatment

of insurance lines affected by natural catastrophes, the accessibility of insurance to Native American communities, collection of taxes for multi-state surplus lines placements, and suitability standards for the sale of annuity products.

Section V discusses insurance modernization in the context of basic principles of regulatory reform. The Report comprehensively addresses all of the statutory considerations and factors, but not in a serial or individual manner.

Recommendations for Modernization of Insurance Regulation in the United States

For over a century, the debate over reform of insurance regulation in the United States has focused largely on the practical and legal limitations of the state-based insurance regulatory system. The absence of uniformity in the U.S. insurance regulatory system creates inefficiencies and burdens for consumers, insurers, and the international community. For example, per dollar of premium, the costs of the state-based insurance regulatory system are approximately 6.8 times greater for an insurer operating in the United States than for an insurer operating in the United Kingdom, and increase costs for P/C insurers by $7.2 billion annually and for life insurers by $5.7 billion annually.[13] The need for uniformity and the realities of globally active, diversified financial firms compel the conclusion that federal involvement of some kind in insurance regulation is necessary. Regulation at the federal level would improve uniformity, efficiency, and consistency, and it would address concerns with uniform supervision of insurance firms with national and global activities.

The increasingly international dimension of the insurance marketplace, in and of itself, is also an important consideration. U.S. firms are not the only ones with a global reach. Non-U.S. firms have significantly expanded market share around the world, including in the U.S. direct and reinsurance markets, a trend that likely will continue because of the size of the U.S. insurance market. Insurance regulatory issues will increasingly require international attention and cooperation. The federal government's predominant role in foreign affairs is one reason for the necessity of a federal presence in insurance regulation. It would be much less costly, much less prone to arbitrage, and much easier to negotiate internationally for more efficient and effective oversight of the insurance sector if U.S. insurance regulation had greater uniformity and predictability.

The limitations inherent in a state-based system of insurance regulation, however, do not necessarily imply that the ideal solution would be for the federal government to displace state regulation completely. The business of insurance involves offering many products that are tailored for and delivered at a local level. For the most part, effective delivery of the product will require local knowledge and relationships, and local regulation. Moreover, establishing a new federal agency to regulate all or part of the $7.3 trillion insurance sector would be a significant undertaking. The personnel, resources, and institutional expertise needed to execute such an endeavor at a professional and rigorous level would, of necessity, require an unequivocal commitment from the legislative and executive branches of the U.S. government.

In light of these considerations, this Report concludes that the proper formulation of the debate at present is not whether insurance regulation should be state or federal, but whether there are areas in which federal involvement in regulation under the state-based system is warranted. Reframed in this manner, the basic question with respect to reforming any aspect of insurance should be whether federal involvement is warranted at this time and, if so, in what areas. The necessity for federal involvement should depend on assessment of questions such as whether states can take measures to regulate effec-

13 McKinsey & Company, "Improving Property and Casualty Insurance Regulation In the United States," (April 2009).

tively and with uniformity, the degree of the national or federal interest, and the nexus of the issues and the firms with the global marketplace.

If the answer to the first inquiry is that federal involvement is warranted, the inquiry then turns to what kind of federal involvement would best provide for attaining the policy objectives. Federal involvement can take many forms, ranging from direct regulation to standard-setting or operating a program that supports or replaces an otherwise failed insurance market. In all events, federal involvement should be targeted to areas in which that involvement would solve problems resulting from the legal and practical limitations of regulation by states, such as the need for uniformity or the need for a federal voice in U.S. interactions with international authorities.

In light of the foregoing, FIO believes that, in the short term, the U.S. system of insurance regulation can be modernized and improved by a combination of steps by the states and certain actions by the federal government. The recommendations are as follows.

Areas of Near-Term Reform for the States

Capital Adequacy and Safety/Soundness

1) *For material solvency oversight decisions of a discretionary nature, states should develop and implement a process that obligates the appropriate state regulator to first obtain the consent of regulators from other states in which the subject insurer operates.*

2) *To improve consistency of solvency oversight, states should establish an independent, third-party review mechanism for the National Association of Insurance Commissioners Financial Regulation Standards Accreditation Program.*

3) *States should develop a uniform and transparent solvency oversight regime for the transfer of risk to reinsurance captives.*

4) *State-based solvency oversight and capital adequacy regimes should converge toward best practices and uniform standards.*

5) *States should move forward cautiously with the implementation of principles-based reserving and condition it upon: (1) the establishment of consistent, binding guidelines to govern regulatory practices that determine whether a domestic insurer complies with accounting and solvency requirements; and (2) attracting and retaining supervisory resources and developing uniform guidelines to monitor supervisory review of principles-based reserving.*

6) *States should develop corporate governance principles that impose character and fitness expectations on directors and officers appropriate to the size and complexity of the insurer.*

7) *In the absence of direct federal authority over an insurance group holding company, states should continue to develop approaches to group supervision and address the shortcomings of solo entity supervision.*

8) *State regulators should build toward effective group supervision by continued attention to supervisory colleges.*

Reform of Insurer Resolution Practices

9) *States should: (1) adopt a uniform approach to address the closing out and netting of qualified contracts with counterparties; and (2) develop requirements for transparent financial reporting regarding the administration*

of a receivership estate.

10) *States should adopt and implement uniform policyholder recovery rules so that policyholders, irrespective of where they reside, receive the same maximum benefits from guaranty funds.*

Marketplace Regulation

11) *States should assess whether or in what manner marital status is an appropriate underwriting or rating consideration.*

12) *State-based insurance product approval processes should be improved by securing the participation of every state in the Interstate Insurance Product Regulation Commission (IIPRC) and by expanding the products subject to approval by the IIPRC. State regulators should pursue the development of nationally standardized forms and terms, or an interstate compact, to further streamline and improve the regulation of commercial lines.*

13) *In order to fairly protect consumers in all parts of the United States, every state should adopt and enforce the National Association of Insurance Commissioners Suitability in Annuities Transactions Model Regulation.*

14) *States should reform market conduct examination and oversight practices and: (1) require state regulators to perform market conduct examinations consistent with the National Association of Insurance Commissioners Market Regulation Handbook; (2) seek information from other regulators before issuing a request to an insurer; (3) develop standards and protocols for contract market conduct examiners; and (4) develop a list of approved contract examiners based on objective qualification standards.*

15) *States should monitor the impact of different rate regulation regimes on various markets in order to identify rate-related regulatory practices that best foster competitive markets for personal lines insurance consumers.*

16) *States should develop standards for the appropriate use of data for the pricing of personal lines insurance.*

17) *States should extend regulatory oversight to vendors that provide insurance score products to insurers.*

18) *States should identify, adopt, and implement best practices to mitigate losses from natural catastrophes.*

Areas for Direct Federal Involvement in Regulation

1) *Federal standards and oversight for mortgage insurers should be developed and implemented.*

2) *To afford nationally uniform treatment of reinsurers, FIO recommends that Treasury and the United States Trade Representative pursue a covered agreement for reinsurance collateral requirements based on the National Association of Insurance Commissioners Credit for Reinsurance Model Law and Regulation.*

3) *FIO should engage in supervisory colleges to monitor financial stability and identify issues or gaps in the regulation of large national and internationally active insurers.*

4) *The National Association of Registered Agents and Brokers Reform Act of 2013 should be adopted and its implementation monitored by FIO.*

5) *FIO will convene and work with federal agencies, state regulators, and other interested parties to develop personal auto insurance policies for U.S. military personnel enforceable across state lines.*

6) *FIO will work with state regulators to establish pilot programs for rate regulation that seek to maximize the number of insurers offering personal lines products.*

7) *FIO will study and report on the manner in which personal information is used for insurance pricing and*

coverage purposes.

8) *FIO will consult with Tribal leaders to identify alternatives to improve the accessibility and affordability of insurance on sovereign Native American and Tribal lands.*

9) *FIO will continue to monitor state progress on implementation of Subtitle B of Title V of the Dodd-Frank Act, which requires states to simplify the collection of surplus lines taxes, and determine whether federal action may be warranted in the near term.*

Potential Federal Solutions to States' Failure to Modernize and Improve

As detailed further in this Report, many of the areas for which FIO recommends that there be reform of the state regulatory system relate to subject matter areas in which the states already have been working to make changes. For a variety of reasons, however, progress has been uneven despite the absence of any dispute about the need for change. As a result, should the states fail to accomplish necessary modernization reforms in the near term, Congress should strongly consider direct federal involvement.

The precise manner of federal involvement is a matter for Congress to determine. Recent experience suggests that proposals for federal involvement have fallen into two paradigms: (1) the federal government serving as a coordinating body that also adopts national rules and standards that would preempt state law, but that would leave direct enforcement of the rules and standards to the states; and (2) direct federal regulation of selected areas or aspects of the insurance industry, whether it be oversight of one element of the distribution chain (*e.g.*, multi-state producer licensing) or a particular line of insurance.

Federal Standards Implemented by the States

The first paradigm is for the federal government to serve as a coordinating and facilitating body to assist states with developing national standards and rules. One example of this approach occurred in 1990, when Congress mandated the development of standard benefit designs for Medicare supplement policies. This approach imposed uniform product design on so-called "Medi-gap" policies, thereby enabling consumers to comparison shop. Under this approach, Congress permitted the states to develop the product standards promulgated as regulation by the U.S. Department of Health and Human Services Center for Medicare and Medicaid Services.

Another example is the National Association of Registered Agents and Brokers Reform Act of 2013 (NARAB II), which is presently under consideration by Congress. Under NARAB II, a commission would be established and guided by a board comprised of state regulators and producers. The National Association of Registered Agents and Brokers (NARAB) would be responsible for issuing multi-state licenses to producers which would preempt the application of any state law or regulation for purposes of licensing and continuing education. Standards will be established, in part, by state regulators, and producers will benefit from one centralized licensing location and process.

Other reform proposals have resembled the foregoing examples of federal/state collaboration. Congress explored one such approach in 2004, when two members of Congress offered a discussion draft known as the "State Modernization and Regulatory Transparency Act," or the "SMART Act." This discussion draft put forth a comprehensive insurance reform proposal that would have provided for the development of national standards and coordinated regulation. It proposed that uniform standards would be enforced at the state level. While the states would develop the uniform standard, each uniformity requirement included an enforcement mechanism to incentivize state participation. For example, failure to streamline licensing for producers would result in preemption of the law of the state that failed to adopt the uniformity standard. This discussion draft, if introduced and adopted, would have

required uniform standards for issues that remain a challenge today: producer licensing, product approval, and surplus lines tax remittance, among others.

One proposed reform has been to adopt a "state passport system."[14] In this scenario, Congress would establish a national standard, or would defer rulemaking on an appropriate topic to an administrative agency, and failure by the states to implement an appropriate national standard would then result in federal preemption. Another version of the national passport approach would authorize FIO, for example, to evaluate state regulatory standards and identify best practices or national standards based on consensus of the states. If FIO surveys state regulatory practices, whether by mandate or choice, FIO could determine whether a satisfactory level of uniformity exists and promulgate that standard as a national target.

Another variant of federal standard-setting is the "federal tools" concept, whereby Congress enacts a regulatory standard and requires the states to develop, adopt, and implement regulation consistent with the standard. A "tools" bill typically requires state action within a limited period of time. In the absence of appropriate state action, or action by a defined number of states, then the federal law preempts the law in those states that have failed to act.

Federal standard-setting schemes can have shortcomings. First, if the legislation delegates a vague standard or objective to the states, it is unlikely to improve uniformity and efficiency as intended. Second, if the legislation contemplates an opt-in by the states, the probability that all states would opt-in may be small.

Thus, while bills to establish federal standards appear to promote incremental improvement on targeted areas, such legislation must specify standards, processes, and a deadline in order to minimize or eliminate the prospect of variance among the states. This experience points to a more general challenge for federal involvement as a standard-setter. Standards themselves may impose a degree of uniformity. However, application of those standards is equally important to imposing uniformity and consistency. Therefore, if federal involvement is to occur through standard-setting, it should be accompanied by mechanisms designed to enhance uniform implementation of the standards through proper, consistent enforcement.

Direct Federal Regulation

One manner of providing for uniform application of rules is to authorize the federal government itself to directly enforce federally-developed and adopted standards and rules. A number of proposals would have subjected much, if not the entirety, of insurance regulation to direct federal oversight. The underlying concept is that the federal government would act not just as standard-setter or rule-maker, but also as regulator and enforcer. Many view this as an essential objective of modernization due to the size and globalization of the insurance sector and its importance to the national economy. Others assert that the federal government need not regulate the entire insurance business, but only certain aspects of it.

For example, one approach would be to adopt federal regulation for those insurance firms that exceed thresholds of size, scale, and complexity, or those that have national or global business operations. Another approach, which has been a focus of prior proposals, is an optional federal charter, whereby those firms that opt for federal charters would be subject to federal regulation. Federal licensing and regulation of insurers, however, could be defined by the terms of eligibility. As proposed in the National Insurance Act of 2007 and the National Insurance Consumer Protection Act of 2009, the optional

14 The Financial Services Roundtable, Public Comment on *How to Modernize and Improve the System of Insurance Regulation in the United States*, December 15, 2011, *available at* www.regulations.gov.

federal charter approach would leave to insurers the choice to adopt a federal charter and, therefore, to be regulated by the federal government or by the states.[15] Yet another approach would be a combination of the first two, where, in general, firms would have an option to adopt a federal charter, but that federal regulation for certain large, globally active firms would be mandatory.

15 *See* pp. 16-17.

II. A BRIEF HISTORY OF THE REGULATION OF THE UNITED STATES INSURANCE INDUSTRY

Early Era of Insurance Regulation and the Limitation on Federal Authority

States first created corporate insurance companies in the late 18th century by enacting individual statutes or charters specific to each insurer. To supervise the activities of a growing industry, in 1851, New Hampshire appointed the first state insurance commissioner. A number of states followed soon thereafter. By 1871, each of the then-36 states had an insurance regulator.

There was evidence early that multistate activity by insurers could create tension with the state-based regulatory regimes. An early manifestation was the case of *Paul v. Virginia*, 75 U.S. 168 (1868). Several New York insurers had hired an agent to sell policies in Virginia, but because the insurers refused to deposit the licensing bond required by Virginia law, Virginia denied the agent a license. When the agent nevertheless sold policies, he was convicted for violating Virginia law. The New York insurers argued to the Supreme Court that the Virginia law was unconstitutional, in part as a violation of the Commerce Clause of the Constitution. The Court rejected the argument, and stated that the business of insurance was not a transaction of interstate commerce, thus placing insurance beyond the authority of the federal government to regulate. Accordingly, the ruling effectively established the states as regulators of the insurance sector.

The Court's decision did not eliminate multistate activity and, with multistate activity, there was recognition of the need for uniformity of rules in different states. The insurance industry and state regulators began to seek ways to promote coordination between states. In 1871, George W. Miller, New York's superintendent of insurance, invited the insurance commissioners from all 36 states to participate in a meeting to discuss insurance regulation. Representatives from 19 states attended the inaugural meeting of the association known today as the National Association of Insurance Commissioners (NAIC). The importance of uniformity was expressed at that meeting:

> In a session "remarkable for its harmony," the commissioners are now "fully prepared to go before their various legislative committees with recommendations for a system of insurance law which shall be the same in all states—not reciprocal, but identical; not retaliatory, but uniform. That repeated consultation and future concert of action will eventuate in the removal of discriminating and oppressive statutes which now disgrace our codes, and that the companies and the public will both be largely benefited, we have no manner of doubt."[16]

Box 1: The National Association of Insurance Commissioners (NAIC)

The NAIC is a voluntary organization that consists of the chief insurance regulatory officials of the 50 states, the District of Columbia, America Samoa, Guam, Puerto Rico, the U.S. Virgin Islands, and the Northern Mariana Islands. Originally formed in 1871, the NAIC reorganized in 1999 as a non-profit corporation under the general corporate laws of the State of Delaware and is a 501(c)(3) tax exempt organization.

16 Susan Randall, *Insurance Regulation in the United States: Regulatory Federalism and the National Association of Insurance Commissioners*, Florida State University Law Review Vol. 26, 625 at 632 (citing 1995 NAIC Annual Report 1 (1996) (quoting Baltimore Underwriter, June 1871)).

The NAIC itself is an association, not a regulator or government entity. Accordingly, public sector requirements do not govern the NAIC's administration, including employment, compensation, and procurement practices. As a private 501(c)(3) organization, the NAIC does not have authority to bind any state or state official to any law, policy, or practice, nor does it have the authority to speak for the United States. Similarly, the NAIC's 501(c)(3) status defines the extent to which it may engage in political and lobbying activities.

Purposes and Functions

The NAIC describes in its 2012 Annual Report the organization's function as a forum through which state regulators develop model laws and regulations:

"The NAIC provides its members with a national forum for discussing common issues and interests, as well as for working cooperatively on regulatory matters that transcend the boundaries of their own jurisdictions. Collectively, commissioners work to develop model legislation, rules, regulations and white papers to coordinate regulatory policy. The overriding objective is to protect consumers and help maintain the financial stability of the insurance marketplace."

Development of a model law proceeds in a number of stages, but must first be authorized by the Executive Committee, the managing committee of the NAIC. A number of qualifying criteria must be met before development of a model law is undertaken, including both: (1) the need for a national standard and uniformity among the states on the relevant policy issue and (2) the commitment among state regulators to support and implement a model law. Once a model law goes through the appropriate committees for review, its adoption by the NAIC occurs at a plenary session and requires a favorable vote of two-thirds of the NAIC members then attending. Model laws are generally not adopted uniformly and only become effective in a particular state if and when enacted by that state's legislature.

The NAIC also provides support services to assist states in implementing regulations. The level of state participation and use of each of these products and tools vary. Five such NAIC services are:

- Interstate Insurance Product Regulation Commission (IIPRC), which offers a centralized life insurance product approval process for 41 states;
- National Insurance Producer Registry (NIPR), which provides a national electronic database of licensed insurance producers;
- System for Electronic Rate and Form Filings (SERFF), which provides an electronic form and rate filing system for insurance products;
- State Based Systems, which offers on-line registration for producers; and,
- Online Premium Tax for Insurance, which allows for payment of premium taxes for multi-state placements.

Structure and Budget

The NAIC's 2013 approved budget includes total revenues of $80.0 million, expenses of $81.2 million, and a total unrestricted net asset balance of $83.3 million. Revenue supporting the NAIC budget is derived from three primary sources: database filing fees paid by the insurance industry in connection with required statutory filings ($26.8 million, or 33.5 percent of budgeted revenues); sales of publications and insurance data products ($19.5 million, or 24.4 percent); and fees paid by the insurance industry for other services provided by the NAIC to satisfy state regulatory requirements ($21.1 million, or 26.3 percent). The data that is included in NAIC products is taken from an insurance sector database that has been populated by data in reports filed with the NAIC by insurers pursuant to state regulatory requirements. State regulators also contribute $2.3 million (2.9 percent) through membership assessments. For 2013, the NAIC budget authorizes

employment of up to 462 full-time equivalent positions across its three offices: the Executive Office in Washington, D.C.; the Capital Markets and Investments Office in New York, New York; and the Central Office in Kansas City, Missouri.

In addition to the Plenary and Executive Committees, the NAIC has seven major committees, each of which is responsible for particular areas of regulatory concern. A major committee may have task forces – as well as working groups and sub-working groups – that address specific issues. The seven major committees are:

- Life Insurance and Annuities (A) Committee
- Health and Managed Care (B) Committee
- Property and Casualty (C) Committee
- Market Regulation and Consumer Affairs (D) Committee
- Financial Condition (E) Committee
- Financial Regulation Standards and Accreditation (F) Committee
- International Insurance Relations (G) Committee

Early Calls for Federal Regulation of Insurance

The perceived state of the insurance industry in the early years of the 20th century sparked a debate about a potential federal role in insurance regulation. In the early 20th century, highly publicized reports and accusations of market manipulation and fraud associated with insurers prompted the New York State legislature, for example, to investigate the business practices of some of the largest life insurers. The results of the investigation documented abuses by life insurers, including stock market manipulation, falsified records to hide campaign contributions, and officers using company funds for personal use.[17] Against this background, President Theodore Roosevelt spoke in favor of federal insurance regulation in his Annual Address to Congress in 1904. Discussing the strains on the state regulatory system through the growth of the insurance industry, he justified federal intervention by stating that the insurance business is "national and not local in its application," and "involves a multitude of transactions among the people of the different States and between American companies and foreign governments."[18]

In 1905, Senator John Dryden of New Jersey, founder and president of the Prudential Life Insurance Company, introduced a bill to implement President Roosevelt's recommendation for the federal regulation of insurance by creating a "Bureau of Insurance" in the Department of Commerce and Labor, which was to be led by a "Comptroller of Insurance" appointed by the President to a four year term. He expanded the justification for federal regulation from combating manipulation and fraud to promoting uniformity and efficiency. Senator Dryden maintained, for example, that his bill would increase security to policyholders, decrease the cost of insurance, and result in "diminution of a vast amount of needless clerical labor to meet the requirements of some fifty different States and Territories and consequent decrease in expense rate."[19] He added, "Whatever may be said in favor of the national regulation of banks and railways applies with equal, if not greater, force in the case of this now universal institution, reaching as it does, all classes and affecting more or less all commercial interests."[20] Thus, Senator Dryden offered many of the arguments that would be repeated in the following decades in favor of federal insurance regulation.

17 Kenneth J. Meier, *The Political Economy of Regulation: The case of insurance* (1988), pp. 57-8.

18 Theodore Roosevelt's Annual Message to Congress for 1904; House Records HR 58A-K2; Records of the U.S. House of Representatives; Record Group 233; Center for Legislative Archives; National Archives.

19 *New York Times*, "Bill for Government Control of Insurance; to be introduced in the Senate by John F. Dryden," Feb. 27, 1905, p. 5.

20 *Id.*

Congress did not pass Senator Dryden's proposed bill. Not everyone agreed that a federal solution was warranted. During the same period in which Senator Dryden introduced his legislation, for example, Louis Brandeis, then practicing law in Boston before becoming a Supreme Court Justice, expressed his belief that state regulation was preferable. At the time, he served as counsel to a New England policyholders' committee that was concerned about the potential bankruptcy of Equitable Life Assurance of New York. After undertaking a study of the insurance industry, Brandeis expressed concerns about dishonest and inefficient management, the amount of capital that the large insurers controlled, and the inefficiency of state regulation. He nevertheless favored improving state regulation to replacing it with federal regulation, characterizing Senator's Dryden's proposal as a way to "free the companies from the careful scrutiny ... of the States."[21]

The Case of *South-Eastern Underwriters*, Federal Authority to Regulate Insurance, and the McCarran-Ferguson Act

In 1944, in a reversal of its previous position, the Supreme Court concluded that Congress had the power to regulate insurance transactions across state lines.[22] In so concluding, it echoed the types of arguments made earlier by President Roosevelt and Senator Dryden, noting that insurance, "has become one of the largest and most important branches of commerce," and, "[p]erhaps no modern commercial enterprise directly affects so many persons in all walks of life as does the insurance business."[23]

The case that occasioned the Supreme Court's decision can be traced back to the San Francisco earthquake of 1906, which bankrupted many fire insurers. In the wake of these bankruptcies, a number of states allowed insurers to set premium rates collaboratively, which allowed insurers to avoid competition in pricing premiums. The rationale was that avoiding such competition would prevent a deterioration in insurers' financial condition and, consequently, possible insurer insolvencies. The insurance industry formed panels to collaboratively set rates in states where such rate setting was permitted.

Missouri did not allow collaborative rate setting. Certain fire insurers, however, were found by the United States to be bribing Missouri state officials to permit them to maintain rates in a manner that effectively amounted to rate setting. The United States filed suit alleging that the bribes and the rate setting constituted price fixing by a cartel in violation of the Sherman Antitrust Act. The case was brought against the South-Eastern Underwriters Association, the largest rate-setting bureau, and ultimately was presented to the Supreme Court in 1944. Cases such as *Paul* had raised the question whether a state had the authority to regulate and to tax specific activities of insurers based in other states. The antitrust claim presented in the *South-Eastern Underwriters* case, however, raised the question whether the Commerce Clause of the Constitution granted Congress the power to regulate insurance transactions across state lines. The Court held that insurers were engaged in interstate commerce and concluded that, even though Congress had not specifically included a provision in the Sherman Act to apply to insurance, Congress had the power to include insurers within the scope of federal law.[24]

21 Louis D. Brandeis, Counsel for the Protective Committee of Policy-Holders of the Equitable Life Assurance Society, "Life Insurance: The abuses and the remedies," Address delivered before the Commercial Club of Boston, 1905, *available at* http://www.archive.org.

22 *United States v. South-Eastern Underwriters Association*, 322 U.S. 533 (1944).

23 *Id.* at 540. The Court noted that the "business is not separated into 48 distinct territorial compartments which function in isolation from each other. Interrelationship, interdependence, and integration of activities in all the states in which they operate are practical aspects of the insurance companies' methods of doing business."

24 *Id.* at 552-553.

In 1945, in response to the *South-Eastern Underwriters* decision, Congress passed the McCarran-Ferguson Act[25] to clarify that state laws governing the business of insurance are not invalidated, impaired, or superseded by any federal law unless the federal law specifically relates to the business of insurance.[26] In the Act, Congress stated that, "the continued regulation and taxation by the several States of the business of insurance is in the public interest, and that silence on the part of Congress shall not be construed to impose any barrier to the regulation or taxation of such business by the several states."

The Crises of Insurer Insolvencies, Congressional Reaction, and State Regulatory Responses

A wave of insolvencies among auto insurers in the 1960s rekindled the debate over the adequacy of state regulation and the inadequate level of uniformity in insurance regulation among the states. In the absence of guaranty funds, failure of these auto insurers left policyholders without adequate recourse against the assets of the insolvent insurer. The crisis attracted Congressional attention and, in 1966, prompted a proposal to create a federal guaranty system for insurers, modeled on federal bank deposit insurance.[27] A decade later, in 1976, Senator Edward Brooke introduced the Federal Insurance Act, which would have authorized the federal government to offer optional federal insurance charters, preempting state law, and would also have created a federal guaranty fund.[28] In a parallel effort a few years earlier, in 1969, state regulators, through the NAIC, developed a model guaranty fund act for property and liability insurance and, in 1970, a similar model for life and health insurance. Guaranty funds aimed to improve policyholder protection with an industry-funded, *ex post* claims payment system whereby consumers would receive some contractual benefit despite an insurer's failure. Many states adopted versions of this model legislation.

After another series of insurer insolvencies, this time involving over 50 insurers in the 1980s and 1990s, including the largest life insurer in California at the time, Congress began a more extensive investigation into the adequacy of insurer solvency regulation. The House Committee on Energy and Commerce's Subcommittee on Oversight and Investigations, chaired by Congressman John Dingell, issued a report in 1990 entitled *Failed Promises: Insurance Company Insolvencies.*[29] The report found that, "the present system for regulating the solvency of insurers is seriously deficient" due to rapid and unbridled expansion, underpricing, inadequate oversight, inadequate loss reserves, poor reinsurance transactions, and fraud.[30] In 1992, Chairman Dingell introduced a bill that, if enacted, would have instituted federal regulation of insurer solvency.[31] In 1994, the same subcommittee issued a second report on insurer solvency regimes, entitled *Wishful Thinking: A World View of Insurance Solvency Regulation.*[32] The report stated that, notwithstanding state regulatory efforts to address solvency reform, regulation re-

25 The McCarran–Ferguson Act, 15 U.S.C. §§ 1011-1015.

26 *Id.* at § 1012(b).

27 Sen. Thomas J. Dodd, "High-Risk Automobile Insurance Company Insolvencies," *Congressional Record,* vol. 112, Feb. 17, 1966, pp. 3373-3374.

28 The Federal Insurance Act (S. 3884, 1976). A modified version of the bill was introduced as S.1710 in the 95th Congress.

29 U.S. House of Representatives, Committee on Energy and Commerce, Subcommittee on Oversight and Investigations, *Failed Promises: Insurance Company Insolvencies,* 101st Cong., 2nd Sess., Committee Print 101-P (Washington: GPO 1990).

30 *Id.* at III.

31 The Federal Insurance Solvency Act (H.R. 4900, 1992). The bill provided for a broad federal preemption of state insurance regulatory powers.

32 U.S. House of Representatives, Committee on Energy and Commerce, Subcommittee on Oversight and Investigations, *Wishful Thinking: A World View of Insurance Solvency Regulation,* 103rd Cong,, 2nd Sess., Committee Print 103-R (Washington: GPO, 1994).

mained insufficient because state regulators lacked adequate national and international authority.[33] A minority report released by the subcommittee, however, disagreed and stated that it favored "strengthening, not dismantling, the current State regulatory system."[34]

In the aftermath of the *Failed Promises* and *Wishful Thinking* reports, in the 1990s, state regulators, through the NAIC, developed and adopted risk-based capital (RBC) formulae for life, property/casualty and health insurers. At the same time, states developed and adopted a self-accreditation program now known as the Financial Standards and Accreditation Program, a peer review process intended to improve consistency of financial regulation across the state system. Later, in 2001, after several years of development, state regulators codified statutory accounting principles (SAP) in an effort to further policyholder protection.

Recent Proposals for Federal Regulation of Insurance to Promote Uniformity

A number of proposals have been set forth more recently to enact federal legislation to address the inconsistency and absence of uniformity in the state-based system of insurance regulation. An important initial effort occurred in 1999, when Congress passed the GLBA.[35] Although GLBA allowed banks to affiliate with insurers through a federally regulated financial holding company, it preserved the states' authorities to regulate insurance company affiliates. GLBA introduced the possibility of addressing the absence of uniformity in one key area of state regulation, however, when it included the requirement for the creation of NARAB to implement national insurance agent licensing requirements if a majority of the states and territories did not meet a 2002 deadline for reciprocity in producer licensing.[36] In 2002, the state regulators certified that 35 states and territories had satisfied the GLBA requirement, enough to constitute a majority and thereby avoiding the creation of NARAB.[37]

GLBA was the beginning of a series of efforts over the ensuing decade to bring a federal regulatory presence to insurance. Between 2001 and 2006, the House Financial Services Committee held more than a dozen hearings at both the subcommittee and full committee levels on insurance matters at which witnesses discussed issues such as the increasing globalization of the insurance sector and inefficiencies attendant to the lack of uniformity in the state-based system of regulation. Members of Congress also offered legislative solutions. Congressman Michael Oxley and Congressman Richard Baker, for example, released a discussion draft called the State Modernization and Regulatory Transparency Act (SMART Act) in 2004, which proposed that states comply with uniform standards for licensing, market conduct regulation, reinsurance practices, and receivership rules. It also proposed expediting the process of introducing new insurance products to the market and shifting toward a system of market-based rates.[38]

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33 *Id.*

34 *Id.*, at 128.

35 Pub.L. 106-102, (1999).

36 *Id.* at § 321.

37 NAIC NARAB (EX) Working Group Report: Certification of States for Producer Licensing Reciprocity, Adopted Aug. 8, 2002. In 2008, in 2009, and again in 2011, Members introduced "NARAB II" bills to establish a national producer registry (H.R. 5611 (2008); H.R. 2554 (2009); H.R. 1112 (2011)). If enacted, the legislation would create NARAB as a national, nonprofit producer licensing corporation and would prohibit states from imposing any additional licensing requirements on non-resident producers who are NARAB members.

38 State Modernization and Regulatory Transparency Act (Discussion draft authored by Rep. Oxley, Chairman, House Fin. Serv. Comm. and Rep. Baker, Chairman, Capital Markets Subcomm.) (2004) available at http://www.aba.com/ABIA/Pages/Issue_RM.aspx.

Although the SMART Act would have required significant increases in the degree of uniformity, state regulators' authorities would have been preserved. Other proposals, however, have prescribed more extensive federal regulatory involvement to promote uniform national insurance regulation. For example, a number of bills have called for the creation of an optional federal charter, such as the National Insurance Act of 2007, co-sponsored in the Senate by Senators Tim Johnson and John Sununu, and in the House by Representatives Melissa Bean and Edward Royce.[39] This proposed legislation would have created an optional federal charter for property/casualty and life insurance.[40]

The Executive Branch presented a similar proposal in a 2008 report by the Treasury entitled *Blueprint for a Modernized Financial Regulatory Structure.*[41] Noting that the insurance regulatory system suffered from duplicative, inconsistent, and non-uniform regulation, the report proposed the creation of an optional federal insurance charter as an interim step toward a unified national chartering system. The *Blueprint* also included proposals for federal licensing for insurance producers and the creation of an Office of Insurance Oversight at Treasury.[42] In April 2009, The National Insurance Consumer Protection Act was introduced in the House by Representatives Bean and Royce with the stated purpose of improving uniformity in insurance regulation.[43] The bill proposed a single, optional federal charter for the insurance industry, including insurers, reinsurers, and insurance producers.[44]

In June 2009, the Treasury released *Financial Regulatory Reform: A New Foundation* that recommended the establishment of an Office of National Insurance "to gather information, develop expertise, negotiate international agreements, and coordinate policy in the insurance sector."[45] In this policy statement, the Treasury articulated six principles by which to measure proposals for insurance regulatory reform:

1. Effective systemic risk regulation with respect to insurance.

2. Strong capital standards and appropriate match between capital allocation and liabilities for all insurance companies.

3. Meaningful and consistent consumer protection for insurance products and practices.

4. Increased national uniformity through either a federal charter or effective action by the states.

5. Improve and broaden the regulation of insurance companies and affiliates on a consolidated basis, including those affiliates outside of the traditional insurance business.

6. Increased international coordination. Improvements to our system of insurance regulation should satisfy existing international frameworks, enhance the international competitiveness of the American insurance industry, and expand opportunities for the insurance industry to export its services.

39 S. 40 and H.R. 3200.

40 *Id.* These proposals are sometimes described as "dual charter" proposals.

41 Treasury, *Blueprint for a Modernized Financial Regulatory Structure,* March, 31, 2008.

42 *Id.*

43 The National Insurance Consumer Protection Act (H.R. 1880) (April 2, 2009).

44 *Id.*

45 Treasury, *Financial Regulatory Reform: A New Foundation: Rebuilding Financial Supervision and Regulation,* June 2009, at 39.

The Financial Crisis

In 2007-2009, the United States faced the most severe financial crisis since the Great Depression. Like other parts of the financial sector, the insurance industry was affected by the crisis in several ways.

One of the most notable events of the crisis was the near-collapse of AIG, which threatened the stability of the entire U.S. financial system. Although AIG was principally an insurer, it also conducted other businesses, including a large amount of derivatives trading and securities lending. At the end of 2007, AIG's derivatives book was nearly $2.65 trillion in outstanding notional amounts.[46] While some derivatives were used for hedging in the conduct of AIG's insurance business, its large credit default swap portfolio ($562 billion at the end of 2007)[47] was located in a non-insurance, non-regulated affiliate, and these derivatives proved to be a major source of financial trouble for the firm and the U.S. financial system. Another major source of AIG's losses came from its large securities lending activities which were conducted through both insurance and non-insurance affiliates.

AIG owned a thrift and, therefore, AIG's holding company was regulated by the Office of Thrift Supervision (OTS). However, GLBA generally limited the authority of the OTS to supervise state-regulated insurance entities.

In the absence of an effective consolidated supervisor, AIG conducted its credit default swap (CDS) business largely outside of regulatory purview and engaged in securities lending activities that had not been previously approved. As it turned out, AIG did not have sufficient capital or liquidity to withstand the deterioration in the financial condition of its CDS and securities lending businesses that occurred during the financial crisis. (*See* Box 2.) The experience with AIG underscored the importance of consolidated supervision and appropriate prudential standards for certain types of nonbank financial institutions.

Box 2: AIG

Prior to the financial crisis AIG was regarded as the world's largest insurance firm with products in nearly every business line and entities domiciled throughout the United States and internationally. AIG's U.S.-based legal insurance entities were subject to state regulatory oversight. Due to the limits of state regulatory authority, the supervisory oversight of AIG's non-insurance operations was completely separate and distinct from oversight of its insurance businesses. While AIG's business ventures developed into complex non-insurance activities, the scope of state regulatory authority was demonstrably inadequate given AIG's size, scale, and complexity.

Credit Default Swaps

AIG conducted its CDS business through AIG Financial Products (AIG FP), which operated in Wilton, Connecticut; London, England; and Paris, France. Despite its locations in Europe, this subsidiary was not regulated by the EU because the EU recognized the U.S. Office of Thrift Supervision as the lead consolidated supervisor, meaning that the EU effectively deferred responsibility for supervision to the OTS. The OTS, however, rarely conducted examinations of AIG FP's activities, which included writing about $562 billion of credit default swap protection. In part because of the fair value impairments associated with its CDS business, AIG experienced significant margin calls in 2007, was downgraded by the credit rating agencies in 2008, and ultimately, turned to the U.S. federal government to provide exceptional assistance.

46 American International Group, Inc., Form 10-K, 2007.

47 American International Group, Inc., Form 10-Q, Q2, 2008.

Securities Lending

AIG's insurance subsidiaries authorized a non-insurance affiliate, AIG Securities Lending Corporation (AIGSLC), to act on behalf of the subsidiaries to loan securities to other financial institutions in exchange for cash collateral. Although state regulators regulated only the AIG insurance entities and did not supervise AIGSLC, state regulators did approve the risk parameters that originally guided AIG's securities lending practices. Over time, however, AIG deviated from the approved parameters to grow a once-conservative business into a source of material risk to the insurers engaged in the securities lending activity. In 2005, AIG began investing the cash collateral it received through securities lending activities into residential mortgage backed securities (RMBS), which provided a return on investment higher than other securities.[48] By 2007, approximately 60 percent of AIG's invested securities lending collateral were in RMBS. As the mortgage crisis deepened, credit rating agencies downgraded RMBS from AAA status. The resulting drop in price and tightening liquidity in the underlying market for structured securities was a significant impediment to AIG selling its RMBS investments for cash in order to meet collateral calls. In the last two weeks of September 2008 alone, AIG's securities lending counterparties demanded that AIG return approximately $24 billion in cash. This problem was exacerbated by the fact that the average maturity of the RMBS securities was materially longer than the average maturity of the securities loans, which often ranged from overnight to 60 days in maturity.

In 2007, state regulators identified the risks associated with AIG's shift from holding cash collateral to investing in RMBS. As of December 2007, securities lending assets and liabilities represented 7 percent and 8.5 percent, respectively, of AIG's consolidated balance sheet. Although numerous life insurers within AIG's corporate structure were involved in securities lending, the actual operations were centralized in AIGSLC.

During the financial crisis, the Federal Reserve and Treasury provided a total combined $182 billion commitment to stabilize AIG, $22.5 billion of which addressed liquidity issues in the securities lending program.

On December 11, 2012, Treasury sold its final shares of AIG common stock for additional proceeds of $7.6 billion. Including the proceeds from that sale, the overall positive return on the Federal Reserve and Treasury's combined commitment to stabilize AIG during the financial crisis is $22.7 billion. Since 2008, AIG's size as measured by assets has decreased 46 percent and the firm has re-focused on the core business of insurance.

The financial crisis also contributed to the failure of financial guaranty insurers, including both municipal bond and mortgage insurers. (*See* Box 5). Financial guaranty insurers provide protection from credit-related losses on debt products such as municipal bonds, mortgage and other asset-backed securities, and collateralized debt obligations. Bond issuers purchase this insurance, which effectively operates as a guaranty on the bonds, thereby providing better access to the market and reducing borrowing costs. The financial crisis forced several financial guaranty insurers into receivership or run-off. Only one of the firms existing pre-crisis continues to write new business today in the same form as prior to 2008, and that new business is limited to insuring municipal bonds. Exposure to mortgage-backed securities and other structured financial products led to the failure of some of the smaller bond insurers and to credit rating downgrades for the larger insurers, which impaired the ability of those insurers to generate new capital or write new business. These downgrades rippled through the municipal bond markets, causing significant difficulties for both investors and municipalities. State regulators respond-

48 Congressional Oversight Panel June Oversight Report: *The AIG Rescue, Its Impact on Markets, and the Government's Exit Strategy* (June 10, 2010).

ed by placing some of the financial guaranty insurers into run-off, which refers to a non-judicial orderly commercial wind down of the insolvent insurer.

Other parts of the insurance sector were also affected by the crisis. A number of insurers sought and obtained access to federal emergency liquidity assistance, largely to bolster capital for variable annuity products. In addition, state regulators provided direct aid to insurers during the crisis by permitting many insurers to deviate temporarily from NAIC-codified SAP.[49] (*See* Box 3).

Box 3: Assistance to the Insurance Industry during the Financial Crisis

During the financial crisis, a number of insurers received extraordinary support from governmental entities. This support was provided in the form of: (1) direct capital support by the federal government; (2) liquidity support through credit facilities established by the Federal Reserve; and (3) relief from SAP granted by state regulators.

Direct Capital Support

During the crisis, insurers that were bank or thrift holding companies were eligible to receive capital support from the Capital Purchase Program (CPP) as part of the Troubled Asset Relief Program. Several life insurers acquired regulated thrifts in order to qualify for capital investments available through CPP, although only two received CPP investments. Direct capital support was also provided separately to AIG through several complex, multi-step investments from the Treasury and the Federal Reserve.

Liquidity Support

Insurance groups were also beneficiaries of liquidity facilities, primarily from two temporary sources: (1) the Federal Reserve's Commercial Paper Funding Facility (CPFF); and (2) the Term Asset-Backed Auction Loan Facility (TALF) offered by regional Federal Reserve Banks.

The CPFF financed the purchase of unsecured and asset-backed commercial paper from eligible issuers through primary dealers. At the time, significant outflows from the money market sector severely disrupted the ability of commercial paper issuers to roll over short-term liabilities. The CPFF acted as a liquidity backstop for the commercial paper market. In at least 175 transactions from 2008 through 2009, firms engaged in the business of insurance made use of the CPFF.

The TALF was a credit facility created in December 2007 that allowed a depository institution to bid for a 28-84 day advance from its local Federal Reserve Bank at an interest rate determined by auction. By allowing the Federal Reserve to inject term funds through a broader range of counterparties and against a broader range of collateral than open market operations, TALF provided liquidity when the unsecured interbank markets were under stress.

Non-U.S. Government Support for Insurers Operating in the United States

In addition to support programs offered in the United States, insurers with substantial U.S. operations, but domiciled elsewhere, received home-country support. For example, one leading variable annuity writer that generates approximately two-thirds of its income from the United States received approximately $3.7 billion from the Central Bank of its country of domicile. Another prominent variable annuity writer received more than $13 billion from the Central Bank of its

49 NAIC, *Annual Statement Permitted and Prescribed Practices Reports* (http://www.naic.org/index_pps.htm).

home country and was forced to separate its banking and insurance activities. In addition, several other non-U.S. annuity writers have moved to sell or dispose of U.S. operations due, in part, to the additional capital demands of home country regulators caused by a U.S.-based variable annuity business.

Capital Relief through State Regulatory Permitted and Prescribed Practices

On November 11, 2008, the American Council of Life Insurers (ACLI) requested that state regulators "provide important near term relief from conservative reserve and risk-based capital standards" to help insurers manage the financial stress caused by the financial crisis. The ACLI's proposal and recommendations for expedited change to existing regulatory provisions that governed statutory capital and surplus requirements were rejected by state regulators as a group on January 29, 2009. Nevertheless, throughout the year, state regulators permitted certain insurers to deviate from SAP equivalent to, or in excess of, what was sought by the ACLI. As a result, by allowing revised accounting practices (for example, for deferred tax assets) more favorable than previously allowed by statutory accounting rules and regulations, state regulators provided capital relief to some insurers at a critical time that, in some cases, had a substantial, positive effect on insurer RBC ratios.

According to NAIC annual statement data,[50] 61 life insurance groups reported positive effects on 2008 year-end surplus from state permitted or prescribed practices. The average benefit to surplus among those 61 groups was 9.64 percent. 15 of those groups benefitted by more than $100 million, five of which benefitted by more than $1 billion. 183 P/C insurance groups reported positive effects on 2008 year-end surplus from state permitted or prescribed practices. The average benefit to surplus among those 183 groups was 5.27 percent.

Financial Regulatory Reform

The Dodd-Frank Act introduced reforms to remedy the weaknesses in supervision of the financial system that were exposed through the financial crisis, including those that touched the insurance industry. For example, Title I of the Dodd-Frank Act established a new supervisory structure for the oversight of the U.S. financial system through the creation of the Council, which is charged with identifying and responding to threats to the stability of the U.S. financial system. The Council is authorized to determine that a nonbank financial company shall be supervised by the Federal Reserve and be subject to prudential standards if the Council determines that the nonbank financial company's material financial distress or activities could pose a threat to the financial stability of the United States. The Federal Reserve must establish and enforce prudential standards for the largest bank holding companies and for nonbank financial companies supervised by the Federal Reserve.

The Dodd-Frank Act also addresses insurance more directly by creating FIO and by assigning to it an important financial stability role. FIO has the authority and responsibility to monitor all aspects of the insurance industry and to identify issues or regulatory gaps that could threaten the stability of the insurance industry or, more broadly, the U.S. financial system. FIO may also recommend to the Council that it designate an insurer as an entity subject to regulation as a nonbank financial company supervised by the Federal Reserve. FIO's financial stability mission also includes playing a role in the context of Title II's Orderly Liquidation Authority. Title II confers "key turning" responsibilities upon FIO, whereby the affirmative approval of the FIO Director and two-thirds of the Governors of the Federal Reserve are

50 SNL Financial (data extracted May 20, 2013) (comparing "Policyholder Surplus: State Prescribed & Permitted Practices" with "Policyholder Surplus: NAIC Statutory Accounting Principle" data elements at the "SNL Group" level for 2008 annual data).

required before the Secretary may make a determination on whether to seek the appointment of the FDIC as receiver of an insurance company.

Under the FIO Act, FIO's mission also extends to international matters, where FIO is responsible for coordinating federal efforts and developing federal policy on prudential aspects of international insurance matters, including representing the United States, as appropriate, in the IAIS. Until the creation of FIO, a single federal entity had not been specifically designated to represent the United States in discussions about the global insurance regulatory framework and international regulatory standard-setting. FIO's current efforts on prudential aspects of international insurance matters, primarily coordinated through the IAIS, complement the reforms of the Dodd-Frank Act and include: (1) the identification of global systemically important insurers (G-SIIs) to be subject to heightened supervision and regulation; (2) the development of a common framework for the supervision of internationally active groups, including a quantitative capital standard; and (3) the integration of resolution measures into international standards applicable to insurers operating in multiple countries.

III. PRUDENTIAL OVERSIGHT

The Solvency Framework

In the context of insurance, "solvency" generally refers to the ability of the insurer to meet its obligations. Solvency regulation has been and continues to be primarily the responsibility of state regulators. It broadly consists of prudential rules (such as capital requirements and accounting standards, together with guidelines governing investment portfolios), protocols for regulatory intervention with troubled institutions (including insolvency proceedings and requirements for guaranty funds), and supervisory practices intended to promote and maintain the safety and soundness of insurers (including financial examination and analysis, company licensing, and collaboration with regulators from other states and international jurisdictions). Primary financial oversight of any given insurer is performed by the state in which the company is domiciled, *i.e.*, typically where it was formed and maintains its corporate license to operate. Other states generally defer to the regulatory authority of the insurer's domestic state with respect to prudential supervision.[51]

Before the financial crisis, increasing globalization and complexity of the business of insurance had prompted the international regulatory community to reexamine the adequacy of prudential oversight of insurers and the consistency of cross-jurisdictional and cross-sectoral regulatory treatment. The importance of that review has only been underscored by the financial crisis. Currently, domestic and international regulatory discussions around solvency regulation are primarily focused on prudential standards, enterprise risk management, and group (*i.e.*, consolidated) supervision. FIO has authorities that include monitoring all aspects of the industry and the identification of issues or gaps in regulation that could have financial stability consequences, and representing the U.S. government in prudential aspects of international insurance matters. The dual developments of the financial crisis and the unprecedented internationalization of the insurance market have led to increased emphasis on all aspects of solvency oversight, both at the state and federal levels. In addition, international standard-setting activities have grown in importance and focus.

More specifically, the IAIS is the forum through which insurance supervisors and authorities from more than 140 countries, including U.S. state regulators, convene to develop international insurance supervisory standards and best practices. The IAIS does not prescribe a particular approach or structure with which a country must satisfy an international standard.

The Dodd-Frank Act vests FIO with authority to:

> coordinate Federal efforts and develop Federal policy on prudential aspects of international insurance matters, including representing the United States, as appropriate, in the International Association of Insurance Supervisors (or a successor entity) and assisting the Secretary in negotiating covered agreements[.][52]

FIO currently represents the United States on the IAIS Executive and Financial Stability Committees, and is involved with the Macro-Prudential Surveillance Subcommittee, along with other subcommittees. FIO's Director also serves as Chair of the IAIS Technical Committee, which leads the development of substantive, technical standards, including the Common Framework for the Supervision of Internationally Active Insurance Groups (ComFrame).

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51 State regulators developed the Financial Regulation Standards Accreditation Program (*see* p. 29) between 1988 and 1990 in the midst of a series of large insolvencies and congressional inquiry into those insolvencies that culminated in the *Failed Promises* report.

52 31 U.S.C. § 313(c)(1)(E).

In its role as representative of the United States, FIO consults with state regulators, relevant federal agencies, consumers, insurers, and other stakeholders and technical experts. FIO's current substantive priorities in this capacity are: (1) developing and field testing ComFrame so that it serves supervisors' interests and reflects the realities of insurance industry practices; (2) refining a methodology and process to identify G-SIIs; (3) establishing enhanced supervisory measures to be applied to a G-SII, including cross-border resolution practices; and (4) enhancing insurance group supervision in light of recent Financial Stability Board (FSB) recommendations. While FIO is not a functional regulator, these international prudential matters fall within the ambit of the authority to develop federal policy on prudential aspects of international insurance matters. In addition, FIO's authority to monitor all aspects of the insurance industry, including its regulation, bring these matters of financial stability and the standards applicable to internationally active insurers directly within FIO's area of focus.

On October 16, 2013, the IAIS released a third version of a draft consultation paper that outlines ComFrame. ComFrame is designed to establish a comprehensive framework for supervisors to: (1) address activities and risks at the insurance group level; (2) develop principles for better global supervisory cooperation; and (3) foster global convergence of regulatory and supervisory measures and approaches. The ComFrame concepts, as presently drafted, are likely subject to revision and refinement through the results of the important field testing phase, which is in its early stages and will study the impact of ComFrame's qualitative and quantitative requirements. Through the development of common supervisory approaches, implementation of ComFrame should reduce the compliance and reporting burden on the increasing number of insurers operating in multiple international jurisdictions, and increase the shared confidence of global supervisors. In addition, ComFrame seeks to further understanding of group structures through risk analysis and transparency. Improved consistency of supervisory approaches to solvency oversight would promote more effective and efficient supervision of groups, build trust among the international supervisory community, and foster markets that allow for the participation of U.S.-based insurers.[53]

In 2010, the FSB instructed the IAIS to develop a methodology to identify G-SIIs and the enhanced prudential measures to which designated firms would be subjected. The IAIS established the Financial Stability Committee (FSC), in which FIO has participated since July 2011 and been actively engaged since April 2012. FIO's FSC priorities have been to work with national and international colleagues to ensure the rigor and quality of the IAIS methodology, as well as to align the IAIS process with the Council's three-stage process for determining whether a nonbank financial company should be designated for supervision by the Federal Reserve.

Insurers, in contrast to banks, are not currently subject to uniform capital requirements at the global level. On July 18, 2013, the FSB issued mandates to change that, directing the IAIS to make tangible progress in the following areas:

- As a foundation for Higher Loss Absorbency (HLA) requirements (*i.e.* higher capital requirements) for G-SIIs, the IAIS will develop a Straightforward Backstop Capital Requirement (SBCR) to apply to all group activities, including non-insurance subsidiaries, to be finalized by the end of 2014.
- Building on the SBCR, and following public consultation, the IAIS will, by the end of 2015, develop implementation details for HLA requirements. These will apply starting from January 2019 to those G-SIIs identified in November 2017, using the IAIS methodology.
- The IAIS will develop, and the FSB will review, a work plan to develop a comprehensive, group-wide supervisory and regulatory framework for Internationally Active Insurance Groups (IAIGs), including a quantitative capital standard (QCS). The timeline for the finalization of the framework will be agreed by the FSB by the end of 2013.

53 *See* IAISweb.org for more details.

On the same day the FSB issued these mandates, it also announced that, in consultation with the IAIS and national authorities, it had identified an initial list of G-SIIs. The population of IAIGs—approximately 50-60 firms from around the world—would include all nine G-SIIs.

The IAIS has been considering alternatives for an SBCR. These proposals will be released for a 60-day public consultation beginning in December 2013. Through 2014, the IAIS will finalize an initial version of the SBCR and alternative approaches for the application of HLA requirements to the G-SIIs. Even once finalized, the SBCR will be subject to testing and refinement in the years leading to 2019. Whether the SBCR serves as a basis for HLA, whether the QCS will build on the SBCR, or whether the QCS will serve as the basis for HLA, remain open questions.

The IAIS released a revised draft of the ComFrame concept paper for a 60-day public consultation on October 16, 2013. This version of ComFrame includes a capital adequacy assessment process that would subject an insurance group to a series of plausible and adverse scenarios. At the same time, ComFrame's QCS will be developed in concept by the end of 2016 and, thereafter, will be tested for two years before being finalized in late 2018.

Development of international insurance capital standards remains a daunting and unprecedented challenge. Nevertheless, driven by the fast-paced internationalization of insurance markets, IAIS members appear committed to achieving the stated objectives. Of necessity, the SBCR will be simpler and less granular than the QCS, although development of both will be guided by the boundaries of time, resource and achievability.

Another significant development in solvency oversight has been the EU's 2009 adoption of a regulatory framework known as Solvency II. Solvency II will soon be adopted by the European Parliament as part of an omnibus legislative package, with a scheduled implementation date of 2016. Notably, despite the previous delays with adoption in the EU, components of Solvency II have been adopted in other countries, including China and Mexico.

Broadly structured around the three pillars of capital, supervision, and disclosure, Solvency II would require adherence to RBC requirements at both the individual regulated entity and group levels, whether pursuant to a standardized formula or based on the insurer's own internal models subject to supervisory review. (*See* Box 4). As originally formulated, Solvency II would have been particularly consequential for the U.S. insurance sector because of its requirement for unilateral assessments of insurance regulation in other jurisdictions (including the United States) and because it would impose solvency requirements on insurers doing business in the EU to the extent the home jurisdiction's requirements are deemed to be unsatisfactory in comparison to Solvency II. Through the EU-U.S. Insurance Project (*see* Box 4), the EU and the United States have committed to a collaborative work plan that will enhance understanding and cooperation and, where appropriate, promote greater consistency between the two jurisdictions. Thus, the orientation of the discussion has been altered by virtue of the EU-U.S. Insurance Project which will lead, where appropriate, to the increased convergence and compatibility of the two insurance regulatory regimes.

Finally, in the United States, in December 2012, state regulators released a Solvency Modernization Initiative (SMI) Roadmap, which they describe as a critical self-examination designed to update the states' approach to solvency oversight. Among the areas reviewed are capital requirements, governance and risk management, group supervision, statutory accounting and financial reporting, and reinsurance. The SMI Roadmap also reports state regulators completed adoption of the Risk Management and Own Risk Solvency Assessment (ORSA) Model Act, which comprises enterprise risk management requirements and standards for insurers, together with the *ORSA Guidance Manual*. The SMI Roadmap also notes that state regulators adopted the NAIC Insurance Holding Company System Regulatory Act

to provide state regulators with authority, albeit indirect, over non-insurance entities in an insurance group. State regulators also continue to develop task forces and working groups to address, or to discuss, substantive matters such as group supervision, reinsurance captives, and monoline insurers. Most recently, in March 2013, the NAIC released a white paper on the merits of state regulation that reports on the states' efforts to address known challenges for the state-based system.

Box 4: Europe's Insurance Regulatory Regime – Solvency II

Overview of the Three Pillars

In the EU, the European Parliament and European Commission (EC), and the European Insurance and Occupational Pensions Authority (EIOPA) are modernizing the EU's insurance regulatory regime under the Solvency II Framework Directive. The directive, introduced in 2007 and enacted in 2009, will be the culmination of work begun in the early 1990s to update existing solvency standards. Despite a few setbacks and modifications, Solvency II's implementation date is now set for 2016.

Solvency II establishes a risk-based approach to insurer capital requirements that relies on three pillars, modeled after the three-pillared Basel II framework for banks. The pillars of Solvency II consist of: (1) substantive and quantitative RBC requirements; (2) system of governance; and (3) market discipline through disclosures to supervisors and the public.

Pillar I sets target capital levels for a given insurer based upon either a standard formula or, subject to regulatory approval, an insurer's internal models. The standard formula is a stressed Value at Risk (VaR) calculation that looks to capture the full set of risks that an insurer faces, including underwriting risk (life, nonlife, health), market risk, counterparty credit risk and operational risk. Pillar I targets capital requirements for insurers at a level that, based on the VaR analysis, would allow for only a 0.5 percent chance of failure over a one-year time horizon. These capital and related reserve requirements were the subject of an EU impact study, particularly as applied to annuity-like products with long-term guaranty features.

Solvency II would also establish a comprehensive supervisory regime for insurance groups that includes a single group supervisor and consolidated capital requirements for insurance groups. Despite the existence of issues that have delayed full implementation, Solvency II remains the aspirational supervisory regime for the EU. Moreover, many aspects of Solvency II have become international standards for insurance supervisors in developing economies and in mature economies seeking to modernize an existing supervisory regime. For example, capital assessment elements of Solvency II are important elements in the revised supervisory regimes in Mexico, China and South Africa. Furthermore, EIOPA and the World Bank have signed an operational Memorandum of Understanding to cooperate on developing the global insurance sector, which includes promoting a risk-based regulatory and supervisory framework in insurance, as well as the identification of systemic risk and the promotion of consumer protection.

Pillar II, the system of governance, imposes requirements on insurers and groups with regard to risk management and internal control systems, as well as with regard to key functions which, at a minimum, must include the risk management, compliance, audit and actuarial functions. Pillar III sets forth requirements for information to be reported to supervisors and for information to be publicly disclosed so as to enable assessments of an insurer's overall financial condition in addition to market trends and risks.

Regulatory Regime Equivalence

Solvency II includes a provision by which the EC determines whether non-EU regulatory systems provide a similar level of protection to policyholders as would the Solvency II regime, and are therefore "equivalent" to Solvency II. The equivalence assessment would be based on three criteria, two of which relate to group supervision and one of which relates to reinsurance supervision. Insurers in "equivalent" jurisdictions would be able to access the EU market, and EU-based insurers would be able to access non-EU markets, without the imposition of additional capital requirements or restrictions. Insurers in non-equivalent jurisdictions would need to undertake structural changes to "ring-fence" European assets from non-EU assets, including, for example, the creation of separate holding companies within EU jurisdictions.

EU-U.S. Insurance Project

For several years, uncertainty over how the EU "equivalence" assessment would affect U.S. companies had a negative impact on firms operating in the two jurisdictions. To address the issue, in January 2012, FIO hosted representatives of the EC, EIOPA, and state regulators to facilitate a dialogue to improve understanding and cooperation between the EU and U.S. insurance regulatory regimes and, where appropriate, to foster convergence. To this end, the parties developed a work plan for 2012, which consisted of identifying and comparing the significant aspects of each jurisdiction's regulatory scheme. On December 21, 2012, after executing the year's work plan, all parties agreed upon objectives for future work to improve convergence and compatibility. The objectives are to:

1) Promote information sharing between EU and U.S. supervisors under conditions of professional secrecy by removing barriers to the exchange of information while seeking to uphold critical confidentiality standards.

2) Establish a robust regime for group supervision, under which there is:

   a) A clear designation of tasks, responsibilities and authority among supervisors, including a single group/lead supervisor;

   b) A holistic approach to determining the solvency and financial condition of the group that is consistent with insurance business practices, that avoids double-counting of regulatory capital and that monitors risk concentrations, considers all entities belonging to the group, and is complementary to solo/legal entity supervision;

   c) Greater cooperation and coordination among supervisory authorities within colleges; and,

   d) Efficient enforcement measures at the group and/or solo level that allow for effective supervision of groups.

3) Further develop an approach to valuation that more accurately reflects the risk profile of companies, is sufficiently sensitive to changes in that risk profile, and has capital requirements that are fully risk-based, based on a clear and transparent calibration and that cover similar categories and subcategories of risk to which companies are exposed.

4) Work to achieve a consistent approach within each jurisdiction and examine the further reduction and possible removal of collateral requirements in both jurisdictions in order to ensure a

risk-based determination for all reinsurers in relation to credit for reinsurance.

5) Pursue greater coordination in relation to the monitoring of the solvency and financial condition of solo entities and groups through the analysis of supervisory reporting. The exchange of information is facilitated by the joint exchange of best practices for analysis and an evolution towards a greater consistency of reporting.

6) Ensure the consistent application of prudential requirements and commitment to supervisory best practices through different peer review processes that ensure an independent view of the jurisdiction being examined.

7) Ensure consistency and effectiveness in the supervision of solo entities and groups.

Each of the foregoing objectives is supported by a number of initiatives to be pursued over a five-year period. A copy of the "EU-U.S. Dialogue Project Technical Committee Reports Comparing Certain Aspects of the Insurance Supervisory and Regulatory Regimes in the EU and the United States," and of the "EU-U.S. Dialogue Project: The Way Forward," can be found on the FIO web site. While marking a significant step towards improving cross-border oversight between the EU and the United States, the Project also facilitates a level of convergence that will benefit industry, consumer, and supervisory interests. In addition, the objectives for each of the seven areas are fundamental to the modernization and improvement of the U.S. system of insurance regulation. Given the national importance of the agreed-upon objectives of this project, failure of the U.S. state regulatory system to pursue adoption of these objectives could warrant greater federal involvement.

Capital Standards

The Current Framework and the Challenge of Non-Uniformity

Recommendations: (1) For material solvency oversight decisions of a discretionary nature, states should develop and implement a process that obligates the appropriate state regulator to first obtain the consent of regulators from other states in which the subject insurer operates; (2) To improve consistency of solvency oversight, states should establish an independent, third-party review mechanism for the National Association of Insurance Commissioners Financial Regulation Standards Accreditation Program.

Insurers, like other financial institutions such as banks, are subject to capital requirements. Capital requirements for insurers, however, are not determined in the same manner as are those for banks. This in part reflects the differences in banks' and insurers' business models, risk profiles and balance sheets. Banks generally lever balance sheets with deposits and debt (some short-term) and use those funds to underwrite loans and to engage in capital markets activities. Assets that banks finance are designed to earn returns from the spread between the interest earned on the long-term assets and the interest paid on short term liabilities. Banks face both credit risk and interest rate risk on those assets and liquidity risk on the ability to fund short-term operations and liabilities. The bank capital regime is therefore designed largely to address credit and liquidity risk, although banks with trading activities also are subject to market risk capital regulation.

Insurers, by contrast, typically do not carry much debt either in unsecured debt at the holding company level or in short-term wholesale funded debt at the entity level. Rather, insurers are primarily funded through investment income and policyholders' premiums, the latter of which are paid periodically and in advance in exchange for insurance coverage that pays out when an insured event occurs. Insurers typically invest premiums received in liquid assets (frequently bonds) that typically match the

duration of liabilities. Since insurers typically have less leverage than banks and prefund insurance liabilities by investing premium income, insurers generally are not subject to the kind of liquidity risk that banks face. Insurers are subject primarily to underwriting risk and market risk (including both interest rate risk and credit risk).

State regulation, which directly regulates only insurance entities, requires insurers to satisfy RBC requirements. RBC does not set a capital target for an insurer but, rather, sets a baseline capital level such that, in the event an insurer approaches that baseline level, a state regulator may take corrective action to conserve or improve the insurer's financial condition. RBC requirements are grounded in a basic risk-based methodology that takes four categories of risk into account. Briefly, these risks are: (1) asset risk, which covers market and credit risks on balance sheet assets, including bonds, equities and other financial assets, as well as reinsurance receivables and investments in subsidiaries; (2) insurance risk, which covers risks related to the underwriting and pricing of policies and contracts, as well as risks related to the adequacy of claims reserves; (3) interest rate risk, which covers potential losses due to interest rate changes and asset/liability mismatch; and (4) business risk, which covers guaranty fund assessments and general business risks, such as litigation.

NAIC Financial Regulation Standards Accreditation Program

States have sought to establish generally consistent solvency oversight approaches across jurisdictions through the NAIC Financial Regulation Standards Accreditation Program (Accreditation Program). Following the wave of insurer insolvencies in the 1980s, the Accreditation Program was developed as a response to Congressional inquiries into the regulation of insurers. The Accreditation Program evaluates member states for substantial compliance with NAIC-established solvency oversight standards and practices. Accreditation standards are minimum standards against which states are assessed on not more than a five year cycle.

To be accredited, a state must have in force laws that are substantially similar to the significant elements that have been identified as the key provisions in each of the relevant NAIC model laws or regulations. If a state fails to meet the accreditation standards and loses its accreditation, then the work of that state regulator in maintaining and enforcing insurer solvency standards for its domestic industry will not receive deference from other states' regulators. Although several states have been subjected to tentative accreditation pending improvement, no state has ever lost its accreditation. All states are now accredited, with the State of New York having been accredited most recently in 2009.

Notwithstanding the foregoing efforts to establish consistency in capital regulation, significant elements of non-uniformity remain. First, for example, even though RBC standards have been adopted by all states, those standards are not applied to all insurers. Some states allow certain classes of insurers not to comply with RBC requirements. For example, fraternal benefit societies operating as life insurers are treated differently for RBC purposes and only 14 states have adopted the applicable model law.

Second, as another example, monoline insurers (*e.g.*, mortgage insurers and financial guaranty insurers) are not subject to RBC requirements; instead, these entities have been subject to different capital ratio requirements that are enforced differently from state-to-state. Up to and through the crisis, state regulators granted waivers from adherence to capital ratio requirements in order to allow mortgage insurers to continue operating. These developments are particularly noteworthy given the subsequent history of insolvency with much of the financial guaranty business and the challenges encountered by mortgage insurers, including insolvency. (*See* Box 5).

Box 5: Credit Rating Agencies, Financial Guaranty Insurance, and the Financial Crisis

Credit rating agencies (CRAs) have played a twofold role in the insurance industry: (1) providing views of an insurer's solvency to policyholders and lenders; and (2) rating financial instruments in an insurer's investment portfolio. Both roles significantly inform the amount of capital that insurers hold. Some state that the role of CRAs in assessing the targeted capital levels that insurers and groups should hold based on risk profiles is as or more important than that of the state regulators which, through RBC, focuses on a quantifiable basis on the amount of capital necessary for individual insurers (but not groups) to avoid regulatory intervention.

The financial crisis highlighted pervasive problems with the CRA business model and practices, such as conflicts of interest, inadequate controls, and unreliable ratings methodologies. The ratings assigned by CRAs on many assets turned out to be higher than warranted. Belated downgrades of assets caused significant market disruption.

One example of CRAs' failure was the incorrect assessment of the health of financial guaranty insurers. Financial guaranty insurers are organized as "monoline" insurers because state insurance regulations generally prohibit these firms from writing other types of insurance. The financial crisis showed that the monoline nature of the business, together with the performance of the assets underlying the guaranties, contributed to insolvencies of financial guaranty insurers.

For many years, the assets guaranteed by most financial guaranty insurers, such as mortgages and municipal bonds, were generally considered low-risk because of historically low default rates. As a result, financial guarantors held low levels of capital with the consent of the regulators. On the same rationale, financial guarantors received top ratings from CRAs notwithstanding low capital levels and the eventual movement from the core business model to provide guaranties on assets such as riskier structured products, including collateralized debt obligations consisting of mortgage-backed securities.

During the crisis, as the number of defaults on the underlying assets increased, the mortgage-backed securities were downgraded and dropped in value. Financial guaranty insurers were forced to recognize losses which eroded already thin layers of capital. The loss recognition in turn caused CRAs to downgrade these insurers, thereby subjecting the insurers to a vicious cycle of collateral calls and additional market pressure, which further accelerated loss recognition. The losses for financial guaranty insurers contributed to temporary dislocation in the municipal bond market, and limited the access of municipal issuers to the market. Since the crisis, much of the municipal bond market has moved forward without the wrap of a financial guaranty.

The Dodd-Frank Act requires the Securities and Exchange Commission (SEC) to adopt rules to govern CRAs on conflicts of interest, ratings performance and methodology transparency, strengthening internal controls policies and procedures, improving governance, and training and competency standards for credit analysts. In addition, Section 939A of the Dodd-Frank Act requires federal agencies to remove regulatory references to credit ratings and to replace those references with alternative measures of creditworthiness and reliance.

State regulators have sought to decrease the influence of credit ratings both by expanding the role of the NAIC's Securities Valuation Office (SVO) and by retaining contractors to evaluate the quality of collateral underlying mortgage-backed securities. The SVO, which has historically provided credit ratings for insurers and supervisors for non-rated securities, now also offers high level guidance and insights for both insurers and supervisors. With respect to mortgage-backed securities, the NAIC engaged contractors, at industry expense, to support the move away from rigid dependence on credit ratings. These contractors are responsible for reviewing the loss probabilities in mortgage-backed securities based on the underlying collateral and aiding in the determination of the NAIC designations that translate into RBC factors.

Third, RBC standards are not necessarily applied uniformly. The lack of uniformity occurs largely because of a range of discretionary decisions by state regulators that can affect the reported or actual amount of an insurer's capital. These discretionary decisions can occur in a number of areas, but some of the more important decisions that affect solvency oversight involve decisions regarding reinsurance captives and permitting deviations from standard accounting practices. Although supervisory discretion may be necessary for some regulatory purposes, a principal concern with extensive and inconsistent use of such discretion is that it may effectively exempt an insurer from abiding by capital requirements, thereby undermining the comparability of the RBC framework across different jurisdictions. Such variability has the potential to create safety and soundness concerns. Moreover, such inconsistent discretionary decisions create competitive imbalances that disadvantage insurers domiciled in one state solely because that regulator's discretion may be more circumspect than that of the lead state regulator of a competitor.

It is important for accounting and capital standards, and discretionary variances from those standards, to be governed by uniform rules. Under the current system of state regulation, consistency can occur only by uniform adoption and implementation of such standards and rules. As noted, however, the regulatory system has not resulted in consistent implementation of solvency oversight, notwithstanding coordination efforts through the NAIC, because regulators have interpreted and enforced even similar standards differently.

Two reforms could assist the coordination efforts and further improve uniformity and consistency. First, variations resulting from discretionary practices can be reduced if state regulators develop and implement a process whereby before implementing a discretionary practice involving important solvency oversight matters, the domestic state regulator notifies and also obtains the consent of regulators from other states in which the subject insurer operates. In the case of insurers operating in multiple states, such an approach would require, at a minimum, the concurrence of insurance regulators from multiple states prior to permitted deviation from significant solvency standards. For insurance groups that are subject to supervisory college oversight, consent of other regulators could be obtained through the ongoing activities of the college.

Second, the credibility and effectiveness of the Accreditation Program could be bolstered if it becomes also subject to independent, third party review. Currently, only state regulators, NAIC staff, and NAIC contractors are charged with evaluating states' compliance with the Accreditation Program. States often consult with the NAIC's legal staff when considering adoption of model laws and regulations, yet it is the NAIC's legal staff that is solely responsible for assessing compliance of states with adoption of the key elements of model laws and regulations. To improve the reliability of this peer review structure, an additional independent review and audit layer would provide a helpful perspective on the uniform adoption and implementation of capital rules and other standards. This independent review will also help to maintain the incentive for accreditation reviews to be conducted with appropriate and objective rigor.

Mortgage Insurance

Recommendation: Federal standards and oversight for mortgage insurers should be developed and implemented.

Like financial guarantors, private mortgage insurers are monoline companies that experienced devastating losses during the financial crisis. A business predominantly focused on providing credit enhancement to mortgages guaranteed by the government-sponsored enterprises (GSEs), Fannie Mae and Freddie Mac, mortgage insurers migrated from the core business of insuring conventional, well-underwritten mortgage loans to providing insurance on pools of Alt-A and subprime mortgages in the years leading up to the financial crisis. The dramatic decline in housing prices and the impact of the change in underwriting practices required mortgage insurers to draw down capital and reserves to pay

claims resulting in the failure of three out of the eight mortgage insurers in the United States. Historically high levels of claim denials, including policy rescissions, helped put taxpayers at risk.

Regulatory oversight of mortgage insurance varies state by state. Though mortgage insurance coverage is provided nationally, only 16 states impose specific requirements on private mortgage insurers. Of these requirements, two govern the solvency regime and, therefore, are of particular significance: (1) a limit on total liability, net of reinsurance, for all policies of 25 times the sum of capital, surplus, and contingency reserves, (known as a 25:1 risk-to-capital ratio); and (2) a requirement of annual contributions to a contingency reserve equal to 50 percent of the mortgage insurer's earned premium. In addition to the states, the GSEs (and through conservatorship, the Federal Housing Finance Agency) establish uniform standards and eligibility requirements that in some cases are more stringent than those required by state regulators. As the financial crisis unfolded, mortgage insurers no longer met state or contractual capital requirements. State regulators granted waivers in order to allow mortgage insurers to continue to write new business while the GSEs loosened other standards that were applicable to mortgage insurers.

The private mortgage insurance sector is interconnected with other aspects of the federal housing finance system and, therefore, is an issue of significant national interest. As the United States continues to recover from the financial crisis and works to reform aspects of the housing finance system, private mortgage insurance may be an important component of any reform package as an alternative way to place private capital in front of any government or taxpayer risk. Robust national solvency and business practice standards, with uniform implementation, for mortgage insurers would help foster greater confidence in the solvency and performance of housing finance. To achieve this objective, it is necessary to establish federal oversight of federally developed standards applicable to mortgage insurance.

Captives and the Impact on Capital in the Life Insurance Industry

Recommendation: States should develop a uniform and transparent solvency oversight regime for the transfer of risk to reinsurance captives.

Captive insurance programs, in the conventional meaning, typically are entities (usually corporate affiliates set up by a parent company) that provide a self-funded insurance-like product for a single non-insurance business. Captives include a diverse set of entities and are most often established to meet the unique needs of the owner. For example, a large manufacturing firm may establish a captive to cover property damage to its facilities around the country.

However, captives also have developed as a tool for insurers to transfer risk within the affiliated insurance group. A reinsurance captive, sometimes referred to as a special purpose vehicle, or SPV, allows an insurer to transfer risk to an affiliated entity, thereby reducing reserve obligations and freeing the underlying insurer's capital to be used for other purposes. However, reinsurance captives are not subject to the same solvency oversight as a traditional commercial insurer or reinsurer. Thus, reinsurance captive programs can be mechanisms by which insurers decrease capital and reserves at the insurance-entity level through intra-group reinsurance arrangements while also reducing overall regulatory scrutiny across the group.

Over the past 30 years, the use of captives has grown from less than 1,000 captives in 1980 to over 5,000 operating worldwide today.[54] In particular, U.S. commercial life insurers' use of reinsurance captives to transfer insurance risk has grown, perhaps due to reserve requirements for some life insurance and annuity products. In the United States, almost 30 states, the District of Columbia and the U.S. Virgin

54 Marsh, Next Generation Captives – Optimising Opportunities, 2008; A.M. Best Captive Center.

Islands serve as domiciles for reinsurance captives.[55] Indeed, states are aggressively competing to be domestic regulators for reinsurance captives.

There are two basic concerns with reinsurance captives that are increasingly prevalent in the life insurance business. The first is that reinsurance captives allow an insurer to receive credit against its reserve and capital requirements by transferring risk to the captive even though the captive is not bound by rigorous or consistent capital rules across the states. Reinsurance captives can be established with a small percentage of the capital required to establish a commercial insurance license in the same state. In particular, the standards that govern the quality of capital that reinsurance captives must hold are not sufficiently robust. For example, some state laws currently allow intra-company letters of credit, parental guaranties, or intra-company guaranties to constitute capital for captives. These instruments may not be sufficiently loss-absorbing if a significant adverse event were to occur. In many cases, a significant adverse event would cause a captive to fail and spread losses retained within the holding company or to another affiliate within the group, thereby accentuating group risk.

If an insurer is to receive credit against a capital or reserve requirement because of risk transferred to an insurance captive, the rules governing the quality and quantum of assets offered in support of the captive should be uniform across states and sufficiently robust and transparent in order to prevent arbitrage by insurers. The matter is one that must be assessed within the rubric of the capital adequacy of an insurance group as a whole. Under the current state-based capital adequacy regime, group capital assessments rely on CRA ratings or on a firm-produced ORSA to evaluate a group's capital position and the strength of intra-group guarantees. Neither of these measures of group capital adequacy, however, is a substitute for group capital standards that are established and supervised by regulators.

Second, there is a lack of transparency for captive oversight from state-to-state. While transparency to investors and the public is important, transparency to regulators is particularly critical and absent. Unlike the case of traditional insurers for which financial statements are made publicly available on the NAIC's website or the websites of the domestic state and the company itself, the financial statements of captives are kept confidential between the captive manager and the domestic state. Due to the limits of state regulatory authority, this concern is especially critical when a state regulator must rely on information from another state in which a reinsurance captive is domiciled.

In response to these issues and to the increased use of reinsurance captives, the NAIC commenced a review of state approaches to captives in October 2011. The NAIC received comments on a draft white paper on regulation of reinsurance captives, released on November 29, 2012, which offered five recommendations addressing accounting, confidentiality and reinsurance regulatory matters. The NAIC then issued a revision of the white paper on June 6, 2013. While this paper showed the regulator dialogue was continuing, it notes the lack of agreement among the states on issues of transparency and confidentiality, on whether captives should be assigned a company code and name and included in the regulators' company database, and on how to address inconsistencies between the current approach to reinsurance captives and the more general laws governing credit for reinsurance (where the reinsurer is a third party company, as opposed to an affiliate within the same group). The comments illustrate that several states seek greater regulatory scrutiny and uniformity in captive oversight, while others remain committed to the *status quo*. Still other states are interested in reducing oversight fees and premium taxes for reinsurance captives, possibly to allow jurisdictions to attract more reinsurance captive enterprises for economic development purposes.

On June 12, 2013, the New York Department of Financial Services (NYDFS) issued a report that details the initial findings of an investigation into the use of reinsurance captives by life insurance companies as a capital arbitrage vehicle. The NYDFS found that New York-based insurers and affiliates alone

55 Business Insurance, Market Insights, Captive Domiciles 2012.

accounted for $48 billion of "shadow insurance" capital manipulation. The NYDFS report found that existing state-based disclosure regulations are inadequate, inconsistent, and incomplete to properly identify and regulate these transactions; and that reserves were diverted and risk-based capital was artificially boosted, misleading regulators, investors, and the general public. The NYDFS report identified regulatory inadequacies in transparency with respect to the use of letters of credit, parental guarantees, and other forms of capital permitted by state captive regulators but not disclosed or made publicly available.

To modernize and improve state-based oversight of reinsurance captives, states should develop and adopt a uniform and robust standard for transparency, not only of the liabilities transferred to a reinsurance captive, but also of the nature of the assets that support a reinsurance captive's financial status. As part of such an oversight regime, states should develop and adopt a uniform capital requirement for reinsurance captives, including a prohibition on those types of transactions that do not constitute a legitimate transfer of risk, *e.g.* that do not provide the protections intended by the Credit for Reinsurance Model Law. Subject to limitations on the disclosure of legitimately proprietary information, these transactions should be disclosed in the financial statements of the ceding insurer. Finally, states should develop and adopt nationally-consistent standards for oversight of the reinsurance captive industry that includes public disclosure of the financial statements of such captives, adopting nationally-consistent standards for oversight of all captives, and adopt those standards as a feature of the Accreditation Program.

Issues Surrounding RBC Methodology and Adequacy Determination

Recommendation: State-based solvency oversight and capital adequacy regimes should converge toward best practices and uniform standards.

The RBC framework has been criticized both on the basis that it is too prescriptive and rigid and that it is too permissive and fails to adequately capture economic and other risks. For example, one stated shortcoming is that RBC applies a single framework to all insurers regardless of size, complexity, and risk profile. Other criticisms of the RBC methodology are that it relies on static statutory accounting valuation of assets and liabilities instead of economic valuations, that it uses pre-determined factor-based calculations instead of dynamic risk models, and that the risk weights for certain assets and liabilities should be modified (*e.g.*, those for investment assets and reinsurance recoverables[56]). The criticisms also state that the current RBC methodology lacks explicit quantification for key risks, that certain risks are currently not captured in RBC at all (such as catastrophe and operational risks, the so-called "missing risks" issue), and that the risks are calibrated in a manner that is not clear or consistent. State regulators are reviewing the RBC framework and intend to address certain of the foregoing criticisms of the methodology, including the "missing risks" issue and adjustment of certain risk weights.

To complement RBC requirements, state regulators have also begun to develop a risk assessment regime whereby insurers make annual self-assessments of capital adequacy and report those annual determinations to state regulators. The self-assessments, known as ORSA, would include stress testing and a requirement to detail risk management systems and policies. If adopted by the states as presently contemplated, the self-assessment obligations would apply both to a statutory insurance entity and to a consolidated group engaged in the business of insurance. For firms operating in the United States and also the EU, consideration should be given to the convergence of EU and state-based ORSA requirements in order to minimize redundant or duplicative reporting requirements for participating insurers.

As state regulators work to refine the RBC methodology and develop ORSA, two important considerations should be kept in mind. First, programs such as ORSA present the question of whether state regulators possess sufficient resources with the prerequisite technical skills and experience to review the

56 This refers to the counterparty credit risk associated with a reinsurer paying an insurer for the insurer's incurred losses.

complex insurer self-assessments of risk and capital adequacy. If ORSA requires significant investments in actuarial modeling expertise and professional services, state regulators may confront significant challenges to meet those needs. If state regulators move to reliance on third-party contractors for an ORSA assessment, a uniform national standard should be used to determine qualified contractors, as well as a means to assure that state regulators adequately understand, and are accountable for, the work and findings of such contracted specialists.

Second, solvency oversight and capital adequacy principles should be attuned to international developments and should endeavor to integrate best practices, standards and principles that are developed through international consensus. As major participants in the business of insurance become increasingly global in operation, it is important for insurance regulatory authorities to guard against capital arbitrage across international jurisdictions.

Reserving

For insurance purposes, reserves are liabilities that are reported on insurers' balance sheets for the ultimate payment of future losses and policyholder benefits. Reserves are often set using factors and rates determined by an insurer's actuary consistent with guidelines established in state law for insurance products. Reserve levels for insurers operating in the United States and offering certain life insurance and annuity products have been set according to a state law rules-based formula that, insurers claim, results in excessive reserves that detract from the insurer's ability to maximize the value of its capital. For example, in the life insurance sector, insurers complain that reserve requirements for certain products fail to reflect current mortality rates and fail to integrate the insurer's particular business mix and risk profile.

Principles-Based Reserving

Recommendation: States should move forward cautiously with the implementation of principles-based reserving and condition it upon: (1) the establishment of consistent, binding guidelines to govern regulatory practices that determine whether a domestic insurer complies with accounting and solvency requirements; and (2) attracting and retaining supervisory resources and developing uniform guidelines to monitor supervisory review of principles-based reserving.

As required by state law or regulation, life insurers currently calculate reserves for life insurance policies based on a standardized formula prescribed by the Model Standard Valuation Law (SVL) of the NAIC. Although the SVL's prescribed valuation mortality table is based on U.S. population data and contains a prudent margin for reserving, the reserve calculated is not specifically tailored to the circumstances of any insurer because it does not consider more particular attributes of policyholders in individual insurer portfolios. Critics of the current formula-based approach to reserving for life insurance contend that it: (1) is static and too conservative; (2) fails to capture all the particularized risks inherent in increasingly complicated life insurance benefits and guaranties; and (3) does not reflect life insurers' business practices, such as the hedging of risk through derivatives use plans. However, reserves are subjected to an annual asset adequacy test analysis to verify the adequacy of reserves through different stochastic and deterministic models, with additional reserves established if necessary. Many industry participants argue that redundant reserve requirements force reliance upon reinsurance captives in order to reduce excessive reserves and allow life insurers to efficiently use capital.

For nearly a decade, state regulators have been considering a move to principles-based reserving (PBR) to address these concerns. Whereas the formula-based approach to quantifying reserves uses standardized calculations, PBR relies upon an insurer's internal risk modeling and analysis techniques, including the use of insurer-specific claims experience with specific portfolios of business, to incorporate consideration of particularized risks and thereby to more closely tailor calculations to the actual attributes

of insurer portfolios. State regulators adopted a supporting *Valuation Manual* (*Manual*) at a December 2012 NAIC meeting that contains details of the principles-based approach and defines the methods for calculating life insurer reserves. However, legislative adoption of the revised SVL by a supermajority of states (42) representing at least 75 percent of the nationwide premium volume is needed along with a supermajority NAIC adoption of the *Manual* before the *Manual* and PBR become operative.

The difficulty with consistent adoption, interpretation and enforcement of a principles-based approach under the current system of insurance legislation and regulation was evident through the Valuation of Life Insurance Policies Model Regulation (Regulation XXX), which establishes reserve requirements for life insurance products with secondary guarantees, and Actuarial Guideline 38 (AG 38). AG 38 was first adopted by the NAIC in 2003 to address questions pertaining to Regulation XXX such as clarifying reserve requirements for new universal life insurance product designs. AG 38 was revised in 2005 to clarify guidance applicable to sophisticated shadow fund designs and in 2007 to provide an interim solution for reserving for universal life with secondary guarantees with respect to certain matters. Notwithstanding these revisions and clarifications, different state regulators had different interpretations regarding the meaning of AG 38, resulting in competing firms holding more (or less) capital in reserve, depending on the jurisdiction. This state-by-state variance led to competitive imbalances and substantial criticism from industry participants and observers. State regulators have pursued a solution whereby reserving for prospective policies is premised on an agreement negotiated between several states and the life insurance industry, but the agreement does not address marketplace imbalances that result from previously divergent state regulator interpretations. As even this example of a successful compromise demonstrates, full consistency among states is difficult to achieve.

The U.S. life insurance sector's reserving requirements should properly reflect current mortality rates, the life insurer's business model, and its particular risk profile, but substantial concerns arise with the prospect of a wholesale adoption of PBR. In addition to consistency issues, state regulators will also face the challenge of maintaining a sufficiently high level of expertise for understanding the "black box" of the models on which reserve levels would be established. Specifically, the need for many more sufficiently trained and expert actuaries and examiners than are currently available to regulators raises necessary questions with respect to the states' ability to verify insurers' implementation of PBR in a uniform manner that is consistent with the *Manual*. Furthermore, the state-by-state interpretation and application of PBR means consistency across the states will be difficult to achieve. To obtain necessary expertise, states likely would have to contract with consulting actuaries and other professionals, many of whom may have clients in the life insurance industry and, thus, state regulators will need to sort through and manage potential conflicts of interest.

Following the leadership of New York, state regulators in California, Florida and North Dakota, among others, established a working group through the NAIC to recognize the challenges of implementing PBR but allowing the implementation to move forward. Recently, however, the NYDFS identified flaws and raised serious questions about the efficiency of the working group process. Some industry leaders oppose the effort as an initiative that could lead to further weakening of the state solvency oversight regime.

States should move forward with substantial caution to implement PBR. State regulators require significant additional technical expertise or resources to properly evaluate the rigor and quality of idiosyncratic reserve models that vary among firms within a heterogeneous insurance industry. Therefore, states should also adopt standards for the oversight of the vendors who will provide related consulting services to the states.

Credit for Reinsurance

Recommendation: To afford nationally uniform treatment of reinsurers, FIO recommends that Treasury and the United States Trade Representative (USTR) pursue a covered agreement for reinsurance collateral requirements based on the National Association of Insurance Commissioners Credit for Reinsurance Model Law and Regulation.

Reinsurance is a risk management mechanism whereby insurers transfer, or "cede," risk to an "assuming" reinsurer. The state-based capital regime for insurers recognizes the value of reinsurance typically by permitting the insurer to reduce its reserve liabilities in some proportion to the risk that is ceded to a reinsurer. This also can reduce the insurer's capital requirements as determined by RBC.

Under the current state regulatory regime, states insurance regulators do not have direct oversight over non-U.S. reinsurers, but instead regulate the solvency of those U.S. insurers that purchase reinsurance. If a reinsurer is based in the United States, then the ceding carrier receives 100 percent credit on its financial statement to the extent that gross liabilities are transferred, or ceded, to that reinsurer. In most states, however, if the reinsurer is a non-U.S. firm, and if it is not licensed, accredited, or approved by the regulator of the state in which it seeks to provide reinsurance, the reinsurer typically must post qualifying collateral equal to 100 percent of the actuarially estimated reinsurance liabilities that it has assumed from the ceding insurer in order for the ceding insurer to receive full credit. This is true even though non-U.S. reinsurers typically are not required to have a domestic license in order to write business in the United States, and regardless of the financial strength of the foreign reinsurer or the strength of the supervisory regime in the reinsurer's home jurisdiction. The issue is particularly significant because non-U.S. reinsurers play a large role in the U.S. market, accounting for at least 58 percent of the reinsurance premium volume that is ceded by U.S.-based insurers.[57]

This collateral requirement has long been a subject of discussion within the domestic and international reinsurance sector. Proponents of collateral requirements often refer to the importance of reinsurance recoverables to the U.S. insurance marketplace. Others point to the solvency impact on the primary insurer in the absence of adequate collateral if reinsurance fails to deliver according to a contractual promise. Critics of the current system, on the other hand, maintain that a determination of whether a reinsurer should post collateral should be more sensitive to evolving risk-based considerations. Other related questions in this discussion have been the basis and extent to which regulators should recognize the capital regimes in reinsurers' home jurisdictions, the impact of collateral requirements on reinsurance capacity, and the increased costs for insurers and consumers.

In November 2011, state regulators, working through the NAIC, unanimously adopted amendments to the Credit for Reinsurance Model Law and Regulation (Model Collateral Law) that, if enacted at the state level, would authorize the state regulator to certify unauthorized reinsurers for reduced collateral regulatory standards. As of July 2013, the NAIC reports that 18 states have adopted some form of authorization for the state regulator to accept less than 100 percent collateral from non-U.S. reinsurers, but the authorization is not uniform in structure or implementation. Among other requirements of the Model Collateral Law, for an unauthorized reinsurer to be certified, the reinsurer must be domiciled and licensed in a jurisdiction deemed to be "qualified." The determination of whether a non-U.S. jurisdiction is qualified would be made by each state regulator, based on the quality of regulation in the non-U.S. jurisdiction, among other criteria. If a state regulator concludes that a non-U.S. jurisdiction is qualified, the Model Collateral Law, if applied, would then require the state to make a further determination as to the quality of the reinsurer. The state is to assign a "secure level" rating based, at least in part, on the opinion of a CRA. This rating would then be used to determine the minimum level of collateral required by the reinsurer for the ceding insurer to receive 100 percent credit against capital requirements for the reinsurance.

57 Reinsurance Association of America, Offshore Reinsurance in the U.S. Market – 2011 Data (2012).

Recent state regulator action on this topic has been noteworthy and constructive. The Model Collateral Law represents a step forward but it remains incomplete. For example, a determination by one state within the United States of the adequacy or the equivalence of regulation by another nation would not bind other states. One consequence might be that a foreign jurisdiction could link insurance determinations by a state to other economic or regulatory issues pending between the United States and the affected foreign jurisdiction, possibly frustrating broader U.S. economic or regulatory policy.[58] The Model Collateral Law also has other features that require further deliberation. For example, it depends too heavily upon assessments of reinsurers' creditworthiness by CRAs. It would be preferable for other, more risk-based empirical factors to be the basis upon which to determine creditworthiness. Sound credit risk management practices by ceding insurers, and not reliance on CRAs or regulatory measures, should be the basis on which collateral relief is provided.

Under Title V of the Dodd-Frank Act, FIO and the United States Trade Representative (USTR) are authorized, jointly, to negotiate and enter into "covered agreements." Specifically, such "covered agreements" would relate to the recognition of prudential measures with respect to the business of insurance or reinsurance that achieve a level of protection for insurance or reinsurance consumers that is substantially equivalent to the level of protection achieved under State insurance or reinsurance regulation. Such agreements may be necessary to impose uniformity on a prudential insurance matter of national interest.[59] As part of such an analysis, FIO would consider pending prudential regulatory issues affecting the United States and relevant foreign jurisdictions.

FIO is authorized to coordinate federal efforts and develop federal policy on prudential aspects of international insurance matters. In formulating federal policy, FIO is well-positioned to make determinations regarding whether a foreign jurisdiction has sufficiently effective regulation and, in doing so, would consider other economic or regulatory issues pending in the United States and between the United States and affected foreign jurisdictions.

State regulators have worked constructively to move forward with enactment and implementation of the Model Collateral Law. Given the likelihood that the Model Collateral Law would be of non-uniform application, together with the complicating effect of state-by-state inconsistency on economic matters of national interest, the circumstances warrant the pursuit of covered agreements for reinsurance collateral requirements. Indeed, the Model Collateral Law could form the basis for such covered agreements. To afford nationally uniform treatment of reinsurers, FIO recommends that Treasury and USTR pursue a covered agreement for reinsurance collateral requirements based on the NAIC Credit for Reinsurance Model Law and Regulation.

Corporate Governance – Director and Officer Suitability and Fitness

Recommendation: States should develop corporate governance principles that impose character and fitness expectations on directors and officers appropriate to the size and complexity of the insurer.

Corporate governance is a broad and expanding area of supervisory interest, particularly for those firms based or operating in the United States that also have international operations. Accordingly, state regulators do have a practice of checking the fitness of insurer management and directors, as they consider the background of officers in determining whether that person is suitable to act as an insurance executive or key owner. When an insurer is initially formed, for purposes of issuing a license to operate, state regulators evaluate the character and fitness of prospective owners, directors or officers by evaluating the individual's biographical information. In some instances, this review is limited to determining whether the individual has a history of criminal wrongdoing. After an insurance entity is

58 *See AIA v. Garamendi,* 539 U.S. 982, 124 S. Ct. 35 (2003).

59 "Covered agreement" is defined at 31 U.S.C. §314 (*See* footnote 10).

operating, state regulators review changes on the board of directors and officers with oversight that is often limited to an evaluation of whether the individual self-reports a prior conviction for criminal behavior. State regulators allow an individual to serve in an insurer's leadership position upon receiving notice, but may later revoke that tacit approval if the individual is proven to be unqualified or a threat to policyholders.

Even though state regulators conduct fitness reviews, there is an absence of state law or regulation applicable to corporate governance specific to insurers. In 2012, the NAIC compiled a summary of existing corporate governance requirements for U.S.-based insurers. With regard to insurance regulation, the NAIC summary described various governance-related aspects of prudential oversight requirements for: (1) an insurer's financial reporting and audit functions; (2) the monitoring of an insurer off- and on-site and through examinations and ongoing analysis; (3) solvency oversight; (4) regulatory authority over transactions; (5) authority of regulators to take corrective action in respect of a troubled insurer; (6) the authority of state regulators to operate a receivership; and (7) other processes such as authority over market conduct examinations and rate regulation. The summary also described non-insurance related governance standards, including from the Securities Act of 1933 and the Sarbanes-Oxley Act of 2002.

The absence of an NAIC Model law or regulation governing insurer corporate governance has also been noted by international authorities. The International Monetary Fund (IMF) conducts a Financial Sector Assessment Program (FSAP) to help countries identify and remedy weaknesses in their financial sector structures, thereby enhancing resilience to macroeconomic shocks and cross-border contagion. FSAP assessments are designed to assess the stability of the financial system as a whole and not that of individual institutions. For the insurance sector, supervisory practices are measured against the IAIS Insurance Core Principles. In 2009-2010, the IMF conducted an FSAP of the United States financial system, including state regulatory oversight of the insurance sector. In its review, the IMF concluded there are "no NAIC model laws or regulations that address corporate governance directly."

Notwithstanding the absence of authoritative rules and guidelines, insurers have increasingly focused on governance and risk management matters since the financial crisis. In recent years, for example, many insurers have elevated the prominence of a chief risk officer within the corporate hierarchy. In addition to increased focus by insurers, regulatory authorities and standard-setting bodies have been engaged in sustained work on corporate governance issues.

The focus on corporate governance should continue and become more defined. Many U.S.-based insurers are expanding rapidly in geography, size and complexity, thereby imposing even greater demands on leadership. For example, internationally active insurers are increasingly engaged in sophisticated enterprise risk management practices to measure and understand risks posed to the enterprise from any angle or perspective. With standards appropriately scaled to the size and complexity of the firm, state regulators should adopt director and officer qualification standards that require individuals serving in those roles to have the expertise to assess strategies for growth and risks to the enterprise. For an insurer that exceeds size and complexity thresholds, state regulators should adopt an approach designed to ensure that individuals nominated to serve in the firm's leadership ranks have sufficient capacity to understand and challenge an insurer's enterprise risk management.

Group Supervision

Recommendation: (1) In the absence of direct federal authority over an insurance group holding company, states should continue to develop approaches to group supervision and address the shortcomings of solo entity supervision; (2) state regulators should build toward effective group supervision by continued attention to supervisory colleges; and (3) FIO should engage in supervisory colleges to monitor financial stability and identify issues or gaps in the regulation of large national and internationally active insurers.

State regulators are authorized to supervise insurers at the individual entity level, but lack the legal authority to supervise a non-insurance affiliate or any affiliate domiciled and operating outside of the state. These inherent limitations of state law constrain any particular state regulator from conducting oversight over or obtaining information regarding the operations of a multi-jurisdictional insurance group such as a large, complex global insurance firm.

The absence of state regulatory authority over non-mutual holding companies (*i.e.*, solo entity supervision) and the existence of only indirect authority over non-insurance entities within an insurance group raise concerns with respect to regulatory acceptance of U.S. insurance firms that desire to engage in the business of insurance outside of the United States. International supervisors from other developed and emerging economies – markets in which U.S.-based firms are seeking to expand – continue to evaluate the relative strengths and weaknesses of solo entity supervision, particularly with respect to solvency matters. To date, actions taken against U.S.-based firms to remedy shortcomings of state-based solo entity supervision have been few, but that may change in the coming years. For example, non-U.S. supervisors may determine that solo entity supervision is inadequate for large, complex financial firms, especially when those firms have significant market share; if so, then the foreign supervisors may take unilateral remedial action against those firms.

Experience with recent insurer insolvencies, moreover, illustrates that a comprehensive understanding of an insurance group could have resulted in a safer and more stable system. Since 2000, the largest U.S. insurer insolvencies were attributable to a variety of causes, but the important facts in common among these cases indicate that a group regulator armed with comprehensive supervision of the enterprise may have prevented those failures or resulted in earlier action that could have stemmed the losses. One firm failed due to mismanagement and fraud, including the shifting of assets between affiliates and the holding company that could more easily have been detected absent the diffusion of state regulatory responsibility. Another firm failed due to inadequate rate-setting which, if subjected to appropriate enterprise risk management oversight, could have exposed deficient pricing, inadequate reserves and the inadequacy of support by the holding company for its licensed entities. A consolidated group supervisor with knowledge of an insurer's enterprise risk management and intra-company transactions, together with the appropriate authority, could have been in a position to improve the supervision of the failed firms to help assure the safety and soundness of those firms.

The limits on state regulatory authority hamper effective regulation at a time when insurers are increasingly part of internationally active, diversified financial conglomerates that engage in a variety of non-insurance businesses. The inability of this regulatory structure to account for consolidated supervision was evident during the financial crisis, particularly in the case of AIG. The Dodd-Frank Act partly addresses this shortcoming of the state regulatory system by introducing provisions on consolidated supervision of the financial activities of nonbank financial companies supervised by the Federal Reserve, as determined by the Council. However, the insurance regulatory system itself should be reformed to provide for group supervision.

State regulators have taken steps to improve solo entity supervision and to make such entities less vulnerable to the weaknesses of affiliates or the group. For example, the regulations of many states require prior approval of certain investment and reinsurance transactions between insurers and non-insurer affiliates, and generally require prior approval by the state regulator before capital can be removed from an insurer.

State regulators may also have the indirect authority to seek information concerning a non-insurer parent or affiliate. Specifically, through the NAIC, state regulators adopted a revised Model Insurance Holding Company System Regulatory Act and Regulation in 2010 (Holding Company Model Act), which grants the state regulators only indirect authority over non-insurance affiliates and the holding

company. However, given that direct state regulatory authority is limited to the state-licensed legal entity, there are substantial questions as to how effective the Model Insurance Holding Company System Regulatory Act and Regulation can be and whether the law's indirect authority actually grants insurance regulators effective authority over non-insurance affiliates or holding companies. The NAIC has reported that the revised Holding Company Model Act has been adopted in 14 states and is pending in 15 others. The actual statutory language and implementation has varied among those states in which the Holding Company Model Act has been adopted.

In addition to the Holding Company Model Act, state regulators, working through the NAIC, are evaluating enhancement of group supervision as part of the SMI process. The principal proposal in SMI adopts a "windows and walls" approach that would "provid[e] a window into group operations, while building upon, rather than rejecting, the existing walls which provide solvency protection," to insurers. The proposal identifies the following "regulatory windows": (1) the coordination of state participation on a national level for sharing information with international regulators; (2) supervisory colleges for internationally active groups; and (3) access to information about unregulated entities within the holding company system.

The NAIC is considering additional guidance in its *Financial Analysis Handbook* to address group-wide supervision. The proposed changes cover topics such as the scope of group supervision, coordination and cooperation with supervisors in other jurisdictions, holding company and group-wide financial analysis, a financial examination assessment, roles and responsibilities of the group-wide supervisor/lead state, corporate governance, enterprise risk management, and the supervisory college.

The state of group supervision in the United States has drawn international attention. In its 2010 FSAP, for example, the IMF stated with respect to insurance group supervision: "The U.S. approach is focused on securing the financial soundness of individual insurance companies. While this has not been unusual among insurance regulators internationally, many have been supplementing their strong solo company focus with financial and other requirements and more supervisory focus applied at the group level and U.S. supervisors should do the same. They do not currently make an assessment of the financial condition of the whole group of which a licensed insurance company is a member."[60]

In the absence of direct federal regulation of insurance groups, supervisory colleges will be an important means of addressing the conduct of group supervision in the intermediate term. The IMF similarly recommended that the United States further develop group supervision and establish international supervisory colleges to supervise U.S.-based insurance groups with international operations.

A supervisory college should be a forum that includes all of an insurance group's functional regulators, both domestic and international, to meet and to share information relating to the supervised group, and identify trends or areas of strength or weakness within the group. A supervisory college should also establish a system in support of group supervision and offer a formal mechanism for increasing regulatory communication and collaboration. For example, the IAIS ComFrame project will significantly improve the operation, efficiency, and substantive value of supervisory colleges for both supervisors and insurance groups. States have undertaken good faith efforts to establish and operate supervisory colleges, and many are in the nascent stages of development.

Supervisory colleges established for U.S. firms operating nationally and internationally, and for non-U.S. firms with large operations in the United States, should also include FIO in light of FIO's statutory mission to monitor all aspects of the insurance industry, including issues or gaps in regulation, and FIO's significant role with respect to financial stability. The financial stability perspective brought by

60 IMF, United States: *Publication of Financial Sector Assessment Program Documentation — Detailed Assessment of Observance of IAIS Insurance Core Principles (2010).*

FIO would be important for the functioning of the supervisory colleges and, similarly, the information made available to FIO through activity in the supervisory college would be highly significant to FIO's explicit statutory role as financial stability monitor for the insurance industry.

Supervisory colleges are necessary but not sufficient, and do not completely substitute for a consolidated regulator. For example, members of a supervisory college may find it difficult to reach consensus on important issues and the processes by which the college decides or acts may prove to be inefficient. Given concerns about the adequacy of solo entity supervision for larger groups, particularly for U.S.- based firms operating globally, consolidated supervision for large, internationally-active U.S.-based insurance firms will require continued focus and national attention.

Resolution of Insolvent Insurers

The resolution of insolvent insurance entities is governed by state receivership law, specifically the law of the insurance entity's state of domicile. Recent developments stemming from the financial crisis, however, have prompted re-evaluation of the extant resolution regime for insurance entities. While there already have been reforms with respect to the resolution of large, internationally active insurers, further reforms of the resolution regime should be considered.

Resolution of Large, Internationally Active Firms

Establishing an authority that would implement an orderly resolution of a failed financial firm is an essential component of the Dodd-Frank Act. In the case of insurance firms, the Dodd-Frank Act provides that orderly resolution under Title II will take place under prevailing state law. In addition, before the Secretary may make a determination on whether to seek the appointment of the FDIC as receiver of an insurer under Title II, the Secretary must first receive a written recommendation from the FIO Director and the vote of two-thirds of the Governors of the Federal Reserve then serving.

Although resolution of a licensed insurance entity largely occurs under state law, a number of factors suggest that it would be important for resolution planning for complex, global insurance firms to involve analysis and preparedness extending beyond the framework of state-based receiverships and guaranty funds. Consideration of resolution plans for complex U.S.-based national and international insurance firms indicate, for example, that: (1) non-insurance subsidiaries, affiliates and holding companies do not participate in guaranty funds or state-based receiverships; (2) insurance entities may sell products excluded in whole or in part from guaranty fund protection; and (3) insurance entities are not always included in the guaranty fund scheme. These realities mean that, in some cases, a significant part of the activities of an insurance group will fall outside of the states' resolution scheme for insurers. In these cases, separate, holistic orderly resolution plans should be developed for globally active insurers.

Resolution of insurers is a focus of the international regulatory agenda. In that regard, in 2013, the FSB stated that it will focus on three main objectives: (1) addressing the remaining obstacles to implementation of resolution strategies such as cross-border cooperation and information sharing among supervisors; (2) launching an effective assessment process to evaluate the resolvability of all global systemically important financial institutions, including G-SIIs; and (3) developing guidance for the resolution of insurance and other nonbank financial institutions.[61] With respect to insurance in particular, the FSB will initiate a thematic peer review on resolution regimes. This will include a cross-jurisdictional review of the adequacy and effectiveness of resolution regimes for nonbank institutions, including insurers, particularly if the failure of those firms could raise financial stability concerns. The FSB is

61 Financial Stability Board, Press Release, Meeting of the Financial Stability Board in Zurich on 28 January (2013).

working with the IAIS to develop further guidance on the features and powers necessary for resolution regimes to meet FSB standards.

Receivership

Recommendation: States should: (1) adopt a uniform approach to address the closing out and netting of qualified contracts with counterparties; and (2) develop requirements for transparent financial reporting regarding the administration of a receivership estate.

Insurer resolution proceedings typically begin with the filing of a petition by a state attorney general, acting on the recommendation of the regulator of the insurer's domicile. If the petition is granted, the state regulator will be appointed receiver. Once the insurer is in receivership, the state regulator generally has three options: conservation; rehabilitation; or liquidation. In a conservation, the state regulator attempts to preserve the *status quo* while additional information is gathered to determine whether a more assertive approach in receivership (*i.e.*, rehabilitation or liquidation) is needed. In a court-supervised rehabilitation, the state regulator submits to the court a plan to restore the insurer to a solvent capital position. If a feasible rehabilitation plan cannot be developed, or is proposed but not approved by the court, or if the plan proves unsuccessful, a state regulator will then seek a court order allowing for liquidation that will lead to distribution of any insurer assets to policyholders and claimants in accordance with state law.

The determination as to whether and, if so, when to place an insurer into conservation, rehabilitation, or liquidation is subject to the discretion of the domestic state regulator. State political, consumer, and economic development issues may impact the timing of state regulator action. Furthermore, permitted accounting practices can subvert the intent of other solvency tools, such as RBC. The NAIC created the Financial Analysis Working Group (FAWG) to provide a forum of peers to engage with domestic state supervisors of a troubled insurer. FAWG is often cited by the NAIC as an effective means to help states consider appropriate courses of action. Nonetheless, any course of action is entirely dependent upon the authority, discretion, and will of the domestic state regulator.

Following the solvency crisis in the 1960s, states adopted resolution laws and receivership protocols in certain important areas. For example, state laws generally protect policyholders and claimants in a receivership proceeding by elevating those claims to priority over other creditors. Policyholder and claimant protection sometimes takes the form of ring-fencing some assets of an insurer's receivership estate and prohibiting the use of those funds to pay other estate liabilities. An example of such ring-fencing, which has widespread adoption among the states, is protecting owners of variable annuities backed by "separate accounts," which hold assets that are largely segregated from the insurer's general assets and liabilities.

Beyond issues surrounding policyholder and claimant protection, however, insurer resolution laws vary both in specific terms and in application across different states. There have been efforts to impose greater uniformity on state receivership laws. In 1978, state regulators developed the first model law on insurer resolution. To date, however, only 32 states have adopted this template in whole or in part. In 2005, the NAIC published the Insurer Receivership Model Act but, to date, only two states have enacted legislation based on this model law.

One important area in which there are state-by-state differences is the treatment of derivatives and other qualified financial contracts (QFCs) once an insurer is in receivership. The federal bankruptcy code provides protections to counterparties on QFCs by exempting these transactions from the automatic stay and allowing counterparties to terminate and close out QFCs on a net basis. While the

Federal Deposit Insurance Act (FDI Act)[62] and foreign bankruptcy laws also provide similar protections to QFC counterparties, only some state resolution laws do. The lack of inclusion of uniform close-out netting and other protections for QFCs in state insurance receivership laws has potential negative consequences for insurers and for the financial system. For example, an insurer operating in a state with resolution laws that do not include QFC protections may find it difficult and far more costly to participate in derivatives markets. In addition, the absence of these QFC protections in many state laws could have negative implications for financial stability since these provisions are designed in part to reduce interconnectedness between firms. Accordingly, states should adopt a uniform approach to address the closing out and netting of QFCs with counterparties.

The status and cost of a receivership estate are issues in which policyholders and other creditors have a keen interest, but too often there is a lack of sufficient, clear, and timely information. In 2008, the NAIC announced the release of its Global Receivership Information Database (GRID) which serves as a publicly accessible repository of information about open and closed estates being administered by state insurance regulators (or their designees) as receiver. GRID includes administrative elements such as contact information for the receiver, court order references, lines of business that had been written by state, and distributions. The database also provides an opportunity for the receiver to post a financial statement for the estate. The NAIC reported as of March 31, 2013 that there are wide variances among the states as to the extent of information that has actually been made available through GRID, with the data submitted by many states as being less than 25 percent complete. Furthermore, the nature, form, extent, and timeliness of financial information about insolvent insurers and pertinent disclosures by receivers are inconsistent, if available at all. Receivers use various bases of accounting (*e.g.*, cash basis, modified cash basis), with widely varying degrees of detail as to disclosures accompanying the financial statements. States should develop requirements for transparent financial reporting by receivers about the insolvent estate as well as the costs of administration that have been incurred, require timely preparation and filing of reports on a regular basis, and make pertinent aspects of this information publicly available.

Guaranty Funds

Recommendation: States should adopt and implement uniform policyholder recovery rules so that policyholders, irrespective of where they reside, receive the same maximum benefits from guaranty funds.

One condition for operating an insurer in a state is the insurer's participation in the state guaranty fund. State guaranty funds provide for the timely honoring of policyholder claims asserted against an insolvent insurer.

Guaranty funds are administered by state guaranty associations, which are created by state law typically as nonprofit entities and are subject to the oversight and direction of insurers licensed in the state. Most states have established separate funds for different lines of insurance, *e.g.*, separate funds for P/C and for L/H coverage.[63] Guaranty associations dedicated to each line of business participate in national associations – the National Conference of Insurance Guaranty Funds (NCIGF) and the National Organization of Life & Health Insurance Guaranty Associations (NOLHGA).

62 Both the FDI Act and the Orderly Liquidation Authority in Title II of the Dodd-Frank Act provide for a temporary 24-hour automatic stay.

63 Not all insurance lines are covered by guaranty funds, including financial guaranty, mortgage insurance, and title insurance. Some states also exempt health maintenance organizations (HMOs) requiring solvent HMOs operating in the state to assume the policies and enrollees of the insolvent HMO. Additionally, some insurance companies offer non-insurance, non-annuity products such as guaranteed investment contracts (GICs) which are also not covered by guaranty funds.

In the event of an insurer's insolvency, guaranty associations may take a range of steps to offer continuing protection to policyholders. For example, in the typical insolvency of a P/C insurer, state guaranty associations step in to pay the portion of claims within the limits guaranteed by the respective state association. In a L/H insolvency, state guaranty associations may arrange continuing insurance coverage for the failed insurer's policyholders; that can involve entering into "assumption reinsurance" agreements with healthy insurers, whereby the healthy insurer assumes policy liabilities in return for a transfer of the failed insurer's assets. NOLHGA may often assist the various state L/H guaranty associations in the negotiation process and in the transfer of liabilities arising from multi-state L/H insurer insolvencies to a solvent carrier. Guaranty associations may also assume liabilities until such liabilities run off, although this path is less frequently taken.

NCIGF reported that, through 2011, its member guaranty funds have paid more than $26.4 billion to claimants since 1976. NOLHGA states that its members have protected consumers in roughly 75 multi-state insolvency cases involving life and health insurers. NOHLGA reports that a significant life insurer has not failed since the early 1990s.[64] However, despite significant apparent capacity in the guaranty fund system, it is unclear how the system would fare in the event of a failure of a large insurance group in the United States. Furthermore, an event that would cause such a scenario would likely impact other insurers as well. Just as insurers perform stress tests under adverse scenarios, NCIGF and NOLGHA should periodically model the potential adverse impacts of such scenarios on the guaranty fund system for review by FIO.

While guaranty funds address many of the consumer protection deficiencies that were experienced during the solvency crises that occurred in the 1960s, 1980s, and 1990s, some important consumer protection considerations remain. For example, laws concerning product pay-outs by guaranty funds to policyholders are not uniform across states. For claims against P/C insurers, maximum payouts per claim are generally set by statute between $100,000 and $500,000, with most state laws imposing a $300,000 cap. For claims against life and health insurers, guaranty funds provide at least $100,000 in coverage for health claims, $300,000 for life claims, $100,000 for cash surrender/withdrawal values, and $100,000 for annuity claims. Although these figures define the general range of protection, there are significant variations among states on these figures. For example, an annuitant in New Jersey is eligible for up to $500,000 of guaranty fund protection, but an annuitant in Indiana with the same product is eligible for up to $100,000 in guaranty fund protection. Consumers who purchase the same coverage or product from the same company may receive a different guaranty fund benefit if they reside in different states at the time the insurer is placed into receivership.

States should enact uniform policyholder recovery rules so that all policyholders, irrespective of where they reside, receive the same benefits from guaranty funds. In the event that states fail to achieve uniformity with respect to guaranty fund benefits, then federal involvement may be necessary to ensure fair treatment of all policyholders.

64 However, see Box 3: Assistance to the Insurance Industry during the Financial Crisis.

IV. MARKETPLACE OVERSIGHT, CONSUMER PROTECTION AND ACCESS TO INSURANCE

"Marketplace oversight" refers to those aspects of insurance regulation that concern consumer protection, insurance access, and affordability. Marketplace regulation displays substantial state-by-state variance. This variance was the subject of substantial attention in the decade before the financial crisis and prompted a number of members of Congress to introduce legislation to introduce greater uniformity. Insurers and consumer advocates have criticized this lack of uniformity and the absence of coordination on regulatory matters on grounds of duplication, inefficiency, delay, and uneven consumer protections.

This section reviews the areas that are most frequently the subject of discussion in the area of marketplace regulation: producer licensing; approval of insurance products for sale; market conduct examinations; and collection of tax for multi-state surplus lines. This section also addresses issues of affordability and access to insurance, including rate regulation, risk classification, natural catastrophes, and accessibility of insurance for Native Americans.

Producer Licensing

Recommendation: The National Association of Registered Agents and Brokers Reform Act of 2013 should be adopted and its implementation monitored by FIO.

A "producer" is an agent or broker who markets, distributes or sells an insurance product to a consumer. Today, even though an increasing percentage of consumers purchase insurance on-line or through other direct means, insurance products reach the consumer principally through producers. The number of total licensed producers reflects their importance: in 2012, NIPR, an electronic, centralized producer database, reported that nearly 2.3 million individuals maintained more than 6 million state insurance producer licenses.

Producers may not market, distribute or sell insurance in a given state without a license from that state. States have an application process that typically requires providing personal information, completing required education and training, satisfying a background check, and passing a licensing examination. Regulating producers is an important activity for states. Producers often are the principal insurance point of contact for consumers and, therefore, regulating producers' qualifications directly bears on consumer protection. Producer licensing also generates revenue for the states and state insurance departments.

Although approximately 70 percent of producers maintain a license in only one state, the remaining are licensed in two or more states. The differences in licensing requirements among the states can present duplicative obligations and barriers to entering business in a particular state.

There have been steps to promote greater uniformity in licensing practices and requirements. In 1996, the NAIC, with support from the producer community, developed NIPR, which thereafter established the electronic database through which states may obtain and share information about any current or prospective licensee. NIPR now offers a range of services to aid with licensing, including single and multi-state licenses, single and multi-state renewals, and continuing education verification.

A few years later, in 1999, Congress, in enacting GLBA, set a deadline of November 2002 to require that a majority of the states and territories enact uniform producer licensure laws or adopt reciprocity laws. Under GLBA, failure of the states and territories to meet the producer licensing target would have trig-

gered formation of NARAB, an entity to provide multi-state producer licenses. In response to GLBA, however, state regulators developed the Producer Licensing Model Act (PLMA), which sought to create a framework for reciprocal recognition of producers seeking to be licensed in more than one state. In 2002, the NAIC certified that 38 states and territories adhered to the PLMA, thereby complying with GLBA and avoiding creation of NARAB. As of 2009, the NAIC certified that 47 states and territories were in compliance with the PLMA. After the PLMA, state regulators adopted Uniform Licensing Standards, which provide substantive standards for licensing, renewals, and continuing education requirements.

Notwithstanding these efforts, the inconsistencies and inefficiencies resulting from the absence of uniformity in state producer licensing persist. One fundamental reason is the lack of full participation by the states in the reciprocity and uniformity efforts. For example, many states do not offer the full range of services that NIPR makes available. Moreover, NIPR offers services to help with insurer appointments, or with resident licensing and renewal, but these services are not used by many states. In addition, although the NAIC certified that 47 states and territories had adopted PLMA, three that had not were New York, Florida, and California, which are among the largest of the state insurance markets.

Consumers are detrimentally affected by the absence of uniformity and reciprocity in producer licensing. For example, in an increasingly mobile society, many consumers who move across state lines may prefer to maintain a relationship with a producer based in another state. The National Association of Insurance and Financial Advisors reported, however, that 80 percent of its surveyed members were unable to serve a client who moved to another state, and 12 percent of its members were unable to serve 50 or more clients who had moved to a state in which the producer was unlicensed.

The lack of uniformity creates duplicative administrative and regulatory burdens with no corresponding consumer benefit. Small firms (or "agencies") seeking producer licenses in multiple states confront significant resource demands. The Independent Insurance Agents and Brokers of America report that more than 1.6 million producers are licensed in more than one state, requiring time and expense to obtain licenses that could otherwise be used to develop and grow the producer's business portfolio. The resource burden is also felt at large firms. The Council of Insurance Agents and Brokers described one large firm that holds 76,100 licenses nationally for approximately 5,000 licensed individuals, 3,100 of whom are licensed in more than one state. Other firms face similar burdens.

Even adherence to the PLMA does not necessarily result in the needed uniformity. For those states that have adopted the PLMA, reciprocity has not necessarily followed. A business entity that employs individuals who sell, solicit, or negotiate insurance is considered a producer under the PLMA. The reality remains, however, that every state requires these business entities to be licensed producers, which is in addition to the requirement that every individual producer employed by the entity be individually licensed. Some states impose different requirements for the licensing of business entities, including entity appointment requirements, licensing for branch locations, affiliation requirements, and filing of organizational documents. Regardless of the reasons for these differences, each increases the compliance burden without commensurate benefits of consumer protection.

The lack of uniformity persisting in this area, even following explicit Congressional direction through GLBA, warrants Congressional action to establish uniformity and to reduce the burdens of multi-state producer licensing. NARAB II, which has passed the House and is pending in the Senate, would establish NARAB, a corporation solely intended to establish uniformity and efficiency in producer licensing requirements.

Producers licensed through NARAB would be able to conduct business in multiple states, but would not be subject to licensing requirements in every state in which they do business. Rather, they would

be licensed through NARAB with the opportunity to conduct business in all the states. Enforcement of state laws applicable to producers would remain with the state regulator.

If NARAB II is passed by Congress, the focus should shift to successful implementation of the legislation. In particular, the interests of consumers, although not directly represented on the proposed NARAB II governing board, should receive due consideration and remain a priority. Further, the NAIC should develop an appropriate mechanism to integrate the concerns of those states whose regulators, as a matter of state law, are unable to serve on the governing board. Finally, NARAB II must provide producers an efficient and streamlined multistate licensing mechanism. Consistent with its authority to monitor all aspects of the insurance industry, if NARAB II is passed by Congress and signed by the President, then FIO will monitor the establishment and implementation of NARAB II to ensure that these priorities are achieved.

Box 6: Marriage and Insurance

Recommendation: States should assess whether or in what manner marital status is an appropriate underwriting or rating consideration.

Insurers often use marital status as an underwriting and rating factor. Auto insurers and homeowners' insurers often offer a lower premium for the same coverage to married individuals than to a single person. The use of marital status as an underwriting and rating factor may disadvantage an individual who is lawfully married under the laws of another state to a person of the same sex.

Recent years have seen a number of legal and policy developments at the federal and state levels regarding the treatment of same-sex spouses. To note one example, in *United States v. Windsor*[65] the Supreme Court recently ruled a provision of the Defense of Marriage Act (DOMA) unconstitutional. That provision provided a federal definition of "marriage" and "spouse" to be used in reference to federal laws and regulations, defining marriage as a legal union between one man and one woman, and spouse as referring only to a person of the opposite sex who is a husband or a wife. The Supreme Court found that that provision "violates basic due process and equal protection principles applicable to the Federal Government" under the Constitution's Fifth Amendment.[66] Following *Windsor*, federal agencies have reviewed and revised regulations and policies to extend federal benefits and obligations of marriage to same-sex married couples, in a manner consistent with law. For example, the Internal Revenue Service allows a same sex couple lawfully married in one state to be treated as married for tax purposes regardless of whether the laws of the state of residence allow for same sex marriage. In addition, at the state level, Illinois recently became the sixteenth state to allow for same-sex civil marriage.

In light of the recent legal and policy developments in the treatment of same-sex spouses, and based on equality considerations and other factors, states should assess whether or in what manner marital status is an appropriate insurance underwriting or rating consideration.

Product Approval

Recommendation: State-based insurance product approval processes should be improved by securing the participation of every state in the Interstate Insurance Product Regulation Commission (IIPRC) and by expanding the products subject to approval by the IIPRC. State regulators should pursue the development of nationally standardized forms and terms, or an interstate compact, to further streamline and improve the regulation of commercial lines.

65 133 S. Ct. 2694 (2013).

66 *Id.* at 2693.

State regulators use product approval, or "form regulation," to assess whether insurance products comply with state consumer protection laws, such as those governing insurance policy or contract design, pricing, and coverage terms. The process for product review and approval varies by state, as do the standards with which the insurer must comply. For example, some states require approval before a product is offered in the market, but others permit introduction to the market without prior approval, while still other states reserve the option for later review. The duration of review and substantive standards for review also vary, depending on factors ranging from regulatory processes to state resource constraints.

The absence of a uniform national standard and protocol for product approval is a continuing complaint for insurers that argue the lack of uniformity creates inefficiencies and compromises the ability to offer the same products simultaneously and in the same manner on a nationwide basis. Insurers assert further that both speed-to-market and innovation are harmed by product approval delays in many jurisdictions. Consumer advocates note that the lack of uniformity creates opportunities for regulatory arbitrage, both with respect to personal and commercial lines insurance.

Box 7: Personal Auto Policies for Service Members

Recommendation: FIO will convene and work with federal agencies, state regulators, and other interested parties to develop personal auto insurance policies for U.S. military personnel enforceable across state lines.

Product approval requirements also can disproportionately impact members of the armed forces. Active duty members of the military may transfer to a different base in the United States every 24 to 36 months, which typically involves the member of the armed forces moving to a different state. An individual on active duty can transfer credit cards, checking accounts, and other financial services simply by submitting a change of address form. By contrast, an individual moving from one state to another may be required to obtain a new auto insurance policy on each transfer.

While state laws differ, FIO will work with federal agencies, state regulators, and other interested parties to identify a more accommodating approach for service members who have personal auto policies and are required to move across state lines. For example, a common form for personal lines auto coverage for active duty members of the military could be developed and adopted so that the member's transfer to a new base located in another state does not necessitate a new policy form issuance.

Over the years, states have moved to address some of the shortcomings of the product approval process through the IIPRC and SERFF. In July 2003, the NAIC adopted the current IIPRC model law. Upon the adoption of the model in a state, the state is allowed to join the IIPRC. The IIPRC develops uniform product standards and improves speed-to-market and uniformity for life insurance, annuity, disability income, and long-term care products. Through the IIPRC, an insurer may submit a life, annuity, disability income, or long-term care product filing to be reviewed and approved by a single reviewing body operating under unitary standards. If a product is filed for approval with IIPRC, its uniform standards supersede those of any compacting state unless the insurer submits that product directly to the compacting state outside of the IIPRC framework. The IIPRC was brought into existence in May 2006 upon meeting the threshold requirement of 26 states or 40 percent of premium volume nationwide. The IIPRC currently has 43 members (42 states and Puerto Rico). None of the compact members have opted out of the uniform standards for life only or annuities products; five members have opted out of the uniform standards for long-term care; six members do not permit Modified Rate Schedule filings for long-term care; and one member has opted out of the uniform standards for individual disability

products. In 2012, 167 companies registered to file products for approval and submitted 744 filings, resulting in the approval of 625 products. The average approval time for the products was 23 days.

Notwithstanding the strides represented by the formation and function of the IIPRC, for several reasons uniformity and efficiency have yet to be achieved in the area of product approval for life insurance, annuities, long-term care, and disability products. First, state participation in IIPRC is incomplete, largely because California, Florida, and New York have not joined, and the populations of those states constitute a substantial portion of the U.S. insurance market. Second, the scope of product lines eligible for IIPRC review is limited, and the IIPRC has yet to develop approval standards for group annuity, group long-term care or group disability products. Finally, IIPRC permits an insurer to submit an approval request directly to a state IIPRC member, thereby allowing an insurer to circumvent IIPRC standards completely. Accordingly, insurers have the ability to avoid the IIPRC consumer protection standards if those standards are more stringent than the consumer protection standards of the state IIPRC member, thus making IIPRC a regulatory tool susceptible to arbitrage.

Given the shortcomings, dissatisfaction among life insurers persists. In 2011, ACLI's survey of its members found that 83 percent believe that improvement of policy/contract form approval processes is of "critical/major importance." Life insurers assert that the lack of uniformity in a rapidly evolving and growing market for retirement products stifles product innovation.

States should take the following measures in the short term. First, non-participating states should join the IIPRC. For states with a constitutional or legal impediment to joining a multi-state compact, state regulators should adopt the IIPRC product standards and processes as model law and regulation. Second, such standards should serve as a baseline so as to allow states with higher consumer protection standards to continue enforcing those higher standards. Third, to remove opportunities for arbitrage, state regulators from member states should prohibit insurers from opting into less restrictive non-IIPRC standards. Finally, IIPRC should expand the scope of its product coverage and develop standards for all products within its authority.

In 1998, state regulators established SERFF to standardize initial product filings with the regulators and to expedite submitting insurance policy forms for approval. With SERFF, insurers can simultaneously file for product approval in multiple states but the legal and regulatory standards for form review remain different state by state.

Regulatory approval of policies sold to sophisticated commercial policyholders, though presently subject to less regulatory scrutiny than policies for individuals and families, often impose substantial delay and may have the unintended consequence of driving more commercial policyholders to less regulated surplus lines coverage or self-insurance. In a 1998 NAIC white paper entitled *White Paper on Regulatory Re-engineering of Commercial Lines Insurance: Streamlining of Commercial Lines Insurance Regulation,* state regulators recommended, among other things, a flexible regulatory stance for form and rate review in markets found to be competitive by the state regulator, exemptions for large commercial policyholders from form and rate review, and authority for state regulators to waive specific policy requirements for policyholders primarily located in another state. In the 15 years since that white paper the states have made important strides.

Nonetheless, commercial lines insurance regulation must continue to modernize. Inconsistent and sometimes lengthy product approval periods continue to limit the ability of insurers to meet the needs of national businesses with new products. Although most states permit exemptions for large commercial policyholders from rate or form review, the premium volume or number of employees that qualify an insured as a large commercial policyholder vary by state. Additionally, while the creation of SERFF

has achieved efficiency gains, insurers continue to identify inconsistencies in SERFF filing requirements by state that limit those efficiencies for multistate filings.

Recently, the NAIC formed the Commercial Lines (EX) Working Group to ascertain the extent to which states moved forward with the recommendations included in the 1998 white paper as well as to consider additional reforms in the commercial lines market. As part of this work, state regulators should pursue the development of nationally standardized forms and terms, or some mechanism for interstate reciprocity, to streamline and improve the regulation of commercial lines.

Given the importance of efficiency and consistency in the product approval process for many insurance products, FIO should continue to monitor state-based product approval processes. Federal action may become necessary if the current, and long-standing, shortcomings are not improved in the near term.

Box 8: Sale of Annuities to Suitable Consumers

Recommendation: In order to fairly protect consumers in all parts of the United States, every state should adopt and enforce the National Association of Insurance Commissioners Suitability in Annuities Transactions Model Regulation.

One of the most important financial decisions facing many consumers approaching retirement is whether to invest their savings by purchasing annuities, shares in mutual funds, or interests in other securities. Financial literacy among consumers varies widely and it is difficult for many consumers to evaluate what investments are most suitable. Whether an annuity is suitable for a particular consumer and what specific contract features best meet the consumer's needs depends upon a variety of considerations, including the consumer's age, income, financial situation, and risk tolerance. In addition to state regulation, federal law, including the Employee Retirement Income Security Act, may govern the provision of investment advice concerning annuities.

All annuities offer the advantage of the deferral of tax on the investment earnings, with the earnings taxed as ordinary income only when the annuitant actually receives the annuity payment. There are three general types of annuities. Fixed annuities pay a pre-determined flat monthly sum. Variable annuities pay a monthly sum determined by the performance of an investment portfolio held in a segregated account. Indexed annuities have a guaranteed minimum payment with the opportunity for a higher payment depending on the performance of another asset or underlying rate or index, such as a selected securities index.[67] Each of these types of annuities can be paid for a specific period of time or for the life of the annuitant.

State regulators supervise the sale of all commercial annuity products, and licensed insurance producers may sell annuities. In addition, variable annuity products are also considered securities and are regulated by the SEC.[68] Consequently, licensed insurance producers selling variable annuities must be appropriately affiliated with a member of the Financial Industry Regulatory Authority (FINRA) and comply with registration requirements applicable to a securities representative.

Through the NAIC, following numerous state enforcement actions, state insurance commissioners have attempted to create a national suitability standard for annuity sales. The NAIC Suitability in Annuity Transactions Model Regulation (Model Suitability Regulation) requires: (1) insurance

67 Indexed annuities do not have segregated accounts. Indeed, the insurer may not actually invest in the instruments associated with the underlying rate or index, such as the securities that correspond to the selected securities index.

68 In 1959, the Supreme Court decided that variable annuities are securities.

producers to have reasonable grounds for believing that the recommendation to buy an annuity is suitable for the consumer; (2) insurers to maintain procedures for review of each recommendation to purchase an annuity to determine suitability prior to issuing the annuity; (3) insurance producers to be trained on the provisions of annuities generally; and (4) a safe-harbor for variable annuity sales made in compliance with FINRA requirements.[69]

The Dodd-Frank Act provides incentives for state regulators to enact national suitability standards. The Dodd-Frank Act authorizes the Office of Financial Literacy in the Consumer Financial Protection Bureau (CFPB) to issue grants to states to enhance the protection of seniors from misleading and fraudulent sales of financial products.[70] State regulators could, for example, apply for the grant if, among other requirements that may be established by the CFPB, the state regulator were to adopt suitability standards that meet or exceed the Model Suitability Regulation. The Dodd-Frank Act also directs the SEC to treat indexed annuities as exempt securities if: (1) the value of the indexed annuity does not vary according to the performance of a separate account; (2) the indexed annuity satisfies state nonforfeiture law or in the absence of such, the NAIC Model Standard Nonforfeiture Law for Life Insurance or NAIC Model Standard Nonforfeiture Law for Individual Deferred Annuities; and (3) the indexed annuity is issued in a state that has adopted the Model Suitability Regulation or by an insurer that adopts and implements practices on a nationwide basis for the sale of annuity contracts that meet or exceed the NAIC Model Suitability Regulation.[71]

The United States has entered an era of unprecedented levels of retirement age residents. Financial security for the aging population is an essential priority, and that security must be shaped around the unique circumstances of each retiree.

The suitability of an annuity purchase should not be dependent upon the state in which the consumer resides. Given the importance of national suitability standards for consumers considering or purchasing annuities, states should adopt the Model Suitability Regulation. In the event that national uniformity is not achieved in the near term, federal action may become necessary.

Market Conduct Regulation

Recommendation: States should reform market conduct examination and oversight practices and: (1) require state regulators to perform market conduct examinations consistent with the National Association of Insurance Commissioners Market Regulation Handbook; (2) seek information from other regulators before issuing a request to an insurer; (3) develop standards and protocols for contract market conduct examiners; and (4) develop a list of approved contract examiners based on objective qualification standards.

Regulators formally review an insurer's compliance with state laws governing market conduct practices through market conduct regulation. Market conduct regulation includes market analysis, investigations and market conduct examinations. Investigations or market conduct examinations may be commenced either as part of a regular schedule or on an ad hoc basis, when the regulator becomes aware of circumstances that raise market behavior concerns, whether through the receipt of information from customer complaints, other supervisors, other insurers, the media, or other sources. Currently, investigations and market conduct examinations may be conducted by the regulator of any state in which an insurer operates and may cover any matter within that state's laws, including licensing, underwriting practices, claims settlement, use of forms, and customer service.

69 The Model Suitability Regulation was first adopted in 2003 and applied only to sales to seniors. It was revised in 2006 to apply to all consumers. The model regulation was revised again in 2010. The term Model Suitability Regulation is used here to refer to the 2010 version.

70 *See* Section 989A

71 *See* Section 989J, 15 U.S.C. § 77c(a)(8).

Market conduct regulation has been the focus of significant criticism by industry and third-party commentators. The principal reasons are that state regulators often fail to adequately coordinate market conduct examinations, resulting in multiple examinations for the same or similar sets of issues, with all the attendant burdens and inefficiency. A 2003 Government Accountability Office (GAO) report[72] noted that states not only differed in the rigor and breadth of market conduct examinations – thus raising concerns also about effective consumer protection – but that coordination between states was inconsistent and infrequent.

In response to these shortcomings, state regulators have taken steps to create a more systematic, structured and uniform market conduct regulation program. Although a Market Conduct Surveillance Model Law, adopted by state regulators at the NAIC in 2004, has not been widely adopted, the NAIC *Market Regulation Handbook* (*Handbook*), has been adopted by most jurisdictions, and describes the key components and standards for: (1) market analysis; (2) investigations; and (3) market conduct examinations. Aside from adopting common examination protocols, state regulators collaborate and coordinate market conduct regulation through the NAIC Market Actions Working Group (MAWG). This forum permits states to share information gained through market analysis, investigations, or market conduct examinations. Based on this information, a state regulator may proceed with a multi-state market conduct examination.[73]

Notwithstanding these improvements, when the GAO revisited the market conduct examination process in 2009, it determined that states had improved the process, but that differences among the states still limited progress toward appropriate coordination and standardization of examinations. The GAO acknowledged that states had developed some market conduct guidance, data collection, and analysis tools, but noted that substantial variances continued among the states in terms of process, criteria, and coordination. Indeed, as of 2011, 45 of 56 NAIC jurisdictions required insurers to submit a Market Conduct Annual Statement (MCAS), a compilation of insurer-specific market conduct-related data. However, a 2011 ACLI survey of its members noted continued dissatisfaction with market conduct regulation. The ACLI survey noted that 63 percent of respondents rated current market conduct practices as "unsatisfactory/needs improvement," with 78 percent citing a lack of uniformity as the major cause of dissatisfaction, along with "speed/timing," "cost," and "expertise/capacity."

State regulators have continued to work on improvements to market conduct regulation and conducted a self-survey to understand current state activities.[74] A 2012 NAIC survey demonstrates the continued variation in market conduct regulation among the states: one state carried out 66 percent of all interrogatories conducted in 2010, three states carried out 48 percent of all specialized data calls, and one state accounted for 73 percent of all reviews of insurers' self-audits. The survey asked whether states would be willing to forgo an examination of an insurer if another state had conducted an examination and ensured all of the issues of concern were corrected. Respondents noted this would depend on the comparability of the state's market conduct examination system, whether the insurer was a domestic insurer, the severity of the issues, and the similarity of state laws.

Coordination between states and standardization of market analysis, investigations and examinations are essential to modernization. Aside from promoting efficiency and consistency, improved coordination could present an opportunity for state regulators to pool already scarce resources. Moreover,

72 Insurance Regulation, Preliminary Views on States' Oversight of Insurers' Market Behavior, May 6, 2003.

73 The NAIC developed a number of tools states may use to share information and coordinate market conduct regulation activity. In addition to Market Conduct Annual Statement, these include the Market Initiative Tracking System, the Special Activities Database, the Complaints Database System, the Examination Tracking System, Market Analysis Review System, and Regulatory Information Retrieval System.

74 *See* NAIC Market Regulation and Consumer Affairs Committee *Market Regulation Survey* August 3, 2012.

standardization provides consistent and uniform consumer protection for all policyholders irrespective of where the policyholder resides.

Under the state-based regulatory system, states should develop a requirement that market conduct regulation be performed according to the *Handbook*, which would significantly improve the consistency of consumer protection across all states. Moreover, as part of the examination protocol, states should develop a process whereby information relevant to the same or similar statutory and regulatory requirements first be sought from another regulator before issuing a duplicative request to the insurer. States should adhere to a "lead state" concept for multi-state market conduct examinations in order to eliminate unnecessary and duplicative examinations.

Another factor that may augment the variability of rigor and professionalism from one state to another is the increasing dependence of state regulators on contract examiners to perform market conduct examinations. States should develop explicit standards and protocols to govern contract examiners including cost and schedule, education, professional background, training requirements, and appropriate ethical standards regarding conflict of interest, confidentiality, privacy and report drafting. State regulators should also develop a list of approved contract examiners based on an objective evaluation of expertise and training to examine specific issues or industry participants.

Rate Regulation

Recommendation: States should monitor the impact of different rate regulation regimes on various markets in order to identify rate-related regulatory practices that best foster competitive markets for personal lines insurance consumers. FIO will work with state regulators to establish pilot programs for rate regulation that seek to maximize the number of insurers offering such products.

An insurance rate determines the price at which an insurance policy or contract is sold. Insurers use rates to determine the premium due on a particular insurance policy: premium equals the rate multiplied by the number of units of insurance purchased. The rate typically reflects the risk characteristics of the purchaser of insurance.

Rate regulation originated in the late 19th century, when insurers gathered in "bureaus" to set rates because of the concern that price competition would bring the threat of insolvency ("destructive competition"). Rate regulation also evolved to allow insurers to exercise greater discretion when setting rates. Whereas states formerly set a "mandatory rate," regulation now is generally based on a legal standard, shared by all states, that the rate not be "inadequate, excessive, or unfairly discriminatory." Today, rate regulation principally addresses affordability.

The evolving views on the manner of setting rates is reflected in the variety of processes through which states now permit insurers to file rates with the state regulator. (*See* Box 9). However, many empirical studies suggest rate regulation, particularly in auto and homeowner insurance, may adversely impact market supply resulting in higher prices and an increase in the market share of the residual market.[75]

75 *See* Lauren Regan, Sharon Tennyson, and Mary Weiss *The Relationship Between Auto Insurance Rate Regulation and Insured Loss Costs: An Empirical Analysis*, NAIC 2009; Mary Weiss, Sharon Tennyson, and Laureen Regan *The Effect of Regulated Premium Subsidies on Insurance Costs: An Empirical Analysis of Automobile Insurance*, The Journal of Risk and Insurance, Vol. 77, No. 3, 2010; Richard Derrig and Sharon Tennyson *The Impact of Rate Regulation on Claims: Evidence from Massachusetts Automobile Insurance*, Risk Management and Insurance Review, 2011, Vol. 14, No. 2, 173-199; and Sharon Tennyson, *The Long-Term Effects of Rate Regulatory Reforms in Automobile Insurance Markets*, Insurance Research Council, March 2012.

Box 9: Forms of Rate Regulation

States exercise varying degrees of rate regulatory authority. Listed from the least to most stringent, the different types of rate regulation include:

- *Open rating*: Insurers establish rates for the products with a presumption that the rates satisfy the state standard. The state regulator intervenes only in limited circumstances.
- *Use and File*: An insurer releases a product with certain rates, while also submitting a rate filing for review. The regulator can object or disallow the filed rate within a fixed number of days after the request to review. If the regulator does not object to or disallow the proposed rate within the allotted timeframe, the insurer can continue using the rate in the market. In some states, if the rate request is disallowed within the review timeframe, the insurer is required to rebate the premiums already collected.
- *File and Use*: An insurer files a rate request with the state regulator who has a fixed amount of time to review the filing. If the regulator does not take action within the allotted timeframe, the rate is deemed approved and the insurer implements the rates in the market.
- *Prior Approval*: An insurer files a rate request with the state regulator and cannot implement the proposed rates until approved by the regulator.

In 2011, 35 jurisdictions required a prior approval process for some lines of coverage, 37 jurisdictions utilized a file and use process, four jurisdictions utilized a flex band rating scheme, 16 jurisdictions required use and file process, and 33 jurisdictions had no filing requirements for commercial lines except upon demand of the regulator. States often use a particular approach for rates dependent upon the line of insurance. In general, however, rates for personal lines typically receive a higher degree of scrutiny than commercial lines and, therefore, rates for personal lines are more likely to be required to go through a prior approval process.

Proponents for an open market system argue that prior approval rate regulation unnecessarily injects local political dynamics into a private economic market. Some argue more broadly that rate regulation artificially depresses prices, forcing insurers out of otherwise important markets and distorts the real cost of insurance. Supporters of strict rate regulatory authority argue that such regulation is critical for providing affordable and accessible insurance. Proponents of open market systems counter that, as an "open market" state, Illinois does not regulate base rates for affordability, but relies on the competitive market to impose discipline on prices and cite as evidence that more insurers participate in the Illinois P/C markets than in any other state.

The "open market" approach is not the only alternative to strict rate oversight. In 2011, Tennessee adopted a "flex band rating" approach for personal lines policies that allows insurers to impose rate increases within a range of 15 percent of the prior year's rate. In 2011, Connecticut extended for another two years a flex band rating (originally enacted in 2006) for personal lines that allows insurers to impose rate increases within a range of 6 percent of the prior year's rate. These recent developments may indicate a trend among the states to consider alternatives to strict rate regulation.

Rate regulation processes and protocols are fertile areas for experimentation by the states. With different states testing alternative approaches to rate oversight, states can evaluate the results in other jurisdictions and identify best practices. States pursuing enhanced competition and capacity in personal lines insurance markets have the option of pursuing moderate rate regulatory reforms on a limited or pilot basis to test the view that the burdens of rate regulation deter competition and reduce market capacity.

In making a determination regarding whether or how to implement a pilot program a number of factors may be considered. In order to define the factors state regulators may use to make such a determination, it is important to understand the characteristics of a competitive market that provide sufficient market discipline to maximize the number of insurers offering products to consumers. FIO has authority to monitor the affordability and accessibility of non-health insurance products to traditionally underserved communities. In the exercise of this authority, FIO will continue to monitor developments in the area of rate regulation and work with state regulators to identify best practices for implementation of pilot programs, as well as best practices for monitoring the impact of any change on consumer access to insurance.

Risk Classification

Recommendation: (1) States should develop standards for the appropriate use of data for the pricing of personal lines insurance; (2) states should extend regulatory oversight to vendors that provide insurance score products to insurers; (3) FIO will study and report on the manner in which personal information is used for insurance pricing and coverage purposes.

In determining the insurance rate applicable to particular customers, together with eligibility for coverage and class of service, insurers increasingly consider a myriad of data points to determine an individual consumer's risk profile. In the context of personal lines insurance products, this practice is familiarly known as "risk classification." Many P/C insurers generally rely upon these methodologies, for example, to place a customer in a particular rating tier, which can carry particularized coverage limits and premium prices

The increasingly prevalent methodology for determining risk profiles for P/C personal lines is to rely on insurance scores. Insurance scores are typically generated by algorithms that consider a large number of data points, including an applicant's driving history, age, gender, zip code, marital status and credit score, or the components of a credit score. Some estimates indicate that, to one degree or another, the vast majority of auto insurers factor in credit scores, or components of a credit score, when determining applicable policy rates. The impact of applying these scores can be substantial. For example, some studies suggest that a driver with a poor credit score may pay 40 percent more in premiums.

Proponents of insurance scores argue that the more data an insurer can collect about an applicant, the more accurately the insurer can evaluate risks and price the policy. They also assert that the accurate pricing enabled by an insurance score reduces the cost shift in an insurance pool in which consumers with a lower risk profile subsidize the costs of individuals with a higher risk profile. These arguments are made with particular reference to individuals with high risk habits or jobs, or individuals who live in high risk communities. Proponents also contend that insurance scores actually increase insurance availability in high risk areas because, in the absence of the ability to price accurately, insurers would elect not to offer insurance in those areas at all.

Insurance scores, however, are controversial. Certain insurance score components, like a credit score, have a greater impact on the price quoted for certain consumers. For example, insurers may price personal line policies higher if the policyholder is unmarried, which raises concerns about whether certain life events, such as divorce or death of a spouse, or, as in the case of gay and lesbian couples, the legal inability to marry in many states, should be considered an appropriate basis for increasing the price of mandatory insurance policies. In addition, rating factors like education, occupation, and credit score, or the components of a credit score, may be correlated with race and thus it may appear that a greater percentage of racial minorities pay higher prices.

Personal auto insurance provides an example of how concerns regarding risk classification processes and methodologies can play out. Critics of insurance scoring practices have maintained that risk deter-

minations should rely on factors that have a direct connection with driving ability or capacity. Accordingly, these critics support a number of reforms ranging from prohibiting the use of credit scores to requiring that premiums be based on driving record, miles driven, and driving experience.

Ultimately, insurance scoring or other risk classification systems may be important tools that allow insurers to charge higher rates to individuals who engage in riskier behavior. However, regulators and consumers should better understand the criteria and methodology by which insurers develop a policyholder's risk profile. The technical evolution of insurance pricing has been driven by advances in data mining and technological capability, and responsible use of these techniques that imposes higher prices on truly risky behavior should be permitted. However, simply because data may be available regarding consumers does not mean that any data is relevant to determining the insurance premiums they should pay.

With an ever-expanding universe of personal information available, important questions regarding boundaries or limitations on the use of that personal information should be answered in the context of insurance. Therefore, regulatory policy and practice must clarify that the criteria and methodologies actually used by insurers not rely on impermissible or discriminatory factors. Risk classification factors may be an appropriate subject for binding, uniform federal standards, particularly to the extent that insurance scoring methodologies involve factors that implicate rights secured under federal law.

In addition to developing and articulating standards concerning the proper use of data and methodologies of risk classification, state regulators should develop protocols for oversight of vendors – or insurers if the insurer develops the protocol for its own use – that provide the algorithms and data that render insurance scores and affect eligibility, tier and price of coverage. In most cases, the vendors that sell insurance score products and services to insurers are not subject to oversight by state regulators. The lack of transparency into the development of insurance scores prevents regulators – and the public – from meaningfully evaluating not only a rate but also the process by which that rate has been determined.

Improved regulatory oversight of the insurance score vendors should be a priority for state regulators, including the development and adoption of an appropriate model law that will subject insurance score vendors to licensing and examination standards. In addition, FIO has authority to monitor the affordability and accessibility of non-health insurance products to traditionally underserved communities. In the exercise of this authority, FIO will monitor state regulatory activity in this area and move for federal involvement if reasonable progress is not achieved in the near term. In support of its responsibility to monitor access to affordable insurance to traditionally underserved communities, FIO will study the appropriate boundaries of use of personal information for insurance pricing and coverage purposes.

Box 10: Access of Native Americans to Insurance

Recommendation: FIO will consult with Tribal leaders to identify alternatives to improve the accessibility and affordability of insurance on sovereign Native American and Tribal lands.

The United States has a unique legal and political relationship with Indian tribes and Alaska Native entities as provided by the U.S. Constitution, treaties, court decisions, and federal statutes. Generally, state insurance laws and regulation do not apply to policies sold in Indian Country. Regulatory authority, the power to develop insurance law and regulation, and the authority to operate tribally-owned insurance companies remains with Tribal governments. However, the majority of Tribal governments have not established specific insurance regulatory regimes, thereby leaving the responsibility with Tribal courts to determine the acceptable market conduct of an insurer or insurance professional on Tribal lands.

The absence of defined regulatory parameters presents a challenge for insurers considering the sale of conventional insurance products in Indian Country. Insurers point to the lack of a legal and regulatory framework as a reason for not conducting business in Indian Country. Despite the progress some organizations have made to provide access to affordable insurance in Indian Country, there remains a genuine need for additional insurance protection to limit business owners' and individuals' exposure to devastating losses from natural disasters or other unforeseen events, which in turn may hamper economic development. This is an area in which federal action may be warranted.

One possible course for consideration is to facilitate purchase of broader flood coverage. The Department of Homeland Security oversees the National Flood Insurance Program (NFIP), which is administered in part by the Federal Emergency Management Agency (FEMA). To be eligible to purchase flood coverage, FEMA requires that the property be located within a FEMA flood map zone or designated flood zone. However, many Tribal lands are not mapped by FEMA. FEMA estimates that fewer than 90 of the 566 federally recognized Tribes reside on lands mapped by the NFIP and are, therefore, eligible for participation in conventional NFIP coverage.

The Department of Housing and Urban Development (HUD) helped address this coverage gap by recognizing the need for an affordable flood program on tribal lands that have not been mapped. This privately offered policy covers up to $15,000 in damage for an insured property. In coastal areas, this flood policy pays regardless of whether the insurer has determined the cause of damage to be wind or water. Tribes have encouraged the federal government to facilitate the development of alternative insurance programs by allowing enhanced flexibility in federal programs that would provide more affordable coverage options, including an NFIP partnership with a Native American-owned insurance or risk retention enterprise.

FIO will initiate a consultation with Tribal leaders, including tribally-owned risk pools, and involve relevant federal agencies and state regulators, with the objective of identifying alternative courses of action to improve the accessibility and affordability of insurance on sovereign Tribal lands.

Nonadmitted and Reinsurance Reform Act of 2010

Recommendation: FIO will continue to monitor state progress on implementation of Subtitle B of Title V of the Dodd-Frank Act, which requires states to simplify the collection of surplus lines taxes, and determine whether federal action may be warranted in the near term.

The Nonadmitted and Reinsurance Reform Act (NRRA) was enacted as part of the Dodd-Frank Act. Part I of the he NRRA, which took effect on July 21, 2011, reformed surplus lines insurance by streamlining the collection of taxes for multi-state surplus lines placements.

Surplus lines insurance provides coverage for businesses and consumers for risks that are not adequately insured by insurers licensed to do business in the given states. Surplus lines policies often cover one policyholder for property that the policyholder owns in multiple states. Prior to July 21, 2011, states typically taxed the premium on a pro-rata basis according to the value of the insured risks located in the various states. The various states, however, have different surplus lines tax collection processes and offices, as well as different tax rates. Thus, there was great potential for confusion among producers paying surplus lines taxes for multi-state risks.

The NRRA prohibits any state other than "the home State of an insured" from requiring premium tax payments from nonadmitted insurers. The NRRA permits states voluntarily to "enter into a compact or otherwise establish procedures" for allocating premium taxes for nonadmitted insurance paid to the insured's home state. Absent a compact, states may only collect premium tax on the premium written

in the home state. The NRRA also expresses the intention of Congress that states adopt nationwide uniform requirements, forms, and procedures to provide for the reporting, payment, collection, and allocation of premium taxes for nonadmitted insurance.

As of December 31, 2012, five states and Puerto Rico were participating in the Nonadmitted Insurance Multi-State Agreement (NIMA), which created a central clearinghouse for reporting, collecting, and allocating nonadmitted insurance premium taxes. No other states are operating in a tax allocation agreement. Nine states have entered into the Surplus Lines Insurance Multistate Compliance Compact (SLIMPACT), which would also create a tax payment clearinghouse and an allocation agreement. However, SLIMPACT will not become effective until ten states enter into the compact. Many other states simply enacted legislation authorizing the collection and retention of 100 percent of the nonadmitted insurance premium taxes for which the state is the home state of the insured.

Seven states (three of which entered SLIMPACT and four of which have entered no premium tax allocation agreement) are collecting nonadmitted insurance premium taxes at a pro-rata rate according to the locations of the multi-state risks. Nonetheless, these states are retaining 100 percent of the premium taxes. Finally, some states are taxing 100 percent of nonadmitted insurance premiums, including premiums for risks located in non-U.S. jurisdictions. Some question the legality of such a practice and suggest that it subjects insureds to double taxation.

The NRRA could be a model for insurance regulatory reform because it preserves state regulation but provides incentives for states to act in a manner consistent with federal guidelines. It urges states to simplify and make uniform the regulation of surplus lines insurance in the United States. However, the states have not fulfilled this vision as some states have agreed to share the premium tax collected from surplus lines insurance and others have opted to retain the premium tax applicable to the insurer's home state. A compact seems no more likely than before the NRRA became law. Implementation of the NRRA demonstrates the challenge of facilitating coordinated state action when coordinated action may materially impact state general revenue funds. FIO will continue to monitor state progress on this issue. Further federal action on this issue may be warranted in the near term.

Natural Catastrophes[76]

Recommendation: States should identify, adopt, and implement best practices to mitigate losses from natural catastrophes.[77]

Natural catastrophes can cause severe stress on all aspects of an affected community or region. These events strain P/C insurance markets. With an estimated $58 billion in insured losses in the U.S. resulting from weather events, 2012 surpassed the average insured losses of $27 billion from 2000 to 2011.[78] Large-scale natural catastrophes insured through the private sector strain industry resources, often resulting in higher premium rates for consumers. After significant outlays resulting from a natural catastrophe, insurers typically rebuild capital levels through increases in premiums, which often result in higher prices for consumers.

76 Pursuant to the Biggert-Waters Flood Insurance Reform Act, Pub.L.112-141; 126 Stat. 916 (2012), FIO will submit a report to Congress on a variety of insurance-related natural catastrophe topics.

77 This section does not address terrorism risk or the Terrorism Risk Insurance Act (TRIA), as renewed and set to terminate on December 31, 2014. The President's Working Group on Financial Markets is studying and will issue a report on TRIA.

78 Munich Re, 2012 Natural Catastrophe Year in Review, January 3, 2013, *available at* http://www.munichreamerica.com/webinars/2013_01_natcatreview/natcat_webinar_record/player.html2012.

Higher premiums following a catastrophe can limit the affordability and accessibility of conventional insurance to consumers. When insurers raised premiums and curtailed dramatically offers of coverage following Hurricane Andrew in 1992 and after the Northridge earthquake in 1994, states created publicly supported or operated insurance or reinsurance programs to improve accessibility and affordability of property insurance coverage.

In a 2010 report, the GAO reviewed a sample of these public catastrophe programs, many of which have been growing over the last half of the decade.[79] From 2005-2010, the state insurance program in Mississippi had grown 495 percent, Texas had grown 147 percent, and Florida had grown 146 percent. The GAO found that some state catastrophe programs rely upon risk transfer through the reinsurance markets, while others rely on post-event funding, bonding, and assessments, to pay for incurred losses.

States also approach and design these residual market programs with different objectives. Some state programs encourage broad participation while other state programs attempt to manage participation through eligibility requirements, rates, or through other legislative or market-oriented approaches. Most states do not charge actuarially justified rates to residents seeking to participate in a state residual market program. In particular, the GAO found:

> Six of the 10 programs charged rates that did not fully reflect the risk of loss, potentially discouraging private market involvement and mitigation efforts by property owners. However, charging rates that do not fully reflect the risk of loss can also potentially increase broad-based participation in state programs. Officials from 7 of the 10 programs said that they took steps to encourage private market participation, and officials from 9 programs told us that they are implementing or considering ways to encourage mitigation, including providing mitigation credits or attempting to develop a more effective mitigation plan. Officials from most of the programs said they encourage broad participation in their programs; however, a few said they specifically discourage it and instead try to encourage homeowners to purchase insurance from the private market.[80]

The results of state involvement can be mixed and, accordingly, state approaches are evolving. The California Earthquake Authority (Authority) requires insurers writing homeowner policies either to offer earthquake coverage or to join and participate in the Authority. The Authority is privately funded and generally manages its exposure through the purchase of private reinsurance. While earthquake insurance is now available to California property owners, the premium cost appears prohibitive for most. Only approximately 14 percent of California property owners have earthquake insurance, penetration rates roughly the same as before the Northridge earthquake.

Industry critics assert that public insurance programs in some areas exposed to hurricanes may limit or crowd out private market capital. Nevertheless, states with coastal areas exposed to hurricanes have found that public support can improve the accessibility of homeowner insurance. Public sector programs frequently inject public capital into an insurance market at rates with which the private sector cannot compete.

The NFIP provides protection for property owners against losses caused by flooding. Superstorm Sandy illustrates the important role of the NFIP in supplementing coverage available for property owners through the private insurance market. Until 2005 and the devastating losses of Katrina, Rita, and Wilma, premiums collected by the NFIP effectively covered annual losses. Due to the hurricane losses of 2005, though, the NFIP accumulated a deficit in excess of $18 billion. When Superstorm Sandy hit

79 GAO, *Natural Catastrophe Insurance Coverage Remains a Challenge for State Programs,* GAO-10-568R Natural Catastrophe Insurance Coverage (2010).

80 *Id.* p. 3.

the northeast in October 2012, NFIP owed the U.S. Treasury $17.8 billion. Due to losses from Sandy, Congress passed legislation increasing the borrowing authority of the NFIP to $30.4 billion.

The Biggert-Waters Flood Insurance Reform Act of 2012 modifies important provisions of the NFIP. First, premiums paid for NFIP coverage will more closely approximate rates justified by the risk of loss (*i.e.* more actuarially justified). Second, NFIP, for the first time, is authorized to secure reinsurance from the private market at rates and on terms determined to be reasonable and appropriate.[81]

At this time, different states are engaged in a variety of approaches that are sufficiently new and varied such that best practices for national adoption should wait until further development and identification of the more successful of these programs. While public policy debates are focused on the relative merits of residual market insurance programs, enhanced property owner mitigation initiatives receive widespread support. The amount of insured loss for a particular natural catastrophe is a function of the density of exposed properties in an area, and the ability of those properties to withstand the effects of the disaster. Effective mitigation strongly enhances the safety of occupants and the durability of property.

Empirical data supports the adoption of statewide building codes to save lives and to reduce the cost of property damage. A study by the Louisiana State University Hurricane Center estimated that stronger building codes would have reduced wind damage from Hurricane Katrina by 80 percent, saving as much as $8 billion. A more recent report, sponsored by the Federal Alliance for Safe Homes, a nonprofit organization focusing on economic resiliency and the role of mitigation in reducing the economic impact of natural disaster, used the uncommonly large number of natural disasters occurring in 2011 to highlight the important role that mitigation and planning have played as different areas recovered from natural disasters.[82]

While difficult to implement mitigation measures for every building in a catastrophe prone area, states and communities investing in the science of mitigation and exploring ways to reduce losses through construction standards may offer the best opportunity for ensuring access to affordable insurance. Proper construction techniques and materials can save lives and reduce both insured losses and taxpayer burden.

States should identify, adopt, and implement best practices for construction standards, including building codes, to mitigate losses from natural catastrophes. FIO intends to expound at greater length on issues involved with natural catastrophes in the forthcoming report required by the Biggert-Waters National Flood Insurance Reform Act of 2012.

81 42 U.S.C. § 4055(a)(2).

82 "Impact 2011: Examining a Year of Catastrophes through the Lens of Resiliency," December 2011, prepared by Weather Predict Consulting, Inc. for the Federal Alliance for Safe Homes 2011 Annual Meeting, www.flash.org.

V. TAKING ACCOUNT OF REGULATORY REFORM

In June 2009, Treasury published the white paper entitled *Financial Regulatory Reform: A New Foundation*, which articulated six principles by which to measure proposals for insurance regulatory reform:[83]

1. Effective systemic risk regulation with respect to insurance.

2. Strong capital standards and an appropriate match between capital allocation and liabilities for all insurance companies.

3. Meaningful and consistent consumer protection for insurance products and practices.

4. Increased national uniformity through either a federal charter or effective action by the states.

5. Improve and broaden the regulation of insurance companies and affiliates on a consolidated basis, including those affiliates outside of the traditional insurance business.

6. Increased international coordination. Improvements to our system of insurance regulation should satisfy existing international frameworks, enhance the international competitiveness of the American insurance industry, and expand opportunities for the insurance industry to export its services.

The Dodd-Frank Act addresses some of these principles directly. For example, the Dodd-Frank Act provides a mechanism for consolidated supervision of insurance firms, or firms with insurance subsidiaries, by empowering the Council to determine that a nonbank financial company shall be supervised by the Federal Reserve if, at least in part, the firm's material financial distress could pose a threat to the financial stability of the United States. If the Council determines that supervision by the Federal Reserve is appropriate, then the firm shall also be subject to enhanced prudential standards. Designation of such firms allows for consolidated supervision of insurers, including corporate affiliates. Similarly, with respect to increased international coordination, Congress empowered FIO to represent the United States on prudential aspects of international insurance matters.

While not all of the six principles are directly addressed by the Dodd-Frank Act, as described more fully in this Report, those topics are the subject of current reform initiatives at both the national and international level. For example, supervisors worldwide are reviewing capital and consolidated supervision regimes independently and multilaterally, including the NAIC and the IAIS. Countries including Mexico, Canada, and China are implementing modernized insurance supervisory regimes. Consumer protection and market regulation also remains the subject of state, national and international attention. A summary of reform efforts with respect to each of the six principles is discussed below.

Systemic Risk Regulation. Title I of the Dodd-Frank Act establishes the Council and charges it with identifying risks to the financial stability of the United States, promoting market discipline, and responding to emerging threats to the stability of the United States financial system. Under Title I, the Council may determine that a nonbank financial company, including an insurer, shall be supervised by the Federal Reserve and shall be subject to prudential standards if the Council concludes that company's material financial distress or activities could pose a threat to the financial stability of the United States. This supervision, together with heightened prudential standards, will better allow regulators to address and mitigate risks to the financial stability of the United States posed by nonbank financial companies.

83 Treasury, *Financial Regulatory Reform, A New Foundation: Rebuilding Financial Supervision and Regulation*, June 2009, at 39.

The Council has three members who specifically have background in or who are involved with oversight of the insurance sector. These members are: (1) a voting member with insurance expertise, who is appointed by the President, with the advice and consent of the Senate; (2) the FIO Director, who is a non-voting member; and (3) a state insurance commissioner, also a non-voting member. This representation provides the Council with significant regulatory experience and knowledge of the insurance industry.

Insurance sector participants and observers argue that traditional insurance business activities do not present the kind of risk that could, in the event of failure, impair the functioning of the U.S. financial markets. This argument seeks to distinguish insurers from traditional financial intermediaries on the ground that insurers by and large do not rely on short-term funding and are not susceptible to runs or liquidity stresses because insurers do not hold liabilities, such as deposits. Ordinarily, a withdrawal from an insurer presupposes the occurrence of an event covered in a policy (*e.g.*, an accident or death). These events are typically uncorrelated (except in the event of mass catastrophes or disasters).

Financial stability concerns arise more often when traditional insurers engage in non-traditional activities, such as derivatives trading, securities lending, or other shadow banking activities, or when they offer products that have features that make them susceptible to runs. Through the Council's authority to determine that nonbank financial companies shall be subject to supervision by the Federal Reserve and enhanced supervision and prudential standards, the orderly liquidation authority with respect to failing firms that could threaten financial stability, and the comprehensive regulation of the derivatives markets, regulatory agencies now have much better tools to address threats to financial stability posed by any particular insurer. Reforms of solvency regulation discussed in this Report, moreover, would further strengthen the supervisors' ability to address risks posed by insurers to financial stability.

Capital Adequacy. As discussed more fully in this Report, capital adequacy standards for insurers are a subject currently being evaluated by the domestic and international insurance regulatory community. State regulators, through the NAIC's SMI initiative and in the EU-U.S. Insurance Project (*see* Box 4), are reviewing state-based RBC standards. Separately, but as a related matter, the IAIS ComFrame initiative will develop a quantitative capital standard for internationally active insurance groups. This Report's recommendations encourage not only further work on this front, but also improved uniformity and oversight across jurisdictions with respect to discretionary practices, more robust regulation of captives and special purpose vehicles, and better oversight of accreditation processes. These additional measures will be important steps toward modernizing capital adequacy standards in insurance regulation.

Meaningful and Consistent Consumer Protection. This Report identifies a number of areas for improving consumer protection. Areas such as producer licensing, product approval, and market conduct examinations are among the areas that have long been considered appropriate for improvement and modernization, particularly through establishment of uniform nationwide standards. This Report touches on these issues, and on others such as risk classification, rate regulation, natural catastrophes, and suitability for customers of annuities products.

National Uniformity. A uniform system of insurance regulation can reduce unnecessary cost and burden. A 2009 study by McKinsey & Co. estimated that regulatory costs added as a result of the current system total $13 billion annually, $7.2 billion of which are borne by P/C insurers.[84] Although many note that the states have taken significant steps towards improvement, the state regulatory system continues to suffer from a lack of uniformity. This Report has recognized uniformity as a central concern regarding the current system of insurance regulation in the United States and, throughout, the analysis and recommendations point to concrete measures to improve uniformity with respect to both solvency and market conduct regulation.

84 McKinsey & Company, April 2009, *supra.*

Consolidated Supervision. The Dodd-Frank Act introduces consolidated supervision of insurers in two different ways. First, to the extent an insurer or group is designated by the Council under Title I, its financial activities will be regulated as a consolidated entity. Second, in Title III, the Dodd-Frank Act eliminated OTS and turned oversight of federally chartered thrifts to the OCC, and made the Federal Reserve Board the supervisor of thrift holding companies at the consolidated level, including those with insurance subsidiaries or affiliates.

Nevertheless, a substantial number of insurers are part of larger corporate groups that are not covered by either Title I or Title III of the Dodd-Frank Act. Accordingly, determining how best to introduce consolidated supervision has been an agenda item both for state regulators and international supervisors. Domestic efforts have met with mixed results, in part reflecting the inherent limits of state jurisdiction. This Report supports the state regulators' efforts to improve consolidated supervision practices. The Report also provides recommendations for the short term, including enhancement of supervisory colleges. Particularly in light of the global nature of the activities of large insurance firms, this is an important area for continuing work.

International Coordination. In Title V, the Dodd-Frank Act vests FIO with authority to coordinate and develop federal policy on prudential aspects of international insurance matters and to represent the United States at the IAIS. FIO today actively represents the United States in international fora, involvement that will continue to expand. At the IAIS, FIO serves on the Executive and Financial Stability Committees, and serves as Chair of the Technical Committee. FIO also serves on several of the IAIS subcommittees. FIO also consults and coordinates with state regulators and other federal agencies in connection with these activities. For example, FIO's collaboration with state regulators has brought the EU-U.S. Insurance Project to a defined path forward. Insurers operating on both sides of the Atlantic have increasing certainty about the impact of regulatory developments, and supervisors in both jurisdictions have heightened awareness and understanding of the other's regulatory regime.

Efforts at international coordination must also continue apace because many aspects of the insurance sector are increasingly global and standard-setting activities will deeply affect oversight of the industry in both developed and emerging markets around the world. Moreover, inattention to global matters and discord among jurisdictions could lead to competitive disadvantages for U.S. firms. Accordingly, this Report contains recommendations specifically tailored to cross-border matters, such as reinsurance, which have important competitive and solvency implications.

VI. CONCLUSION

It is not enough to say that the U.S. system of insurance regulation should be improved and modernized – this is true in every regulatory framework. Financial services evolve with great pace, and regulators of every sector are challenged to remain current, to foster competitive markets, and to protect consumers. Insurance does not differ from banking, securities and commodities in this respect – the insurance sector and its national and international markets are in constant flux.

This Report has identified some targeted and broad areas for which reform of the state-based system of insurance regulation is appropriate. Any reform proposal must also account for the threshold issue of how that reform will be achieved. Notwithstanding a decades-long debate about whether insurance should be regulated at the state or federal level, for the benefit of U.S.-based insurers and consumers, the debate is best reframed as one in which the question is where federal involvement is warranted, not whether federal regulation should completely displace state-based regulation.

Insurance markets are increasingly global, and any structural reform proposal should be premised on objective analyses of current regulation, identification of subject matter areas genuinely in need of reform, and the inherent legal and practical limits of the states. While this Report does not propose a recommendation for every conceivable shortcoming of the insurance industry and its regulatory framework, it sheds light on areas in need of prompt modernization and improvement.

With respect to prudential oversight, state-based regulation has largely evolved with the recognition that the ability of an insurer to pay a claim is the bedrock on which the U.S. insurance market is based. While not beyond reproach, and in need of specific reforms identified in this Report, state regulators have developed a system of entity-specific financial oversight that satisfies this most fundamental regulatory objective. States need to improve prudential oversight of insurers, but are working in that direction. FIO will monitor state regulatory developments, including those called for in this Report, and will present options for federal involvement as such options become necessary.

Any system with 56 independent jurisdictions is inherently limited in its ability to regulate uniformly and efficiently. This remains true for the state-based system of insurance regulation in the United States. The impact of this lack of uniformity is felt acutely in both prudential matters and in certain areas of marketplace oversight. To address the inefficiencies and lack of uniformity in the state regulatory system, federal involvement will be necessary. The *status quo*, or a state-only solution, will not resolve the problems of inefficiency, redundancy, or lack of uniformity, or adequately address issues of national interest. This Report describes some of those areas where federal standards and intervention may be most beneficial.

Working with all aspects of the insurance sector, including state regulators and policymakers, consumers and industry, FIO will recommend additional improvements to the U.S. system of insurance regulation that best integrate the interests of U.S. insurers and consumers. Whether, and to what extent, those improvements will require federal involvement will often depend upon the subject matter, circumstances, and ability and willingness of the states to resolve the underlying issue.

PCI Property Casualty Insurers Association of America
Shaping the Future of American Insurance

ANALYSIS OF PROPERTY/CASUALTY INSURANCE RATE REGULATORY LAWS

Executive Summary

During the past 35 years, much in-depth research has been conducted to examine the different rate regulatory approaches; all studies conclude that the public benefits more under a system that allows greater rate competition than one that requires state approval. Less restrictive, or more market-oriented, rating laws rely on competitive forces to ensure that insurance rates are consistent with underlying costs. Insurers can react quickly to changing loss trends and implement rate increases or decreases in a timely fashion, hence keeping the market stable and strong. These types of laws operate to curtail excess profits, improve insurance availability, remove rate regulation from political volatility, and increase regulatory efficiency. Companies are also able to accept a wider range of insurance applicants.

On the other hand, prior approval laws assume that the state must intervene to ensure a proper balance between adequate and excessive rates; this may be difficult, if not impossible, to maintain as political pressures to provide low cost insurance may lead to rate levels that are insufficient to cover losses and expenses. Not only is there greater price inequity among policyholders in this type of environment, but added regulatory costs are created and passed on to consumers. Another concern is the additional underwriting risk that companies face due to the time lag from the review process; such delays make companies hesitant to lower rates for fear they will not be able to increase them when later needed.

Currently, 38 states and the District of Columbia have less restrictive rating laws in place, which take on different forms, i.e., flex-rating, file-and-use, use-and-file, no-file or no rating law. While most of these states have operated this way for many years, 11 states (Alaska, Connecticut, Georgia, Massachusetts, Nebraska, New Mexico, New York, North Dakota, Oklahoma, Rhode Island, and Texas) modernized their personal auto and/or homeowners insurance rate regulatory systems within the last decade.[1] Other states are considering similar changes, particularly toward flex-rating and file-and-use laws. Arguably the most prominent among these states is Massachusetts, which at one time had the most restrictive and least competitive auto insurance market in the nation.[2]

Indeed, the nation's insurance rate regulatory framework is trending toward greater rate modernization and away from more rigid and restrictive supervision. Even New Jersey, which is still a prior approval state, passed significant auto insurance reform in 2003.[3] The National Conference of Insurance Legislators and American Legislative Exchange Council, both comprising insurance lawmakers throughout the country, have also adopted property casualty model laws designed to eliminate prior approval systems; they advocate open competition instead.

[1] Louisiana also converted to a personal auto flex-rating system on January 1, 2004,[1] but reverted to a "modified prior approval" for political reasons when the Louisiana Insurance Rating Commission was abolished in January 2008. Under the modified system, rates are on file for 45 days before becoming effective.

[2] Effective April 1, 2008, Massachusetts personal auto rates are no longer set by the state and instead are determined by companies under a "managed competition" file-and-use system.

[3] New Jersey auto reforms (June 2003) include rate filings to be approved more quickly.

Experience in certain states (e.g., Massachusetts, New Jersey and Florida) shows that rigid market and price controls have had detrimental effects on the public. In contrast, two benefits resulting from some states' move to greater rate competition are: (1) an increased number of insurers, offering consumers more choice in companies and products; and (2) the ability for insurers to better price their products, creating cost savings in the form of lower rate increases or even rate decreases.

New York is one state that has had a history of rotations in its personal auto rate regulatory law (the current law is flex-rating, effective on January 1, 2009). As such, it provides a good model to evaluate the impact of converting from one rating law to another. When the New York Department of Insurance twice examined an open competition vs. prior approval environment more than three decades ago,[4] it concluded the following:

"There are good reasons to believe that the return (to prior approval) would tend to make existing problems worse, bring back old problems, and limit the resources available to cope with other compelling needs. With regard to the cost of insurance, there is no evidence to suggest that prior approval would reduce the cost of insurance to the consumer. Indeed, if anything, it would tend to have the opposite effect. The return of prior approval would be particularly troublesome in the area of product availability."

"In general, insurers under prior approval would be likely to become less willing to write insurance than they are now because they would no longer be confident of their future ability to implement price changes, up or down, in accordance with changing experience. In addition, a reduction in the variety of prices available in the market would reduce the alternatives that are open to many consumers."

"A review of the particular alternatives (to the competitive rating law), especially a return to prior approval (in New York), indicates that these problems would be made worse, not better, by the alternative approaches."

When New York converted from prior approval to a flex-rating law beginning in 1995, drivers in this state saw benefits. Specifically, auto insurance rates stabilized or reduced immediately thereafter and the number of insurers increased by 28 percent during its six-year flex period, providing greater coverage options from which to select. But when the state reverted to prior approval in 2001, policyholders saw larger increases in their premiums as well as a decline in their choice of auto insurers. Since New York's latest rate regulatory change took place less than two years ago, there are insufficient data to determine the latest impact.

Finally, it should be noted that competition-based systems do not cost the public more money. Rather, the group of states with these types of laws has lower insurance prices than the group of prior approval states. Insurance carriers also do not arbitrarily file for large unwarranted rate revisions when they have greater rate flexibility. Rate increases after states modernized their laws were found to be quite low; many were, in fact, decreases. Furthermore, insurers operating in an environment with greater rate competition do not make more profit. Although profit levels are not impacted by the type of rate regulatory law, they do tend to be more stable under a less stringent rating system.

[4] State of New York Insurance Department, *Competition in Property and Liability Insurance in New York State*, 1973, and *The Open Rating Law and Property-Liability Insurance: An Evaluation of Insurance Price Regulation*, 1977

Introduction

A primary objective of insurance regulation is to ensure that carriers are financially sound and the market is sufficient so consumers can receive the most efficient flow of services at the lowest possible prices. Today, all states have insurance departments created to oversee rates charged by insurance companies, among other functions.

Every state subjects insurance ratemaking to a specified type of statutory regulatory control for at least one line of business. Although the type of control varies by state and by line of business, the purpose of all rating laws is to ensure that rates are not excessive, inadequate or unfairly discriminatory. These three principles of rate regulation are explicitly stated in the All-Industry model statutes adopted by the National Association of Insurance Commissioners (NAIC) in 1945.

In general, rate regulatory systems range from state-made rates to open competition; state laws are sometimes said to fall under one of two broad categories: those that are "prior approval" or those that are "more market-oriented" or "competition-based." Further variations exist in each of these categories (for brief descriptions of these rating laws, see Appendix I). It should not be assumed that competition among insurers does not exist in states having prior approval laws. All rating laws, regardless of the level of price controls, strive for the same goal, that is, to have the lowest possible insurance prices for consumers. However, these laws differ in two important ways: (1) the focus of the regulator's attention; and (2) the timing of rate filings.

Political pressures that often co-exist with prior approval regulation may lead to artificially lower rates that are not sufficient to cover related losses and expenses. Consequently, prices in states with prior approval laws usually result in higher loss ratios and higher rate changes. Furthermore, increased insurance availability is discouraged and additional regulatory costs are imposed under these more rigid controls; such costs ultimately are passed on to consumers.

On the other hand, more market-oriented rating laws rely on competitive forces to keep insurance rates consistent with underlying costs; in this way, prices are fair for everyone as rates more accurately reflect insured risks. This approach is a more efficient way of setting insurance rates because it is self-adjusting. If insurers set rates too high or too low, the market adjusts to drive rates to the competitive level. Greater rate competition has the ability to stabilize the market by smoothing any fluctuations in rate adjustments. Moreover, innovation will be stimulated, thus making a wider variety of product, price, and service combinations available to consumers.

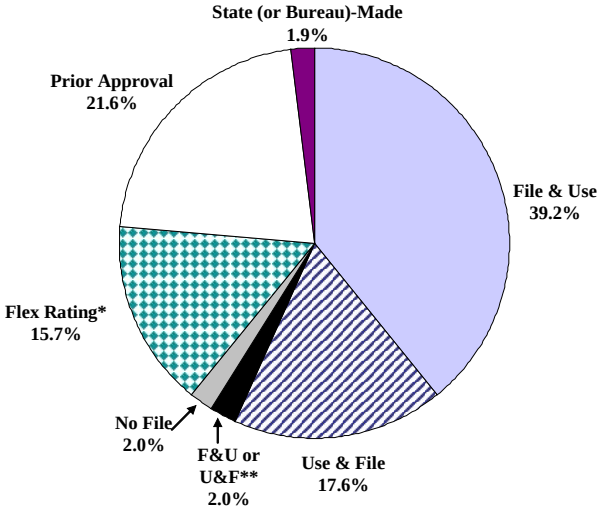
Consumers in states with more rate competition generally pay less for their insurance coverage than their counterparts in prior approval states. This is due to the lack of political influences and delays in having to wait for state approval. As a result, the premiums that are implemented will more likely be able to cover necessary losses and expenses, which in turn produce more favorable underwriting gains. Insurers therefore do not need to raise their rates as often under this type of system, and they are more willing to provide rate decreases as well, when warranted, to the benefit of their customers.

Less stringent rating laws by no means imply that regulators have given up oversight of insurance companies. There are other ways, such as licensing requirements, solvency regulation, market conduct

surveillance and monitoring consumer complaints by which state insurance departments can devote more of their resources to ensure fair, nondiscriminatory markets.[5]

The vast majority of states' rate regulatory laws now embody some form of competition-based rating. For personal auto business, 30 states representing 58.8 percent of all U.S. jurisdictions have a use-and-file, file-and-use, or no-file system (Illinois has no rating law, as it does not allow for disapproval of rates; it is classified with the use-and-file states since companies must make informational filings). Eight other states or 15.7 percent have a flex-rating law,[6] while the remaining 25.5 percent still operate under a more restrictive prior approval law (in this group of 13 states, one[7] of them still uses rates developed by the state rate bureau) (Figure 1).

Figure 1
Distribution of States
by Personal Auto Rate Regulatory Law



***Pennsylvania is included in the flex-rating group, even though flex applies to rate decreases only.**
**** Insurers have the option of selecting either file-and-use or use-and-file in Florida.**

The movement away from prior approval rating laws toward more modernized rate-filing regimes has also been driven in part by state legislators. Both the National Conference of Insurance Legislators (NCOIL) and the American Legislative Exchange Council (ALEC) have adopted model laws designed to eliminate prior approval laws in jurisdictions where they exist. (For additional information on the NCOIL and ALEC model laws, see Appendix II.)

[5] Among its many duties, the New York Department of Insurance (DOI) oversees insurer and producer activities to protect consumer interests, ensures that policies comply with state law, and resolves any disputes between consumers and insurers. Using financial statements regularly submitted by insurers, the DOI evaluates their accounting procedures and conducts periodic examinations to ensure their financial soundness.

[6] Although Pennsylvania's flex-rating law applies only to auto rate decreases, it has been placed into this category in this analysis.

[7] North Carolina utilizes a mandatory bureau rating system, whereby insurers are required to become members of a rating organization in order to write given lines of insurance.

National Trend Toward Greater Rate Competition

Thirty-nine jurisdictions now allow for some or all personal auto[8] rates to be adjusted without prior approval by the insurance commissioner. These jurisdictions are:

Alaska	Illinois	Missouri	Pennsylvania
Arkansas	Indiana	Montana	Rhode Island
Arizona	Iowa	Nebraska	South Carolina
Colorado	Kansas	New Hampshire	South Dakota
Connecticut	Kentucky	New Mexico	Texas
District of Columbia	Maine	New York	Utah
Florida	Maryland	North Dakota	Vermont
Georgia	Massachusetts	Ohio	Virginia
Idaho	Michigan	Oklahoma	Wisconsin
	Minnesota	Oregon	Wyoming

Within the last few years, Alaska, Connecticut, Georgia, Massachusetts, Nebraska, New Mexico, New York, North Dakota, Oklahoma, Rhode Island and Texas have been the latest to make changes toward greater rate competition in personal auto. Louisiana had also converted to flex-rating in 2004, but for political reasons went to a "modified" prior approval system[9] when the Insurance Rating Commission dissolved in 2008.

Positive changes for consumers have been observed in some states that have amended their rating laws. Two of the more common benefits seen are:

- more insurers entering the state, allowing consumers more choices in companies and products; and
- lower rate increases and rate decreases that benefit insured drivers.

History of New York Experience During Flex-Rating and Prior Approval

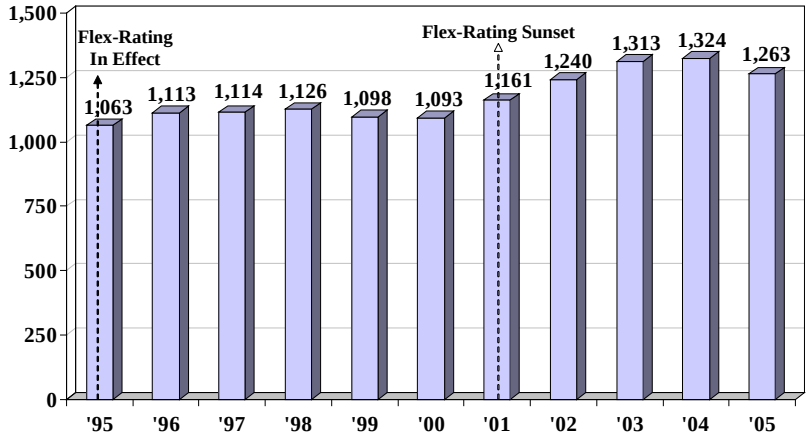
New York first transitioned from prior approval to flex-rating in 1995 and then reverted to prior approval in 2001. With a 2007 annual average premium of $1,179, this state is now ranked 4th highest in the nation. After New York's flex-rating law went into effect in mid-1995, its average premium remained the same for two years. During its flex-rating period (1996-2000), insured drivers paid an annual average of $1,109 for liability and physical damage premiums.[10] The average premium had been stable or declining; dropping from a level of $1,113 in 1996 to $1,093 in 2000, the premium fell 1.8 percent overall. After flex-rating sunset, the average premium rose 13 percent in just two years, from $1,161 in 2001 to $1,313 in 2003 (Figure 2).

[8] The type of rating law varies according to the product line. Personal auto is fairly representative of the way rates are regulated in other lines, even though there are variations in some states with respect to auto and homeowners (or commercial auto, medical malpractice, etc.).

[9] Under Louisiana's modified prior approval system, rates are on file for 45 days before becoming effective.

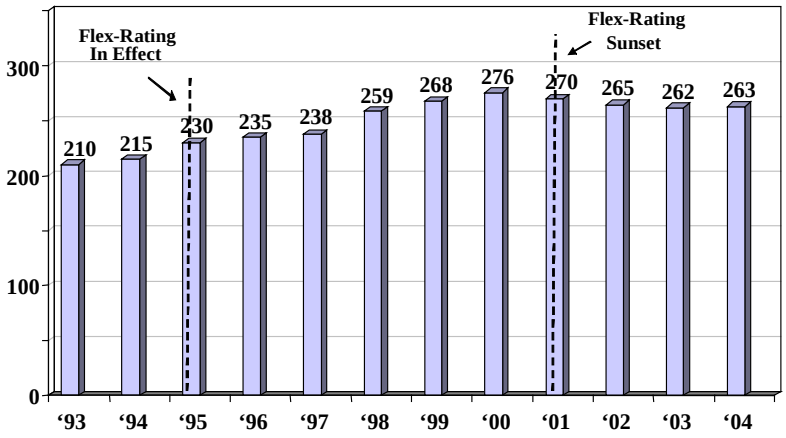
[10] The average of $1,109 is the arithmetic mean of the premiums during the five years 1996-2000. Source: NAIC *Auto Insurance Database Report, 2006/2007*, 2009 edition

Figure 2
Trend in New York Average Auto Premium
Before and After Flex Sunset



In addition, when the New York regulatory system changed to a less restrictive rating law in 1995, the number of insurance carriers grew 7 percent (from 215 companies in 1995 to 230 companies in 1995). The level continued to grow, accelerating to 276 companies five years later. However, after the law sunset in 2001, there was an immediate reduction, whereby the number of writers dropped steadily (Figure 3).

Figure 3
New York
Growth in Personal Auto Insurers
After Flex-Rating Went into Effect



It is believed that insurance companies are encouraged to write business when a more competitive rate regulatory system is adopted. Those that do not write in a state with this type of environment are now more willing to enter the market under these conditions. But when a regulatory system reverts to one with less freedom, such as prior approval, companies no longer want to operate there and, hence, they withdraw from the market. As one noted economist asserts: "persistent rate suppression should

produce reductions in product quality or exit by insurers."[11] This is clearly the case observed in New York's earlier transitions from prior approval to flex-rating and back to prior approval.

Effective January 1, 2009, New York once again converted to a flex-rating system. It is too soon to tell what the positive effects of flex-rating are.

Less Restrictive Rating Systems Do Not Cost Consumers More Money

It is sometimes presumed that companies will seize the opportunity to implement large rate increases under a system with greater price freedom, knowing that these rates will not need regulatory approval. This is clearly not the case, as insured drivers in states that went to greater rate competition saw immediate cost benefits.

Six leading auto insurance companies implemented rate reductions (one as large as 10 percent) or no rate change at all following South Carolina's regulatory modernization. In a March 2004 letter, Dean Kruger, the former chief actuary at the insurance department, wrote, "the assumption used under the prior approval law was that requiring insurers to lower requested rate increases saves money for consumers. If such an assumption were accurate, then premiums should have increased during the implementation. In fact, they dropped and this indicates that the competitive marketplace is the more effective in controlling rate levels."

These sentiments were echoed by former Louisiana insurance commissioner, J. Robert Wooley, who claimed that policyholders benefited when his state converted to greater rate competition: "Insurers aren't as reluctant to reduce rates when business is good because they know they can also raise rates without incurring a political battle." After the change, State Farm Mutual Auto Ins. Co. policyholders received an average $20 rate reduction, or an overall cost savings of $19.3 million.[12]

Even Massachusetts – once considered the most heavily regulated state in the country – has eased its rigid rules pertaining to auto insurance rates. In response to the regulatory change, effective April 1, 2008, companies filed rate reductions for their policyholders, some up to 25 percent. Innovative product features in the form of additional discounts and new endorsements (e.g., accident forgiveness and sliding-scale deductibles) were also implemented.

In states where insurers are allowed to operate more competitively, their policyholders generally have more affordable insurance.[13] Prior approval systems inevitably cause low-risk consumers to pay inflated (and unfair) rates because they are forced to subsidize high-risk consumers who often are not charged a rate commensurate with their level of risk. This in turn leads to both adverse selection (i.e., higher-risk drivers buying more insurance or choosing lower deductibles) and moral hazard (i.e., drivers having less incentive to mitigate their risk or avoid high-risk behavior), which result in higher claim costs.

As discussed earlier, insurers in a more market-oriented system can respond to competitive market conditions and determine appropriate rate level changes more quickly. Rather than costing consumers

[11] Scott E. Harrington, "Rate Suppression," *The Journal of Risk and Insurance*, June 1992
[12] *The Baton Rouge Advocate*, January 21, 2005
[13] While insurance prices are influenced by rating laws, the primary driver of rates should be insured costs.

more money, these less restrictive laws would help them save money through lower rate increases or rate decreases.

Using the latest NAIC data (Table 1), personal auto insurance rate levels are 8.3 percent lower for the group of states with fewer controls than the group of states with more controls ($878.08 – more market-oriented vs. $957.96 – prior approval).[14]

Table 1
Personal Auto
Average Annual Insurance Premiums – 2007

Type of Rating Law	Liability & Physical Damage Premium	Premium Differential
Prior Approval	$957.96	--
More Market-Oriented	$878.08	8.3 percent less

State classifications are made reflecting their status in 2007.
Source: NAIC Auto Insurance Database Report, 2006/2007, 2009 edition

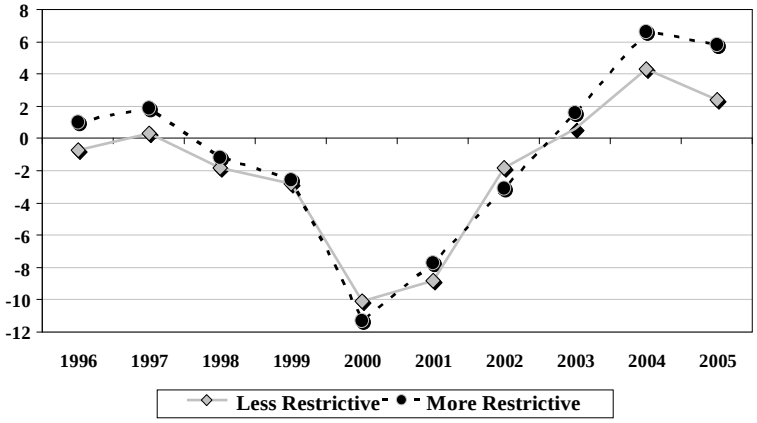
Impact of Rate Regulatory Laws on Insurer Profitability

Questions have also been raised regarding the impact of rate regulatory laws on insurer profitability. It should be noted that the type of rating law does not affect the level of profits made by insurance companies. According to the NAIC, there is no statistical difference in profitability between those states with greater price restrictions and those with fewer restrictions.[15] While other factors – such as unforeseen losses, operating efficiency and price competition – have a more significant impact on an insurer's financial performance than does the type of rate regulation, more market-oriented systems lead to efficient allocation of resources, thus eliminating excessive rates and profits.[16]

Although the magnitude of profitability is not affected by the type of rate regulatory law, research conducted by different individuals and groups finds that regulatory systems with more price controls increase the variability of underwriting profits.[17] In other words, insurers face greater underwriting uncertainty in states that require prior approval of rates, while profitability tends to be more consistent in states that do not require approval (Figure 4).

[14] NAIC, *2004/2005 Auto Insurance Database Report*, 2007
[15] NAIC, *Monitoring Competition: A Means of Regulating the Property and Liability Insurance Business*, May 1974
[16] Emilio Palermo, "The False Face of Prior Approval," *Best's Review: Property/Casualty*, July 1991
[17] Sharon Tennyson, "The Effect of Rate Regulation on Underwriting Cycles," *CPCU Journal*, March 1991; Orin S. Kramer, *Rate Suppression and Its Consequences: The Private Passenger Auto and Workers' Compensation Experience*, 1991; and Virginia Insurance Bureau, *Competition in the Property and Casualty Industry*, January 1978

Figure 4
Personal Auto Underwriting Profits
(as a percent of earned premiums)



While the 10-year trends in profitability for both more restrictive systems and less restrictive systems are seen to almost parallel one another, the difference between the maximum and minimum underwriting profit levels in the former group of states is 3.5 points larger than in the latter group of states [17.9 points – more restrictive rating vs. 14.4 points – less restrictive rating; these are the differences between the 2000 (minimum) and 2004 (maximum) returns for both groups].[18]

One reason for greater stability in profit levels among the group of more market-oriented rating states is that insurers have the opportunity to change rates more quickly in accordance with varying loss experience. Since companies are able to price their policies more accurately in this type of environment, they feel more comfortable in reducing rates if warranted because they realize that they can increase them later if needed. This was observed in states, such as Louisiana, South Carolina and Texas, all which moved toward greater rate modernization.

Academic and Governmental Literature on Rate Regulatory Laws

The subject of insurance rate regulation has been one of great interest over the last 35 years. Regulators and other government officials, academicians, and economists who have examined the different regulatory approaches all conclude that a more market-oriented rating law provides additional benefits to consumers. Some findings are cited below (for a comprehensive bibliography of different studies and presentations on this issue, see Appendix III).

- "A review of the particular alternatives, especially a return to prior approval, indicates that these problems would be made worse, not better, by the alternative approaches."[19]

- "If consumers in competitive rate states fare as well or better than they did in 'non-competitive' rate states, there appears to be no empirical economic justification for the regulation of automobile

[18] NAIC, *Profitability By Line By State*, 2005 edition

[19] State of New York Insurance Department, *The Open Rating Law and Property-Liability Insurance: An Evaluation of Insurance Price Regulation*, 1977

insurance rates by regulatory authorities, especially when considering the costs of regulating rates."[20]

- "…prior approval regulation of rates entails direct and indirect costs and serves no useful purpose in modern, competitively structured insurance markets. Rather, the insurance-buying public would benefit from deregulation of rates."[21]

- Supreme Court Justice Hugo L. Black opined that the philosophy of a less regulated market…. "rests on the premise that the unrestrained interactions of competitive forces will yield the best allocation of our economic resources, and lowest prices, the highest quality and the greatest material progress, while at the same time providing an environment conducive to the preservation of our democratic, political and social institutions."[22]

*The **Property Casualty Insurers Association of America (PCI)** is a national trade association consisting of more than 1,000 insurers of all sizes and types that write 40 percent of the auto, homeowners, business and workers compensation insurance. PCI members represent 39.5 percent of the total personal auto and homeowners markets throughout the country.*

[20] Robert C. Witt and Harry Miller, "Is Auto Insurance Rate Regulation Necessary?" *Best's Review, Vol. 81, No. 8*, Dec. 1980

[21] Scott E. Harrington, AEI-Brookings Joint Center for Regulatory Studies; *Insurance Deregulation and the Public Interest*, 2000

[22] *Northern Pacific R. Co. vs. United States 356 U.S. 1 (1958)*

APPENDIX I

SUMMARY OF INSURANCE RATE REGULATORY LAWS

Historically, property/casualty insurance rate regulatory laws were enacted to protect price-fixing cartels from prosecution under the federal anti-trust laws. Under the McCarran-Ferguson Act of 1944, the insurance industry's rate-fixing activities are exempt from anti-trust laws to the extent that they are regulated by the states.

This appendix briefly discusses seven variations of insurance rate regulatory control; they are: (1) state- or bureau-made; (2) prior approval; (3) flex-rating; (4) file-and-use; (5) use-and-file; (6) no file; and (7) no rating law. These laws can vary by line of business. In addition, further differences in the filing of rates (and forms) can and do exist, depending on specific provisions and insurance department practices.

(1) State- or Bureau-Made

Under this regulatory system, rates are set by a state agency or rating bureau. Currently in Massachusetts, the insurance commissioner establishes personal auto insurance rates after he or she finds an "absence of competition." Effective in April 2008, however, rates will be determined by each company through "managed competition" and are still subject to insurance department disapproval.

North Carolina utilizes a mandatory bureau rating system, whereby insurers are required to become members of a rating organization in order to write given lines of insurance. Rates used by the rating organization must undergo the prior approval process. Insurers are usually allowed to deviate upward or downward from rates set by the rating bureau, subject to some constraints, including prior approval.

(2) Prior Approval

In prior approval states, rates, rules and rating plans must be filed with the regulatory authority, who must then approve or disapprove the filing before it can go into effect. The system essentially relies on the regulator's judgment and the existing political climate. Many prior approval laws have a "deemer" provision which allows companies to use rates if they are not approved or disapproved within a certain time period. In other words, rates are "deemed" approved.

(3) Flex-Rating

In an attempt to provide price stability for the public, "flexible rating" (flex-rating) combines the principles of prior approval and file-and-use or use-and-file rating (see below); under this system, various bands of rate level increases or decreases are established for designated lines. Flex-bands define the percent ranges in which revisions for these markets may take effect without prior approval. That is, rate revisions within a designated percentage flex band may be used without approval, while those outside the band must be authorized by the regulator. Percentages range from 5 percent to 25 percent, but more are within 5 to 10 percent.

Flex-rating provides insurers flexibility to determine appropriate rate level changes, allowing companies leeway to respond to competitive market conditions. The proper administration of this plan

would enable the regulator to assess at an early stage whether rates are reasonable, inadequate or excessive.

(4) File-and-Use
Under "file-and-use" laws, rates must be filed with the regulatory authority no later than the proposed effective date. Rating laws of this type generally do not state what happens once the effective date has elapsed. Rates can be put into use without advance approval of the regulator in most cases, but in some instances, a waiting period is imposed before the rates can be used. Moreover, rates are subject to review and possible disapproval after they have taken effect (this type of statute is also sometimes referred to as a "subsequent disapproval" law). If filings are made by a rating organization on behalf of insurers, rates must be adhered to by the insurer unless the insurer files for a deviation.

(5) **Use-and-File**
Under a "use-and-file" law, rates become effective on the filer's chosen effective date and may be used prior to filing with the regulator. Copies of the filing must be submitted to the regulatory agency within a specified time pursuant to the applicable law. They are typically filed for information purposes only. Rates are subject to review and possible disapproval after they have taken effect.

(6) No File
States with "no file" laws make no requirement that rates be filed or affirmatively approved by the commissioner. Rates are subject to review and possible disapproval after they have taken effect.

(7) No Rating Law
Illinois is the only state that does not have a rate regulatory law for most lines of business, applicable to voluntary risks.[23] It is said to operate in an "open competition" environment. Although rates are not directly controlled by the regulator, they are still subject to the provisions of the state antitrust laws.

[23] Rates for the residual market are regulated in Illinois, and filings must be submitted to the insurance department 10 days after first use.

APPENDIX II

EFFORTS BY STATE LEGISLATOR ORGANIZATIONS TO MODERNIZE INSURANCE RATE REGULATION

In 2001, the National Conference of Insurance Legislators (NCOIL) adopted the "Property/Casualty Insurance Modernization Act," which establishes a use-and-file rate regulatory system for personal lines of insurance, and a no-file system for commercial lines. The model exempts policies sold to large, sophisticated commercial insurance buyers from all forms of rate regulation. In 2004, NCOIL adopted a second model bill aimed squarely at reforming prior approval laws – the "Property/Casualty Flex-Rating Regulatory Improvement Act." As its title implies, this measure establishes a flex-rating system, under which an insurer's rate filing takes effect immediately upon the filing date, provided that the filing entails an overall statewide rate increase or decrease of no more than 12 percent in the aggregate for all coverages that are subject to the filing.

Both NCOIL models contain language noting that they are "intended for consideration in jurisdictions with a more restrictive rate-filing and review system than outlined in the bill" – an obvious reference to prior approval laws. The 2004 NCOIL model act further advises that "states may also wish to consider implementing a competitive rating law, such as the National Conference of Insurance Legislators Property/Casualty Insurance Modernization Act."

The American Legislative Exchange Council (ALEC) adopted its "Property/Casualty Insurance Modernization Act" in 2004. Like the NCOIL model act of the same name, the ALEC model establishes a use-and-file rate regulatory system for personal lines of insurance, a no-file system for commercial lines, and allows policies sold to large, sophisticated commercial insurance providers to be exempt from all rate and regulatory requirements. The bill's summary pointedly notes that its purpose is to "create a more competitive and less onerous regulatory environment in the property/casualty insurance industry." The ALEC model leaves no doubt that it is aimed squarely at prior approval rating laws, noting, like the NCOIL model bills, that it is "intended for consideration in insurance regulatory jurisdictions with a more restrictive rate filing and review system than outlined in the bill."

NCOIL's membership consists of legislators representing 36 states; most serve as chairmen or members of the committees responsible for insurance regulation in their respective state capitols. ALEC is the nation's largest nonpartisan individual membership association of state legislators, with more than 2,400 members nationwide. The NCOIL and ALEC model laws reflect a broad national consensus among lawmakers that overly restrictive rating laws distort insurance markets and harm consumers.

The fact that these two diverse, nonpartisan organizations of state legislators from across the country have endorsed measures that promote varying degrees of rating freedom constitutes a forceful repudiation of prior approval insurance rate-filing systems. If Colorado were to replace its current file-and-use system with a retrograde prior approval regime, it would be defying the accumulated wisdom of most of the country's insurance lawmakers.

APPENDIX III

SUMMARY OF STUDIES EXAMINING THE PERFORMANCE OF INSURANCE RATE REGULATORY LAWS

The following is a list of studies conducted over the last 35 years examining the performance of different property/casualty insurance rate regulatory laws. These analyses were performed by academicians, economists and government agencies. Compared to prior approval laws, all conclude that less restrictive rating laws provide greater benefits in the form of price stability, more product availability and consumer choices, lower regulatory costs, improved efficiency, and a more stable market to the insurance-buying public.

1. **The Impact of Rate Regulation on Claims: Evidence from Massachusetts Automobile Insurance,** Richard A. Derrig and Sharon Tennyson *(Preliminary draft presented at the American Risk and Insurance Association Annual Meeting, Quebec City, August 5-8, 2007)* http://www.aria.org/meetings/ARIA_2007_Program.pdf

   This study analyzed the relationship between price subsidies and insurance cost growth comparing annual state level data on loss costs per car for Massachusetts compared to those in other states during the time period 1972-1998. The analysis showed that the rate regulation/control used by Massachusetts resulted in liability loss cost levels 43 percent over that in the remainder of the U.S. market with the same demographics and liability coverages during 1978-1995, when premiums were fixed by the state. This may be attributed to efficiency losses from the class and price cross-subsidy providing restrictions that resulted in excessive cost growth through the over-purchase and over-use of the insurance system by high-risk insureds.

2. **Efficiency Consequences of Rate Regulation in Insurance Markets – Policy Brief**, Sharon Tennyson, *Networks Financial Institute at Indiana State University* (March 2007) 2007 PB-03

   This study critically examines the arguments for rate regulation and discusses the consequences of this regulation for the insurance marketplace. It discusses the consequences of rate regulation for insurance market outcomes making use of both economic theory and empirical evidence from academic studies of regulated insurance markets. The paper concludes that insurance rate regulation entails high costs for society and for insurance consumers, and that alternative policies for meeting regulatory objectives should be considered. Rate regulation distorts market functioning in many ways. Regulatory attempts to reduce prices by holding down insurer profits have been shown to adversely affect insurance availability and to distort market structure. Regulatory pricing that is substantially below risk-based premiums for some consumers has been shown to lead to larger residual markets and to higher average insurance costs for all.

3. **Effects of Prior Approval Rate Regulation in Auto Insurance, in., Deregulating Property-Liability Insurance**, J. David Cummins, ed. *(Washington, D.C.: AEI-Brookings Joint Center for Regulatory Studies)* (2002) 285-314

   The main results, which confirm and extend those of several previous studies, suggest that on average, prior approval regulation had little or no effect on the relationship between rate levels and claim costs over time; however, it did reduce coverage availability and increased volatility for both insurers and consumers. This finding is consistent with an inability of rate regulation to reduce average rates materially and persistently in competitively structured markets without significantly

reducing product quality or ultimately causing widespread exit by insurers. Prior approval regulation is reliably associated with lower availability of coverage, nevertheless.

4. **Auto Insurance Reform: Salvation in South Carolina**, M.F. Grace, R.W. Klein, and R.D. Phillips, 2002, *in J. D. Cummins, ed. Deregulating Property-Liability Insurance. (Washington, D.C.: Brookings Institution Press)* (2002) 148-194

   From the mid-1970s through 1998, South Carolina intensively regulated auto insurance. Rate levels and rate structures were restricted, insurers' underwriting discretion was limited and large cross subsidies were channeled through its residual market. After several earlier attempts failed, the legislature was successful in enacting a comprehensive regulatory reform package that became effective in 1999. South Carolina's prior approval system was replaced by flex-rating and restrictions on risk-based pricing and underwriting were substantially eased. The number of insurers writing auto insurance has doubled with the implementation of the reforms. Many insurers have implemented more refined risk classification and pricing structures, as well as alternative policy options for consumers. It also appears that overall rate levels have continued to fall.

5. **Deregulating Property-Casualty Insurance Pricing: The Case of Workers' Compensation**, A. Barkume and J. Ruser, *Journal of Law and Economics* (2001) 44: 37-64

   Property and casualty lines of insurance have traditionally been subject to more regulatory price control than most goods in the U.S. economy. However, beginning in the 1970s, some states began to deregulate these lines of insurance, either dropping mandatory pricing in concert by means of rating bureaus or, additionally, dropping regulatory prior approval of premiums. This paper assesses the impact of rate deregulation in workers' compensation insurance. Besides examining the impact of deregulation on price, effects on injury rates were examined, as rate regulation may have reduced incentives for workplace safety by restricting price differences across risk classes. It was found that eliminating both rating bureau pricing and prior approval reduced long-run premiums by 13.7 percent and reduced injury rates at most by 8.2 percent. In contrast, eliminating rate bureau pricing only had small effects.

6. **Insurance Price Deregulation: The Illinois Experience**, Stephen P. D'Arcy, *Presented at the Insurance Rate Regulation Conference Brookings Institution* (January 2001 Revised: May 14, 2001)

   Illinois has functioned without a rating law since 1971, and experience in this state suggests that rate regulation for automobile insurance is unnecessary. Auto insurance is widely available from a large number of competitors. Rate changes are frequent, modest and appear to follow claim experience. Loss ratios and the size of the uninsured and residual markets, as well as insolvency assessments, are in line with those in states with less restrictive systems. Thirty-five years of experience suggests that the auto insurance market functions effectively with no rate regulation.

7. **Proactive Strategies, Meeting the Market: Re-Engineering State Regulation of Commercial Insurance**, Philip R. O'Connor and Eugene P. Esposito (January 1999)

   Traditional rate regulation and burdensome policy form regulation are imposing unnecessary transaction costs because they ignore the actual balance of information in the modern risk protection insurance market. This report recommends that states adopt a "new paradigm" for commercial insurance regulation offering consumer benefits that flow from vigorous price competition and flexibility in product offerings.

8. **Does Rate Regulation Alter Underwriting Risk?**, *Journal of Insurance Issues*, Michael M. Barth and William R. Feldhaus (Spring 1999) Vol. XXII, No. 1

   This research shows that underwriting results are more stable, and thus underwriting risk is lower, in those states that insurers perceive to have less restrictive regulatory environments.

9. **The Effect of Open Competition Law on Insurance Price in Property and Casualty Insurance**, *Journal of Business and Behavioral Science*, (Fall 1997) Vol. 3, No. 1

   The study addresses the insurance price regulation issue in auto and homeowners insurance, and makes an attempt to find whether insurance rates in Illinois are lower and less volatile than in other states where rates are regulated. The analysis of premiums and loss ratios indicates that Illinois policyholders do not pay higher premiums than residents in other comparable states. Auto and homeowners premiums are lower in Illinois than in other states. The loss ratio of all lines does not seem to indicate higher premiums in Illinois. The open competition law in Illinois can deserve partial credit for lower premiums in the state.

10. **Rate Suppression, Rate-of-Return Regulation, and Solvency**, Orin S. Kramer, *Journal of Insurance Regulation* (1992) 10 J. Ins. Reg. 523

    The article concentrates on efforts at rate suppression and rate-of-return regulation in private passenger auto and workers' compensation lines of insurance. The author measures the quantitative effects of rate suppression on insurer finances and concludes that rate suppression increases in solvency risks, produces price inequities among insureds, increases residual markets, increases premiums in the voluntary market, and restricts the availability of insurance coverage.

11. **Auto Insurance in Michigan: Regulation. No-fault, and Affordability**, Scott E. Harrington, *Journal of Insurance Regulation 10* (1991) pp. 144-183

    The report evaluates the private passenger auto insurance market in Michigan. The analysis suggests that additional restrictions on underwriting and rate classification should be avoided. Instead, consideration should be given to allowing more discretion in underwriting and classification to provide insurers and policyholders with better incentives for controlling claim costs. The analysis also suggests that the state's no-fault system could be improved by allowing policyholders significant choice in the selection of personal injury protection levels and by taking steps to ensure that tort liability for non-economic loss is restricted to serious injuries.

12. **Price and Availability Tradeoffs of Automobile Insurance Regulation**, Henry Grabowski, W. Kip Viscusi, and William N. Evans, *The Journal of Risk and Insurance* Vol. 56, No. 2 (June 1989) pp. 275-299

    This study provides an early analysis of auto insurance regulation and deregulation efforts. The analysis focuses on a thirty-state sample from 1974 through 1981 and on the experience of eleven deregulated states. The states that undertook deregulation over the past two decades experienced reduced unit prices and decreases in the size of the involuntary market.

13. **The Impact of Rate Regulation on Automobile Insurance Loss Ratios: Some New Empirical Evidence**, Scott Harrington, *Journal of Insurance Regulation* (1984) 3:182-202

The objective of the paper was to provide further evidence of the impact of prior approval regulation on auto insurance loss ratios. The overall result of the studies suggests that average loss ratios were significantly higher in prior approval states than in more market-oriented rating states.

14. **Benefits and Costs of Insurance Deregulation**, Irwin M. Stelzer and Geraldine Alpert, National Economic Research Associates, Inc., *presented at the National Conference on Insurance Deregulation, University of Wisconsin* (October 1981)

    This presentation discusses the primary benefits of deregulation as bringing rates more closely in line with costs, leading to a more efficient allocation of resources. There is reason to believe that, in the long run, competition will reduce costs, and hence rates, by forcing insurers to be more efficient than they must be when protected by regulation. The following consequences will result: (1) reduced cross-subsidization, resulting in consumers' purchasing decisions being based on the true costs of insuring them; (2) greater availability of coverage; (3) increased consumer choices; and (4) more rational risk classifications, since insurers will compete for the business of low-risk members of any class, hence driving down rates.

15. **Issues and Needed Improvements in State Regulation of the Insurance Business: Report to the Congress by the Comptroller General of the United States**, U.S. General Accounting Office (October 9, 1979)

    In general, price regulation does not force companies into feast or famine cycles, nor do rates in less restrictive environments fluctuate wildly without regulatory control. The auto insurance industry is competitively structured and price regulation is not warranted in the voluntary market. State intervention should not be in the form of direct regulation. Rather, insurance departments can pursue the less intrusive strategy of collecting and disseminating of information that would provide consumers with a better basis of knowledge in purchasing insurance.

16. **The Pricing and Marketing of Insurance. A Report to the Task Group on Antitrust Immunities**, U.S. Department of Justice (January 1977)

    The DOJ concluded that rigid state rate regulation in insurance, characteristic of a number of state systems, has fostered greater adherence to bureau rates, discouraged rate reductions, contributed to instability in insurance company operations, established various forms of cross-subsidization between good and bad risks, imposed unnecessary restrictions on the collective merchandising and the direct writing of insurance, and aggravated the availability problem in which marginal or high risks have difficulty obtaining coverage in the open market at the prevailing rates.

    Unrestricted price competition can provide an effective substitute for rate regulation as a means of achieving reasonable prices and maximum efficiency in the sale and distribution of insurance. The experience of the same insurers under certain open competition and prior approval systems suggests that competition fosters greater independent pricing, operating stability, and flexibility in the pricing structure. A highly competitive system suggests that it provides a more effective mechanism for accomplishing one of the basic insurance goals, that is, generally available coverage at a price reasonably related to cost.

17. **The Open Rating Law and Property-Liability Insurance: An Evaluation of Insurance Price Regulation**, State of New York Insurance Department (1977)

    The department believes that a total return to prior approval would be retrogressive, impairing its operational efficiency and stifling the marketplace. The public interest would best be served by

returning the auto line to open competitive rate regulation. In addition, the changing populations of the various residual markets do not appear to bear any direct relationship to the type of rating law applicable to that line of business. The contention that prior approval of rates is essential to control prices and that open competition would cause rates to skyrocket is not borne out by the findings of this study. The type of rating law neither contributes to nor mitigates the underlying costs of insurance losses. Competitive pricing in the marketplace does, however, appear to provide a greater incentive to improve efficiency and reduce expenses.

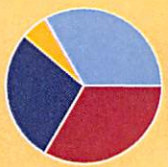
18. **Competition Under the California Rating Law and Its Effect on Private Passenger Automobile and Homeowners Insurance**, California Department of Insurance (1974)

    Competition in the California market for private passenger auto and homeowners insurance has been effective and has benefited consumers: (a) on average, rates were generally within reasonable ranges, as judged by usually accepted standards for loss costs and expenses; (b) the state's loss ratios and loss ratio trends were not out of line with nationwide loss ratios and loss ratio trends; (c) rate levels generally responded promptly to changes in market conditions; (d) there was a large number of financially sound insurers significantly active in the California market; (e) there was a high degree of insurer independence from bureau rates; (f) the state insurance market grew substantially; and (g) the voluntary market was doing a good job of absorbing the bulk of insured automobiles and dwellings.

19. **Competition in Property and Liability Insurance in New York State**, State of New York Insurance Department (1973)

    After examining the possibility of reverting from open competition to prior approval, it was found that prior approval would not do anything to help the problems which currently exist in the system. Instead, there are good reasons to believe the return would make existing problems worse, bring back old problems, and limit the resources available to cope with other compelling needs. Moreover, there is no evidence to suggest that prior approval would reduce the cost of insurance to the consumer; if anything, it would tend to have the opposite effect. A return to prior approval would be particularly troublesome in the area of product availability. In general, insurers under prior approval would likely become less willing to write insurance than they are now because they would no longer be confident of their future ability to implement price changes, up or down, in accordance with changing experience. In addition, a reduction in the variety of prices available in the market would reduce the alternatives that are open to many consumers.

Expert Views of Auto Insurance Rate Regulation



Insurance Research Council

Expert Views of Auto Insurance Rate Regulation

Sharon Tennyson, PhD

Insurance Research Council
August 2013

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Rhonda Aikens
Insurance Research Council Advisory Board, Chairperson

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Executive Summary

A survey of nearly 150 risk and insurance experts conducted by the Insurance Research Council (IRC) shows that a vast majority believe the prior-approval regulation of auto insurance rates is unnecessary and does not benefit consumers. On average, the surveyed experts agreed with only one out of five statements regarding the need for prior-approval rate regulation, and a majority of experts support the idea of reducing state intervention in auto insurance rating and pricing.

Although most experts agree that affordability and availability of auto insurance are appropriate objectives for regulators, they express strong disagreement with many of the tools commonly used to promote affordability—premium caps, premium subsidies, restricting territory-based rating, and barring insurers from basing rates on driver characteristics (such as gender and credit score). In fact, the experts are most likely to believe that all or most rating and pricing restrictions are inappropriate. Consistent with these views, expert opinion strongly favors the idea that auto insurance prices should closely reflect a driver's accident risk.

The survey was undertaken through a website that permitted respondents to anonymously express their views. Experts identified from the member lists of the American Risk and Insurance Association (ARIA) were invited via email to participate in the survey. Over three-quarters of respondents hold doctorate degrees, and nearly three-quarters are employed as university faculty. Just under one-half of the experts have an educational background in risk and insurance specifically, and about one-third have an educational background in economics or finance. Nearly two-thirds of the responding experts report themselves to be familiar or very familiar with United States auto insurance rate regulation, and nearly all respondents considered themselves at least somewhat familiar with these regulations. The views of those who reported that they are unfamiliar with U.S. auto insurance rate regulation are not included in the findings of this report.

The survey responses show that experts who are more familiar with U.S. auto insurance rate regulation tend to have more negative opinions regarding its appropriateness and effectiveness. Experts who are very familiar with auto insurance rate regulation view prior-approval regulation the least favorably,

and are least likely to believe that consumers fare better under prior-approval. Experts who have employment experience in the insurance industry are also somewhat more negative than others regarding the need for prior-approval regulation. However, academic experts with no previous employment in the insurance industry are the least likely to believe that consumers fare better under prior-approval rate regulation and are most likely to believe that regulatory intervention in rating and pricing should be reduced. The most important finding from the consideration of expert differences, however, is that the differences are relatively small. As a whole, experts are negatively inclined toward prior-approval and related rate regulations in auto insurance markets, and no subgroup of experts expressed support for these policies.

Section 1

Introduction

Government regulation of auto insurance has a long history in the U.S. and worldwide. The public interest in this market arises from the economic importance of the auto, the accident risks arising from its use, and the social importance of auto accident costs.[1] Auto insurance regulations aim to achieve a number of different objectives, including market transparency and stability, but social objectives—such as premium affordability and access to insurance—are often among the most important. To achieve these latter objectives, some jurisdictions regulate the auto insurance rates charged to consumers or place restrictions on insurers' methods of determining those rates.

Forty years ago, regulation of auto insurance rates in the U.S. was nearly universal. Some states required direct involvement of the state in determining the rates to be charged by all insurers, and others required the state's prior approval of each individual insurer's rates. Recent decades have seen a trend away from such restrictions. According to the Insurance Information Institute, currently 37 states and the District of Columbia permit insurers to set at least some auto insurance rates without prior approval. This means that only 13 states continue to enforce prior-approval regulation of auto insurance rates; nonetheless, regulatory oversight is extensive in a few of the prior-approval states. Moreover, even in states which do not require state prior-approval, there are often regulations that restrict the role of market forces in determining rates. For example, the information that insurers are permitted to use in determining auto insurance rates is often restricted by law, and some states directly or indirectly mandate auto insurance rate subsidies for certain groups, such as high-risk drivers or urban drivers.

The differences in states' regulatory systems call attention to the lack of consensus among policymakers regarding the appropriate role of prices in auto insurance markets. Policy debates and reforms during times of market

[1] Accident costs from autos extend to others beyond the driver and often have a social component, whether directly, through the provision of medical benefits, or indirectly, through costs of congestion, public services or lost productivity. Kelly, Kleffner, and Tennyson (2012) provide an in-depth discussion of these points and the resulting role of governments in auto insurance markets. Regarding the economic importance of the auto, some studies have shown that car ownership and driving lead to better employment outcomes and higher wages (for example, Raphael and Rice, 2002).

stress also highlight the divergence in prevailing views. In periods when auto insurance premiums are rising, proposed policy responses often involve strengthening or returning to government regulation of rate determination. California's Proposition 103, a voter referendum that was passed in the late 1990s, is perhaps the most famous example of a state reinstituting auto insurance rate regulation. However, other states, including New York and Maryland, have legislated a return to rate regulation during some inflationary periods.[2]

This study seeks to contribute to the public policy discourse by compiling and reporting evidence on experts' opinions regarding the effectiveness and appropriateness of auto insurance rate regulation. Experts' views were sought on prior-approval regulation of auto insurance rates specifically, and on a number of related rate regulatory policies used in some states. Opinions were gathered as responses to a formal survey distributed by email. A wide range of experts in the risk and insurance field were invited to participate in the survey. Experts were identified as individuals with membership in ARIA, "the premier professional association of insurance scholars and other thoughtful risk management and insurance professionals."[3]

The remainder of this report discusses the results of the expert survey. The next section describes the survey instrument, the fielding of the survey, and the characteristics of participating experts. Section 3 of the report presents the experts' opinions on prior approval rate regulation and other aspects of rate regulation in auto insurance markets by analyzing responses to individual questions in the survey. Section 4 aggregates experts' responses to individual questions into measures that assess the strength of overall support for or opposition to key rate regulatory principles in auto insurance. Section 5 examines key determinants of differences in opinions across experts. Section 6, the final section of the report, summarizes and interprets the research findings.

[2] Harrington (2002) provides an historical compilation of states' auto insurance rate regulatory histories.

[3] ARIA, www.aria.org (accessed May 29, 2013). Objective data confirm that this claim is warranted. ARIA was founded in 1932 and is the oldest and the largest academic organization focused on risk and insurance issues, with members worldwide. ARIA is also the sponsor of *The Journal of Risk and Insurance*, the most highly-ranked peer-reviewed academic journal focused on risk and insurance research.

Section 2

Research Procedures

2.1: The Survey Instrument

A survey addressing key issues in auto insurance rate regulation was developed for this research. Areas for inquiry are drawn from theory and empirical research in academic literature, from current public policy debates, and from a previously published expert survey by Edward Lascher Jr. and Michael Powers.[4] Question phrasing, questionnaire sequencing, and response scales were developed in consultation with Cornell University's Survey Research Institute (SRI). Preliminary drafts of the survey instrument were previewed and critiqued by a small group of current and former members of ARIA. Previewers' comments were used to improve the clarity of questions and the flow of the survey and to revise the topics covered.

The final survey instrument includes 19 questions measuring experts' views of the effects and effectiveness of prior-approval rate regulation and other related policies in auto insurance markets. Survey questions concerning prior-approval rate regulation asked about the need for rate regulation to achieve certain desired outcomes in auto insurance markets. Other survey questions concerned the appropriateness of specific rate regulatory tools, such as rate ceilings, premium subsidies, and restrictions on underwriting criteria; regulatory objectives, such as insurance availability and affordability; and the determinants of high costs of auto insurance. Responses were made by expressing strength of agreement to a statement about the regulatory policy using five-point scales ranging from "strongly agree" to "strongly disagree."

The survey further includes eight questions regarding the respondent's professional background and expertise. These questions gather information on the respondent's educational attainment and primary field, sectors of current and past employment, and familiarity with U.S. auto insurance regulations. Responses were made via "yes/no" response options or lists of categories. The full survey instrument and a summary of responses are included as an appendix to this report.

[4] The authors provided IRC with their survey instrument. Survey findings are discussed in Lascher and Powers (1997).

2.2: Fielding the Survey

ARIA membership lists for calendar years 2010–12 and January–February 2013 were provided by the executive offices of the organization. To assure that individuals whose membership had temporarily lapsed were not excluded from the survey, the membership lists for each year were combined by merging the information from all lists and removing duplicates. Student members of ARIA were then removed from the mailing list to assure a more uniform level of expertise among respondents. The resulting target list of experts contained 743 unique email addresses.

A total of 40 email addresses proved to be incorrect or out of date, leaving a net of 703 risk and insurance experts targeted to participate in the survey. Because ARIA has a worldwide membership and encourages membership from individuals in all employment sectors, these 703 experts are diverse in location and employment. However, more than one-half of the target list (374, or 53.2 percent) are residents of the U.S. and nearly three-quarters (512, or 72.8 percent) are university faculty members. Among the U.S. residents, about two-thirds (252, or 67.4 percent) are university faculty.

Each expert on the master list received an email from the ARIA executive director requesting participation in the survey project. The email invitation provided a hyperlink to an online site where respondents were able to complete the survey questionnaire. Because responses were not linked to the survey respondents' email addresses, respondents were assured confidentiality and anonymity. After the initial email request for participation, two reminder emails were sent over a period of seven days.[5] The survey website remained open to collect responses for approximately two weeks.

2.3: Survey Respondents

Of the 703 invited participants in the survey, 173 linked to the survey site and 161 provided complete survey responses. Because the twelve participants who submitted incomplete surveys each answered only a handful of the questions and provided no information regarding their professional backgrounds, the description and analysis in this report excludes the incomplete responses. This yields an overall 22.9 percent response rate for the survey.

[5] An announcement of the upcoming survey was also sent to recipients of the ARIA email newsletter approximately one week before the survey invitations were emailed.

Figure 2-1 presents information on the rate of completed survey responses. Most of the 161 respondents (119, or 73.9 percent) are residents of the U.S. This implies that the response rate among U.S. residents was much higher than for the overall sample: that is, U.S. responses totaled 119 out of 374 requests, for a 31.8 percent response rate. In contrast, the response rate for non-U.S. residents was only 12.8 percent (42 responses received from 329 requests). This differential response rate seems likely to be a result of the specific U.S. focus of the survey; respondents may have selected into the survey based on interest in or knowledge of the subject area.

Figure 2-1

Survey Response Rates

	Respondents in U.S.	Respondents in Other Countries	All Respondents
Number of potential respondents	374	329	703
Number of completed surveys	119	42	161
Response rate	31.82%	12.77%	22.90%

Figure 2-2 summarizes the educational attainment of the respondents. Virtually the entire sample (159 out of 161 respondents) hold a post-graduate degree (PhD, master's, law degree, or ABD), and nearly 84 percent (135 respondents) hold a PhD degree.

Figure 2-2

Respondent Education

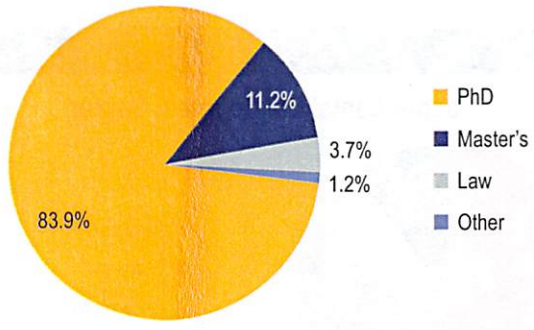


Figure 2-3 displays the distribution of educational fields in which respondents earned their highest degree. Respondents exhibit a broad variety of backgrounds related to risk and insurance. The largest subsets hold degrees in risk management and insurance (45.3 percent), and economics or finance (32.9 percent). Smaller minorities hold degrees in actuarial science (7.5 percent), and decision science, math, or statistics (7.5 percent). The remainder of the sample hold degrees in other fields not specifically listed in the choice set.

Figure 2-3

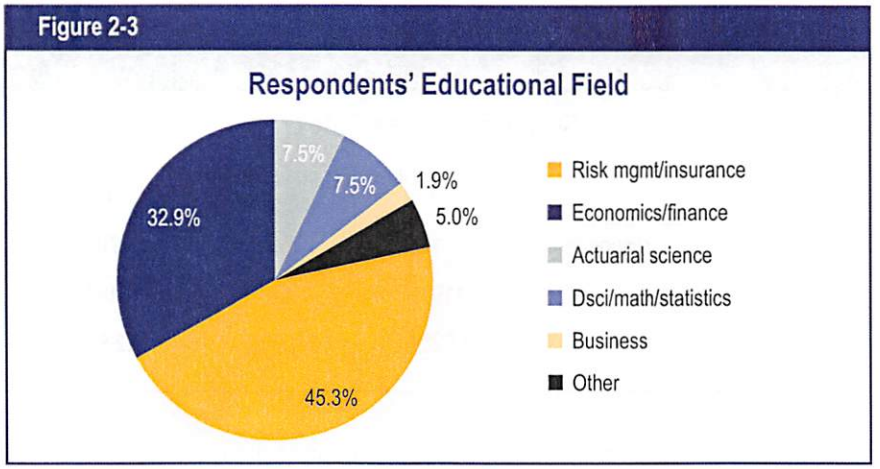
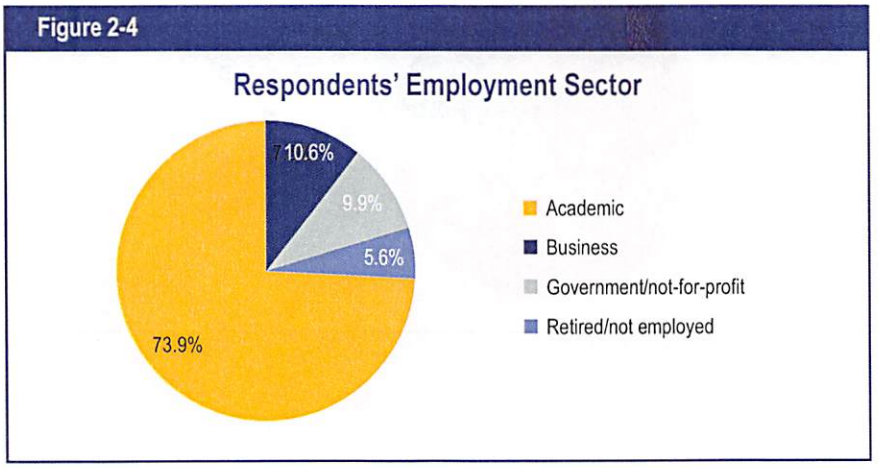


Figure 2-4 reports the respondents' current employment sector. Nearly three-quarters (119, or 73.9 percent) are employed as university faculty members. Twenty percent of respondents are about equally distributed in the for-profit business sector (10.6 percent) and the not-for-profit or government sectors (9.9 percent). The remaining 5.6 percent of respondents are retired or not currently employed.

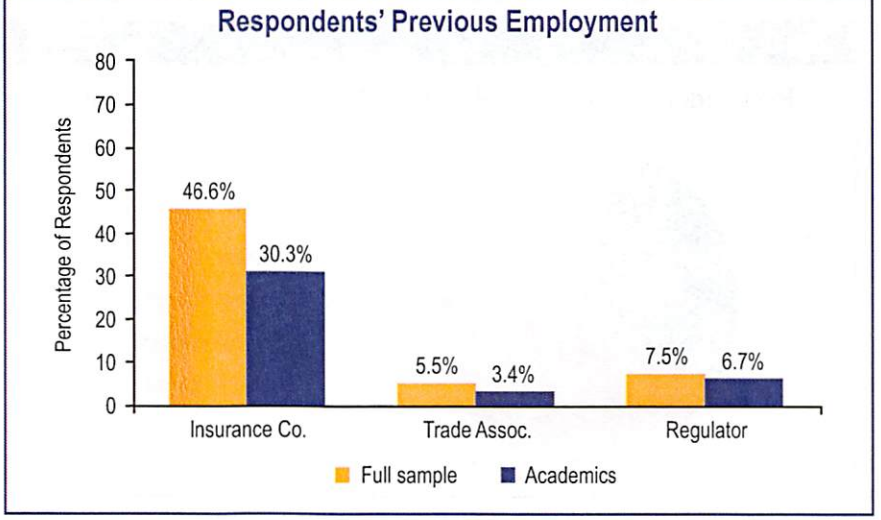
Figure 2-4



Respondents also were asked if they had any previous employment experience with an insurance company or broker, with an insurance trade association, or with an insurance regulator, since employment history may contribute to knowledge of and perspectives on auto insurance rate regulation. Figure 2-5 displays the percentage of respondents who reported any of these previous employment relationships. Data are displayed separately for the full sample of respondents and for respondents currently employed at academic institutions.

Converting numbers of respondents to percentages of the relevant samples, Figure 2-5 shows that 30.3 percent of respondents in academia have previous employment experience in an insurance company or broker; 3.4 percent have previous experience with an insurance trade association; and 6.7 percent have previous employment experience with an insurance regulator. Because respondents were not asked about current employment in the insurance industry (just private sector as a whole), responses in the full sample may reflect current employment as well as past employment.

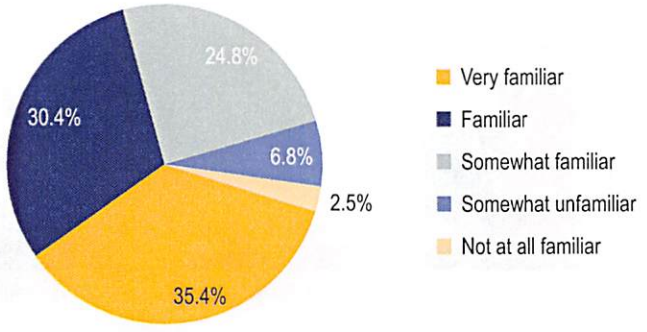
Figure 2-5



Due to the potentially diverse specialty areas of risk and insurance experts, each survey respondent was asked to self-identify his or her level of familiarity with the regulatory environment for U.S. auto insurance. The distribution of responses is shown in Figure 2-6. Of the 161 respondents, 57 (35.4 percent) consider themselves "very familiar" with U.S. auto insurance regulation and 49 (30.4 percent) consider themselves "familiar." A further 24.8 percent consider themselves "somewhat familiar" with these regulations. Only 15 respondents (9.3 percent) consider themselves to be "somewhat unfamiliar" or "not at all familiar" with U.S. auto insurance regulation. The high level of respondent familiarity with U.S. auto insurance regulation is consistent with selection into the survey based on knowledge and/or interest, and inspires confidence that results from this survey will reflect the views of the most relevant set of experts. Because the purpose of this survey is to discover and report views about U.S. auto insurance rate regulation that are held by risk and insurance experts, the responses of the 15 respondents who report that they are "somewhat unfamiliar" or "not at all familiar" with the regulations are omitted from the expert opinions reported in the remainder of this report.

Figure 2-6

Respondents' Familiarity With U.S. Auto Insurance Regulation



Section 3

Expert Opinion on Auto Insurance Rate Regulation

3.1: Prior-Approval Regulation of Rates

A primary area of interest in the survey is prior-approval regulation of auto insurance rates. Under prior-approval regulation, insurers are required to file proposed rate changes with the insurance commissioner in advance of introducing rates into the market, and the commissioner approves or denies the changes. Prevailing language in states' prior-approval statutes directs the insurance commissioner to assure that rates are not excessive, not inadequate, and not unfairly discriminatory. Although the precise standards used to determine whether rates meet these criteria are usually left to regulators' discretion, rates are generally considered to be excessive if they lead to insurer profits greater than the competitive norm, inadequate if they do not support insurer solvency, and unfairly discriminatory if rate differences across drivers are not grounded in risk differences. Historically, rate stability also has been a concern—more specifically, rates that suddenly spike due to forces related to the insurance underwriting cycle.

To assess the views of experts on the need for prior-approval of rates in relation to the stated and implicit objectives of prior-approval rate regulation, the survey includes questions focused on each objective separately. Experts were asked to state the strength of their agreement or disagreement with a series of statements framed in the following manner:

> *"Requiring insurers to obtain regulatory approval before introducing auto insurance rates in the market is necessary to assure that _____."*

In the individual statements, the blank section in this template was replaced with "rates are not excessive," "rates are not inadequate," "rates are not unfairly discriminatory," "there are no large rate swings from year to year," and "profits earned by insurance companies are not excessive."

Figure 3-1 summarizes the extent of expert agreement with each of the statements about prior-approval regulation. For ease of reporting, the response values are coded from 1 (strongly agree) to 5 (strongly disagree). Under this coding scheme, a value of 3 is the neutral response (neither agree nor disagree).

The table reports the median value of the expert responses, the modal value of responses, and the percent of experts who agree with each statement (indicating that they either strongly agree or somewhat agree with the statement). Recall that the median response is the middle value, or fiftieth percentile, of responses: one-half of responses have a lower value and one-half of responses have a higher value than the median. The modal response is the response that occurs most frequently.

Figure 3-1

Experts' Views on the Need for Prior-Approval Rate Regulation

Requiring insurers to obtain regulatory approval before introducing auto insurance rates in the market is necessary to assure that:	Median (1=Strongly Agree to 5=Strongly Disagree)	Mode (1=Strongly Agree to 5=Strongly Disagree)	Percent Who Agree (Either Strongly or Somewhat)
Rates are not excessive	4	4	24.7%
Rates are not inadequate	4	4	29.5%
Rates are not unfairly discriminatory	3	4	39.7%
There are no large rate swings from year to year	4	4	21.9%
Profits earned by companies are not excessive	4	4	17.8%

The experts do not view prior-approval rate regulation as necessary to assure the outcomes sought by regulation. For four of the five outcomes, the median response is "disagree" (the exception for this is the outcome "rates are not unfairly discriminatory," and, in this case, the median response is "neither agree nor disagree"). Moreover, the modal response for each of the five outcomes is "disagree." The percentage of experts who agree with each statement is well under 50 percent, and under 25 percent for three of the five outcomes. It is interesting that nearly 30 percent of experts believe that prior-approval regulation is needed to assure that rates are not inadequate. This concern is in keeping with historical rationales for insurance rate regulation, but assuring rate adequacy has not been a strong focus of auto insurance rate regulation in recent decades. An extensive body of research on the impact of prior-approval rate regulation suggests that regulators tend to promote rate affordability, and that prior-approval rate regulation usually reduces auto insurers' underwriting profits.[6]

[6] For a more detailed review, see the discussion of auto insurance rate regulation in Weiss, Regan, and Tennyson (2010).

3.2: Rate Regulatory Principles

The survey also inquired about experts' views of key underlying principles of rate regulation. The five objectives of prior-approval of rates described in Figure 3-1 are often characterized more simply as attempting to balance two key objectives: promoting both the affordability and availability of insurance for consumers. Balance is required because basic market reasoning suggests that there is tension between the two: insurance will be readily available (supply will expand) if premiums are high, but this reduces affordability; conversely, insurance will be less available (supply will retract) if premiums are low, although low premiums enhance affordability. In the survey, experts were asked the extent to which they agree that access and affordability should be important objectives of rate regulation. Experts were also asked the extent to which they agree that the goal of rate affordability should take precedence over the goal of assuring that rates are adequate for insurance companies.

A related issue in states that regulate auto insurance rates is the extent to which risk-based pricing is permitted.[7] Under risk-based pricing, drivers who have higher expected claim costs are charged higher insurance premiums to reflect the greater risk they impose on the insurance system. It is easy to see that risk-based pricing conflicts with the objective of assuring insurance affordability, particularly for high-risk or low-income drivers. Moreover, because individual risk is difficult and expensive to measure, risk-based prices tend to be linked only imperfectly to individual risk, with many determinants based on group averages rather than the individual. For these reasons, rate regulation often tempers risk-based pricing. The survey sought experts' views on the importance of maintaining risk-based pricing in auto insurance markets. Figure 3-2 summarizes expert responses to the survey questions regarding these principles. The exact text of each survey statement is reported in the table, and the reporting format is the same as utilized in Figure 3-1.

[7] See the discussions in Harrington and Doerpinghaus (1993), Powers (2010), Kelly, Kleffner and Tennyson (2012).

Figure 3-2

Experts' Views on Principles for Rate Regulation

Statements About Principles	Median (1=Strongly Agree to 5=Strongly Disagree)	Mode (1=Strongly Agree to 5=Strongly Disagree)	Percent Who Agree (Either Strongly or Somewhat)
Assuring access and affordability of insurance for all consumers should be an important objective of auto insurance rate regulation.	2	2	66.4%
Regulators should make rate affordability for consumers a higher priority than rate adequacy for insurance companies.	4	4	12.3%

Responses show that experts generally agree that affordability and accessibility should be important goals of rate regulation, although not universally. Both the median and modal response to this idea is "somewhat agree," and two-thirds of experts (66.4 percent) express agreement with the principle. However, experts do not agree that rate affordability for consumers should take precedence over rate adequacy for insurers. The median and modal responses are "disagree," and only 12.3 percent express agreement with this principle. In keeping with this view, risk-based pricing receives nearly unanimous support from the experts. Both the median and modal responses are "strongly agree," and over 97 percent of experts support the principle.

3.3: Rate Regulatory Tools

The survey also addressed experts' views of the appropriateness of certain regulatory tools that are often used to promote the goals of prior-approval rate regulation. The relevance of these tools extends beyond states with prior-approval rate regulation, however, since (as noted previously) some of the same restrictions on insurers' rating and pricing methods for auto insurance may be utilized in states that do not specifically require prior approval. These include rate caps or ceilings; premium subsidies; restrictions on territory rating; restrictions on rating based on personal characteristics such as gender; and restrictions on rating based on consumer characteristics such as credit scores. Explicit rate ceilings and premium subsidies are most often employed as a part of a prior-approval rate regulation system. However, other means may be used to reduce premium differences across drivers or locations, even without imposing prior-approval of rates. One such mechanism is the imposition of legal restrictions on characteristics that insurers may use in determining auto insurance rates. Forbidding the use of

demographic characteristics such as age, gender, and marital status, and the use of location of residence in the state, have traditionally been most common. More recently, the use of consumer characteristics, such as credit score, has become a target of regulation in many states. These types of restrictions provide premium subsidies to drivers who are disadvantaged under the disallowed rating criterion. Figure 3-3 summarizes expert views of these regulatory tools.

Figure 3-3

Experts' Views on Tools for Rate Regulation

Statements About Tools for Rate Regulation	Median (1=Strongly Agree to 5=Strongly Disagree)	Mode (1=Strongly Agree to 5=Strongly Disagree)	Percent Who Agree (Either Strongly or Somewhat)
Regulatory ceilings or caps on auto insurance rates are an appropriate way to promote insurance affordability for consumers.	4	4	19.9%
Providing premium subsidies for high-risk drivers, even if financed by charging other drivers higher premiums, is an appropriate way to reduce the cost of insurance for high-risk drivers.	4	4	18.5%
Preventing insurers from basing auto insurance rates on location or territory is an appropriate way to reduce the cost of insurance for urban drivers.	4	4	11.6%
Auto insurance companies should be barred from basing rates on personal characteristics that individuals cannot control (for example, gender).	4	4	19.2%
Auto insurance companies should be barred from basing rates on consumer characteristics not directly related to driving history (for example, credit score), regardless of whether those characteristics can be correlated to claim likelihood or severity.	4	4	15.8%

The experts have generally negative views of the appropriateness of these traditional types of regulatory restrictions. For each of the first three regulatory tools—rate ceilings, premium subsidies, and territorial rating restrictions—the median and modal expert "disagreed" that the regulatory tool is an appropriate way to achieve the stated end. Experts also "disagreed" (based on the median and modal responses) with the ideas stated in the final two questions—that regulations should restrict the use of demographic characteristics (such as gender) or consumer characteristics (such as credit

score) in auto insurance pricing. Overall, fewer than 20 percent of experts agree with any of the statements regarding use of these types of regulatory tools.[8]

[8] Experts were also asked whether so-called "dollar-a-day" insurance policies, which permit low-income drivers to purchase lesser amounts of auto liability insurance. Only 40.1 percent of experts view this policy as an appropriate way to reduce the cost of auto insurance for low-income drivers. The median and modal response regarding the appropriateness of this policy tool was "neither agree nor disagree.".

Section 4

Strength of Expert Views on the Effectiveness of Rate Regulation

The summary data on responses to the individual survey questions suggest little support from experts regarding the utility of prior-approval rate regulation and related regulatory tools. It is possible, however, that this way of reporting responses overstates the strength of experts' opposition to rate regulation. Because each question addresses one specific aspect or tool of regulation, an expert may agree with some statements and disagree with others. If views differ across experts, and if each expert has mixed views on the need for prior-approval regulation or favors some regulatory tools but not others, response summaries by individual question are not able to pick up this pattern. In this case the statistics for each specific aspect of rate regulatory policy may suggest a higher level of agreement among experts than is actually present.

To avoid this potential problem, three survey questions assess experts' views on the general effects and effectiveness of prior-approval rate regulation. Experts were asked to state their strength of agreement with the ideas that (1) consumers fare better under prior-approval rate regulation than under less regulated systems, (2) rate regulation is a significant contributor to higher auto insurance costs, and (3) regulatory intervention in auto insurance rating and pricing should be reduced. A summary of experts' reactions to these statements is reported in Figure 4-1, using the same reporting format as in previous tables.

Figure 4-1

Views on Effects and Effectiveness of Prior-Approval Rate Regulation

Statements About Rate Regulation	Median (1=Strongly Agree to 5=Strongly Disagree)	Mode (1=Strongly Agree to 5=Strongly Disagree)	Percent Who Agree (Either Strongly or Somewhat)
Consumers fare better under a rate regulatory environment in which insurers must obtain regulatory approval before introducing auto insurance rates in the market.	4	4	24.0%
Regulatory restrictions on insurers' ability to assess risk and price coverage are a significant contributor to higher auto insurance costs.	2	2	55.5%

In keeping with the experts' lack of support for prior-approval rate regulation, the majority hold negative views about the effects and effectiveness of rate regulation. Both the median and modal response to the statement that consumers fare better under prior-approval rate regulation is "disagree;" the median and modal responses to the statements that rate regulation increases costs of auto insurance, and that reducing regulatory intervention in auto insurance rating and pricing is a good idea, is "somewhat agree." More specifically, less than 25 percent of experts expressed the view that consumers are better off under prior-approval rate regulation; over 55 percent believe that regulatory restrictions are a significant cost-driver in auto insurance, and over 60 percent agree that regulatory intervention in auto insurance rating and pricing should be reduced.

An additional way of assessing the views of individual experts regarding prior-approval rate regulation and related restrictions is to measure each expert's combined responses to sets of related questions. For example, one can tally how many of the five questions regarding prior-approval rate regulation (shown in Figure 3-1) that an expert agrees with, to create an index from 0 (agreement with none of the statements) to 5 (agreement with all of the statements). The higher the value of this index, the more strongly the expert believes prior-approval rate regulation to be necessary to assure various desirable outcomes; the lower the value, the more strongly the expert believes prior-approval rate regulation to be unnecessary to assure these outcomes.

Figure 4-2

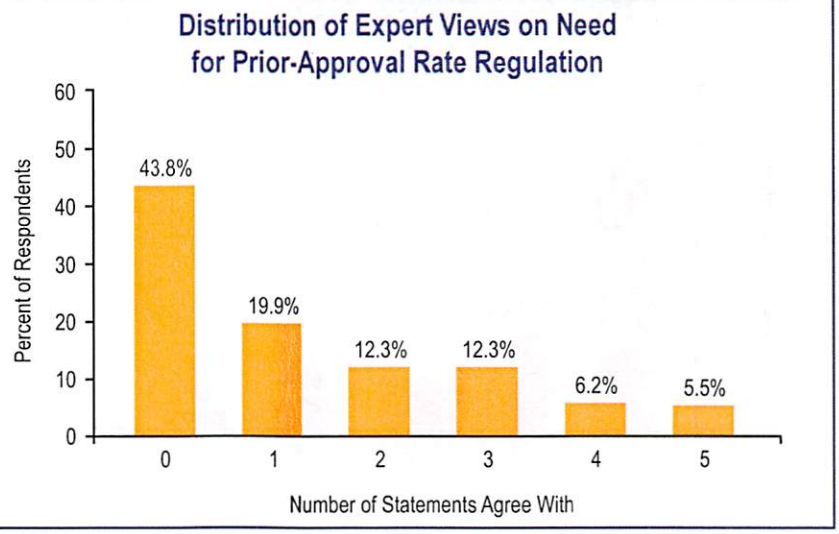
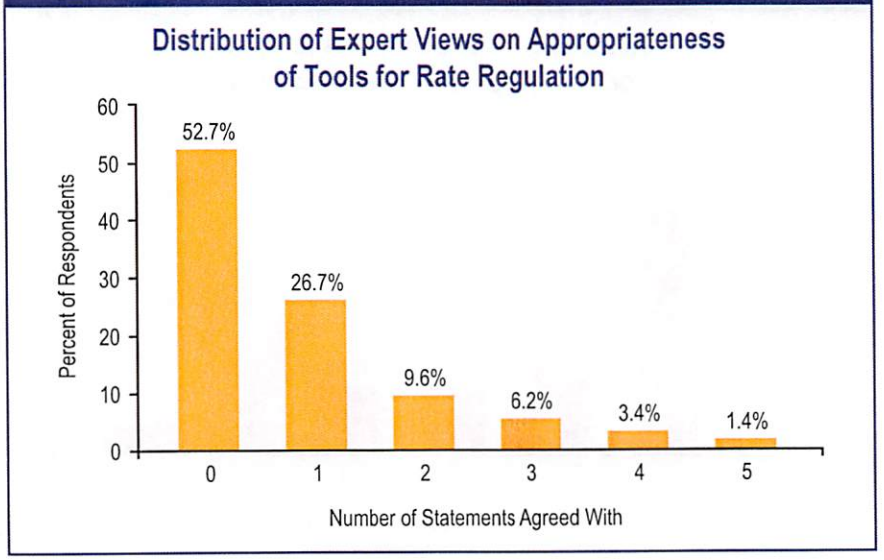


Figure 4-2 displays the distribution across the sample of the index values for the five questions regarding prior-approval rate regulation. The columns in the figure show the number of respondents who agree with 0, 1, 2, 3, 4, or 5 of the survey statements about the need for prior-approval rate regulation, respectively. For ease of interpretation, above each column is a label showing the percent of respondents represented by the column.

The figure shows that nearly 44 percent of experts agree with *none* of the statements about the need for prior-approval rate regulation. An additional 20 percent agree with only one of the statements, while about 12 percent agree with either two or three of the statements. A very small minority of respondents, less than 12 percent, agree with more than three of the five statements. This pattern of responses verifies that experts' views tend to be consistent across the different questions about prior-approval regulation; and that—overall as well as on average per question—experts express little agreement with the rationales for prior-approval rate regulation.

The same approach is utilized in relation to the five statements (analyzed in Figure 3-3) regarding regulatory tools that restrict insurers' rating and pricing of auto insurance. The number of these statements that an expert agrees with is used as a measure of the strength of the expert's view of the appropriateness of these regulatory tools. A higher value for the index indicates a stronger belief that these types of tools are appropriate; a lower value indicates a stronger belief that these types of tools are not appropriate. The distribution across the sample of the index values for the five questions regarding specific rate regulatory tools is shown in Figure 4-3.

Figure 4-3



The figure shows that the experts are negatively inclined toward all of the tools of rate regulation displayed in Figure 3-3. Over one-half (52.7 percent) of experts agree with none of the statements regarding the appropriateness of those tools, and 26.7 percent agree with only one of the statements. This means that only about 20 percent of experts view two or more of the rate regulatory tools as an appropriate means to achieve desired outcomes. Only a small minority of respondents—less than five percent—agree with more than three of the five statements. This pattern of responses indicates that experts tend to have coherent views regarding the rate regulatory tools considered. Experts are more likely to believe that all or most rating and pricing restrictions are inappropriate; relatively few have substantially mixed views regarding the appropriateness of the various tools.

Section 5

Familiarity, Distance, and Expert Views

The vast majority of the risk and insurance experts in this survey have unfavorable views of traditional rate-regulatory policies: prior-approval rate regulation is viewed by most of the experts as unnecessary to assure the outcomes sought by regulators; and most experts consider the tools used to support rate regulatory goals to be inappropriate policy choices. Yet, some experts are more positively inclined than others toward these policies. Although some differences in views are to be expected, it may also be relevant to understand whether differences in experts' views are related to differences in the experts themselves (rather than being simply random variation).

An important characteristic which may affect an expert's views is his or her expertise in U.S. auto insurance rate regulation (familiarity). A second determining characteristic may be the expert's relationship with the insurance industry, or, more specifically, his or her degree of independence (distance) from the industry. Understanding whether and how these factors are related to experts' views of auto insurance rate regulation provides an important check on the robustness of the survey findings.

5.1: Familiarity With Rate Regulation

Consider first the differences in experts' familiarity with U.S. auto insurance regulation. Respondents who viewed themselves as unfamiliar with auto insurance regulations have already been eliminated from the expert sample; but there is still variation in respondents' self-reported familiarity with regulation. It may be revealing to know whether a higher level of familiarity with auto insurance rate regulation results in greater or lesser support for a rate regulatory regime.

To explore this question, Figure 5-1 compares the views of auto insurance rate regulation for experts with differing levels of familiarity with the regulations. The sample is divided into three groups: experts who are "very familiar," "familiar," and "somewhat familiar" with U.S. auto insurance regulation, respectively. The figure displays mean values of each group's responses to four measures of opinions regarding the effectiveness of prior-approval and related regulatory tools.

Figure 5-1

Expert Views on Prior-Approval Rate Regulation by Level of Familiarity

Opinion Measure	Experts Who Are "Very Familiar" (n=57)	Experts Who Are "Familiar" (n=49)	Experts Who Are "Somewhat Familiar" (n=40)
Mean value of index of expert agreement with statements regarding the need for prior approval rate regulation (0 to 5)	1.00	1.31	1.85
Mean value of index of expert agreement with statements regarding the appropriateness of traditional rate regulatory tools (0 to 5)	0.84	0.63	1.13
Percent who agree with statement that "consumers fare better under a rate regulatory environment in which insurers must obtain regulatory approval before introducing auto insurance rates in the market"	19.3%	26.5%	27.5%
Percent who agree with statement that "reducing regulatory intervention in auto insurance rating and pricing is a good idea"	84.2%	63.3%	50.0%

Interestingly, the comparison reveals a strong inverse relationship between an expert's familiarity with U.S. auto insurance rate regulation and his or her opinion regarding its effectiveness. The responses of experts who are very familiar with auto insurance rate regulation are, on average, less favorable toward regulation than those of experts who are only somewhat familiar.[9] With only one exception, the views of experts who are familiar with auto insurance rate regulation lie in between those of the most expert and least expert, resulting in a trend of favorability declining as familiarity increases.

More specifically, on average, experts who are very familiar with regulation agree with 1.00 of the 5 survey statements regarding the need for prior-approval rate regulation; experts who are familiar with regulation agree with an average of 1.31 of the 5 statements; and experts who are only somewhat familiar with regulation agree with an average of 1.85 out of 5 statements. Similarly, experts who are only somewhat familiar with U.S. auto insurance

[9] The differences in the views of experts who are very familiar with U.S. auto insurance rate regulation and those who are only somewhat familiar with them are statistically significant for the index of agreement with the need for prior-approval rate regulation (1 percent confidence level, two-sided t-test) and for the percent of experts who believe that reducing regulatory intervention in rating and pricing is a good idea (10 percent confidence level, two-sided t-test).

rate regulation express a higher average level of agreement with the 5 survey statements regarding the appropriateness of traditional rate regulatory tools. This least-familiar group of experts agrees with an average of 1.13 of the 5 statements, while other experts do not even agree with 1 of the 5 (0.63 among experts who are familiar and 0.84 among experts who are very familiar, on average).

The same patterns are observed in the extent of agreement with statements regarding the effects of rate regulation for auto insurance consumers, and the desirability of reducing regulatory intervention in auto insurance rating and pricing. While 27.6 percent of experts who are somewhat familiar with rate regulation believe that consumers fare better under prior approval of rates, only 19.3 percent of experts who are very familiar with rate regulation believe this to be true. In view of this difference it is perhaps not surprising that fully 84.2 percent of experts very familiar with rate regulation believe that reducing regulatory intervention is a good idea, while just 50 percent of those who are only somewhat familiar with rate regulation express this view. In each case, the views of experts who describe themselves as familiar (but not "very" familiar) with U.S. auto insurance rate regulation lie between the views of the most-familiar and the least-familiar experts.

Despite the differences across respondent groups discussed here, it is important to note that the similarities in responses are greater than the differences. Support for prior-approval of rates and for other traditional rate regulatory tools is low among all of the expert groups.

5.2: Distance from the Insurance Industry

The survey questions about respondents' employment and employment histories reveal some variation in the experts' relationships with the insurance industry. Although the majority of experts surveyed are employed by academic institutions, some are employed in private businesses; moreover, some who are currently employed as academics have previous employment experience in the insurance industry. Exploring for differences in views on auto insurance rate regulation across these groups permits an assessment of the effects of industry relationships on such views.

Figure 5-2 provides this comparison, dividing the experts into three groups: academic experts with no prior employment history in the insurance industry; academic experts with prior employment history in the insurance industry; and nonacademic experts. Because the nonacademic expert group includes individuals employed in the private, public, and not-for-profit sectors, as well as individuals who are retired or not employed, the responses in that column

do not reflect the views of any well-defined group of experts.[10] Thus, the comparison will focus mainly on the two groups of academic experts.

Figure 5-2

Expert Views on Prior-Approval Rate Regulation by Distance From Industry

Opinion Measure	Academic With No Insurance Industry Experience (n=72)	Academic With Insurance Industry Experience (n=35)	Nonacademic (n=39)
Mean value of index of expert agreement with statements regarding the need for prior approval rate regulation (0 to 5)	1.46	1.29	1.15
Mean value of index of expert agreement with statements regarding the appropriateness of traditional rate regulatory tools (0 to 5)	0.96	0.80	0.69
Percent who agree with the statement "consumers fare better under a rate-regulatory environment in which insurers must obtain regulatory approval before introducing auto insurance rates in the market"	26.4%	25.7%	17.9%
Percent who agree with the statement "reducing regulatory intervention in auto insurance rating and pricing is a good idea"	63.9%	57.1%	61.5%

The comparison reveals an interesting pattern of results. The academic experts with no prior employment in the insurance industry are more positive about prior-approval rate regulation and tools than other academic experts. The mean number of statements about the need for prior-approval regulation agreed to by this group is 1.46, and the mean number of statements about the appropriateness of specific regulations to which this group agrees is 0.96. Academics with prior insurance industry experience agree on average with just 1.29 statements about the need for prior-approval regulation of rates, and 0.80 statements about the appropriateness of rate regulatory tools.

Conversely, between the purely academic experts and those with industry experience, there is virtually no difference in the percentage that believe consumers fare better under prior-approval rate regulation than in other rate regulatory environments (26.4 percent versus 25.7 percent). Also, a noticeably

[10] Nine of the experts in this group are retired or unemployed; 13 are employed in the public or not-for-profit sector; 17 are employed in private businesses (not necessarily in the insurance industry, since only the broad sector of current employment was recorded in the survey).

higher percentage of the purely academic experts favor reducing regulatory intervention in auto insurance rating and pricing, compared with other academics (63.9 percent versus 57.1 percent). Thus, while the purely academic experts appear to more highly value prior-approval and other rate regulations in principle (they are more likely to agree that they are "necessary" or "appropriate"), this group is not more optimistic about the benefits of auto insurance rate regulation in practice.[11]

Again, however, it should be emphasized that while this comparison suggests some minor differences in views across the different expert groups; none of the groups express confidence in the effectiveness of prior-approval and related rate regulations. On average, experts in each group agree with only about 1 out of 5 statements regarding the need for and appropriateness of auto insurance rate regulation, and over 55 percent of experts in each group express support for the idea of cutting back on rate regulation.

[11] None of the differences reach statistical significance, however. This means that the only strong conclusion which can be drawn is that academic experts with prior industry experience are neither more likely nor less likely than those with no prior industry experience to agree with the statements about rate regulation.

Section 6

Summary and Conclusions

This study reports the results of a survey of experts on prior-approval rate regulation and related regulatory policies in auto insurance markets. The survey demonstrates that most risk and insurance experts regard prior-approval rate regulation as an unnecessary and ineffective consumer protection policy in auto insurance markets. A majority of experts who responded to the survey expressed the view that prior-approval rate regulation is not needed to achieve the rate adequacy, fairness and stability objectives that regulators typically seek, and that prior-approval of rates is not needed to prevent insurers from earning excessive profits. Accordingly, most experts also believe that auto insurance consumers fare no better in states that impose prior-approval rate regulation than in states that do not.

The expert respondents also think that a number of regulations used to promote auto insurance affordability are inappropriate policy tools. The survey included questions about the appropriateness of rate caps or ceilings, premium subsidies, restrictions on territory rating, and restrictions on driver rating factors, such as gender and credit scores. Each restriction was viewed as inappropriate by over 80 percent of the surveyed experts. Because most of these regulations result in premium subsidies to high-risk drivers, the finding that nearly 100 percent of experts agree that auto insurance rates should closely reflect each driver's risk is not unexpected.

One striking finding is the relative uniformity in expert opinion on these topics. While some variation exists, of course, no significant differences in views are found across respondents when grouped by familiarity with auto insurance rate regulation or by employment histories. Where differences are found, they tend to support the conclusion that experts have negative opinions of U.S. auto insurance rate regulations, because respondents who describe themselves as only somewhat familiar with the regulations express more favorable views of regulation than those are familiar or very familiar with them.

An additional point worth mentioning is that experts' opinions reflect the conclusions of much academic research on auto insurance rate regulation. Researchers have found that prior-approval regulation has only a small effect on average rates in most regulated states, and that its effect on average rates

over time is also small.[12] When prior-approval regulation is stringently applied, however, and in particular when rate cross-subsidies are prevalent, a number of effects detrimental to consumers have been observed. These negative effects include reductions in insurance availability, companies exiting the market, and excessive premium inflation.[13] These research findings are in line with experts' view that there may be little benefit to consumers from prior-approval rate regulation of auto insurance rates.

[12] See, for example, Cummins, Phillips and Tennyson (2001); Harrington (2002).

[13] See, for example, Harrington (1990) and Grabowski, Viscusi, and Evans (1989) on insurance availability; Tennyson (1997) and Weiss and Choi (2008) on insurance market structure; and Weiss, Tennyson and Regan (2010) and Derrig and Tennyson (2011) on excessive premium growth. Tennyson (2012) finds evidence of significant improvements in the auto insurance markets of Massachusetts, New Jersey, and South Carolina after reforms that reduced regulatory intervention in pricing.

Appendixes

I. The Survey Questionnaire

II. References

Appendix I

The Survey Questionnaire

The purpose of this survey is to assess the views of experts in risk and insurance regarding the relative effectiveness of prior-approval and market-oriented rate regulatory policies in U.S. automobile insurance. Your answers to this survey are essential to documenting the state of expert opinion regarding these important public policy questions. Your answers will be confidential and anonymous: none of your personal information will be retained in the survey data.

Please provide us with your professional opinion by checking the appropriate box to indicate your level of agreement or disagreement with each of the following statements:

1. Assuring access and affordability of insurance for all consumers should be an important objective of auto insurance rate regulation.
   - ❑ Strongly agree
   - ❑ Somewhat agree
   - ❑ Neither agree nor disagree
   - ❑ Disagree
   - ❑ Strongly disagree

2. The auto insurance rates that consumers are charged should closely reflect their risk.
   - ❑ Strongly agree
   - ❑ Somewhat agree
   - ❑ Neither agree nor disagree
   - ❑ Disagree
   - ❑ Strongly disagree

3. Regulators should make rate affordability for consumers a higher priority than rate adequacy for insurance companies.
   - ❑ Strongly agree
   - ❑ Somewhat agree
   - ❑ Neither agree nor disagree
   - ❑ Disagree
   - ❑ Strongly disagree

4. Reducing regulatory intervention in auto insurance rating and pricing is a good idea.
   - ❑ Strongly agree
   - ❑ Somewhat agree
   - ❑ Neither agree nor disagree
   - ❑ Disagree
   - ❑ Strongly disagree

5. Requiring insurers to obtain regulatory approval before introducing auto insurance rates in the market is necessary to assure that rates are not excessive.
   - ❑ Strongly agree
   - ❑ Somewhat agree
   - ❑ Neither agree nor disagree
   - ❑ Disagree
   - ❑ Strongly disagree

6. Requiring insurers to obtain regulatory approval before introducing auto insurance rates in the market is necessary to assure that rates are not inadequate.
   - ❑ Strongly agree
   - ❑ Somewhat agree
   - ❑ Neither agree nor disagree
   - ❑ Disagree
   - ❑ Strongly disagree

7. Requiring insurers to obtain regulatory approval before introducing auto insurance rates in the market is necessary to assure that rates are not unfairly discriminatory.
   - ❑ Strongly agree
   - ❑ Somewhat agree
   - ❑ Neither agree nor disagree
   - ❑ Disagree
   - ❑ Strongly disagree

8. Requiring insurers to obtain regulatory approval before introducing auto insurance rates in the market is necessary to assure there are no large rate swings from year to year.
   - ❑ Strongly agree
   - ❑ Somewhat agree
   - ❑ Neither agree nor disagree
   - ❑ Disagree
   - ❑ Strongly disagree

9. Requiring insurers to obtain regulatory approval before introducing auto insurance rates in the market is necessary to assure that the profits earned by insurance companies are not excessive.
   - ❑ Strongly agree
   - ❑ Somewhat agree
   - ❑ Neither agree nor disagree
   - ❑ Disagree
   - ❑ Strongly disagree

10. Consumers fare better under a rate regulatory environment in which insurers must obtain regulatory approval before introducing auto insurance rates in the market.
   - ❑ Strongly agree
   - ❑ Somewhat agree
   - ❑ Neither agree nor disagree
   - ❑ Disagree
   - ❑ Strongly disagree

11. Regulatory ceilings or caps on auto insurance rates are an appropriate way to promote insurance affordability for consumers.
   - ❑ Strongly agree
   - ❑ Somewhat agree
   - ❑ Neither agree nor disagree
   - ❑ Disagree
   - ❑ Strongly disagree

12. Providing premium subsidies for high-risk drivers, even if financed by charging other drivers higher premiums, is an appropriate way to reduce the cost of insurance for high-risk drivers.
   - ❑ Strongly agree
   - ❑ Somewhat agree
   - ❑ Neither agree nor disagree
   - ❑ Disagree
   - ❑ Strongly disagree

13. Preventing insurers from basing auto insurance rates on location or territory is an appropriate way to reduce the cost of insurance for urban drivers.
   - ❑ Strongly agree
   - ❑ Somewhat agree
   - ❑ Neither agree nor disagree
   - ❑ Disagree
   - ❑ Strongly disagree

14. So-called dollar-a-day auto insurance policies, which permit low-income drivers to purchase limited amounts of insurance, are an appropriate way to reduce the cost of insurance for those drivers.
    - ❑ Strongly agree
    - ❑ Somewhat agree
    - ❑ Neither agree nor disagree
    - ❑ Disagree
    - ❑ Strongly disagree

15. Auto insurance companies should be barred from basing rates on personal characteristics that individuals cannot control (for example, gender).
    - ❑ Strongly agree
    - ❑ Somewhat agree
    - ❑ Neither agree nor disagree
    - ❑ Disagree
    - ❑ Strongly disagree

16. Auto insurance companies should be barred from basing rates on consumer characteristics not directly related to driving history (for example, credit score), regardless of whether those characteristics can be correlated to claim likelihood or severity.
    - ❑ Strongly agree
    - ❑ Somewhat agree
    - ❑ Neither agree nor disagree
    - ❑ Disagree
    - ❑ Strongly disagree

17. Uninsured or underinsured driving is a significant contributor to higher auto insurance costs.
    - ❑ Strongly agree
    - ❑ Somewhat agree
    - ❑ Neither agree nor disagree
    - ❑ Disagree
    - ❑ Strongly disagree

18. Claims build-up or fraud committed by claimants or service providers is a significant contributor to higher auto insurance costs.
    - ❑ Strongly agree
    - ❑ Somewhat agree
    - ❑ Neither agree nor disagree
    - ❑ Disagree
    - ❑ Strongly disagree

19. Regulatory restrictions on insurers' ability to assess risk and price coverage are a significant contributor to higher auto insurance costs.
    - ❑ Strongly agree
    - ❑ Somewhat agree
    - ❑ Neither agree nor disagree
    - ❑ Disagree
    - ❑ Strongly disagree

Finally, please provide us with the following general information about your background:

20. What is your highest educational degree?
    - ❑ PhD degree
    - ❑ ABD degree
    - ❑ Law degree
    - ❑ Master's degree
    - ❑ Other degree

21. In what field is your highest educational degree?
    - ❑ Risk management/insurance
    - ❑ Economics/finance
    - ❑ Actuarial science
    - ❑ Decision science/math/statistics
    - ❑ Business other than finance or economics
    - ❑ Other

22. Have you ever been an employee of an insurance company or insurance producer?
    - ❑ Yes
    - ❑ No

23. Have you ever been an employee of an insurance regulatory agency?
    - ❑ Yes
    - ❑ No

24. Have you ever been an employee of an insurance trade association?
    - ❑ Yes
    - ❑ No

25. Who is your current employer?
    - ❑ Academic institution
    - ❑ For-profit business
    - ❑ Government, NGO, or not-for-profit organization
    - ❑ N/A (retired or unemployed)

26. What is your country of residence?
    - ❑ U.S.
    - ❑ Non-U.S.

27. Please indicate your familiarity with U.S. auto insurance regulation:
    - ❑ Very familiar
    - ❑ Familiar
    - ❑ Somewhat familiar
    - ❑ Somewhat unfamiliar
    - ❑ Not at all familiar

Appendix II

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This report surveys academic experts in risk and insurance on the effectiveness of prior-approval and market-oriented rate regulatory policies in automobile insurance. The results show that a vast majority believe the prior-approval regulation of auto insurance rates is unnecessary and does not benefit consumers. Cost: $300 electronic version (pdf) and $400 printed version, postpaid.

Interstate Differences in Medical Utilization in Auto Injury Claims, July 2013, 48 pages.
This reports documents significant differences across states in the use of selected diagnostic and treatment services in auto injury insurance claims. The report also illustrates the potential savings available by bringing utilization rates in high-use states down to median state levels. Cost: $300 electronic version (pdf) and $400 printed version, postpaid.

Insurance Fraud: A Public View, 2012 Edition, December 2012, 44 pages.
This report updates previous IRC studies surveying the public about the acceptability and perceived frequency of various types of insurance fraud, with special emphasis on auto insurance fraud. It also examines attitudes toward a variety of tools that insurers and law enforcement use to fight against insurance fraud, including claim handling techniques and consequences for fraudulent behavior, and the public's willingness to perform fraud-fighting efforts. Cost: $300 electronic version (pdf) and $400 printed version, postpaid.

The Potential Effects of No Pay, No Play Laws, November 2012, 31 pages.
This study seeks to measure the impact of no pay, no play laws on the percentage of uninsured motorists. It also estimates the costs of noneconomic damages awarded to uninsured motorists in states that have yet to enact such laws. The findings suggest that not only would a properly enforced no pay, no play law result in a moderate decrease in uninsured motorists, it may also reduce auto insurance costs. Cost $300 electronic version (pdf) and $400 printed version, postpaid.

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The Long-Term Effects of Rate Regulatory Reforms in Automobile Insurance Markets

Sharon Tennyson, PhD

Insurance Research Council
March 2012

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John Ittner
Insurance Research Council Advisory Board, Chairman

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Executive Summary

Through the examination of automobile insurance markets of several states that introduced regulatory reforms during the past fifteen years, this study provides definitive evidence of the impact of modernizing insurance rate regulation. The automobile insurance markets of South Carolina (reformed in 1999), New Jersey (reformed in 2004), and Massachusetts (reformed in 2008) are studied.

Each of the states studied had a long history of strict rate regulation prior to the reforms but substantially reduced their rate regulation in the reform process. The study examines each state's automobile insurance market performance before and after the regulatory reforms to provide evidence of the effects of the reforms. To account for changes in the national automobile insurance market during this same time period, other states' markets are used as a comparison benchmark—this approach compares how markets in a state changed after regulatory reforms took effect to any changes that occurred over the same time period in states that did not enact a change in regulatory policy. States are compared both before and after reforms because markets may change over time for reasons unrelated to some states' implementation of regulatory reforms. This simple but powerful research design provides strong evidence of the effects of the reforms.

The key outcomes examined for each state are automobile insurance affordability, insurance availability, service quality, and automobile insurance market health. Insurance affordability is measured by examining average expenditures on automobile insurance in each state. Insurance availability is measured by examining the size of residual markets for auto insurance. Service quality is measured by examining the number of consumer complaints received by the state insurance department about automobile insurers in the state. Automobile insurance market health is measured by the extent of uninsured driving, the number and type of insurance suppliers, the mark-up of automobile insurance premiums over losses incurred, and the rates of filing of automobile insurance liability claims for property damage and bodily injury claims. The specific construction of each of these measures and the justifications for their use are developed and explained in detail in the sections that follow.

The results of this study show that regulatory reforms have led to a number of positive developments in the automobile insurance market without leading to increases in insurance prices or reductions in availability of insurance and quality of service. In each state, insurance premium expenditures have declined relative to previous trends or projections; insurance availability has increased or been maintained at previous levels; insurer underwriting results have been maintained or improved to be more consistent with regional or national averages; and underlying claim rates have decreased or been maintained at pre-reform levels. As a consequence of reducing government regulation of rates, insurance market sustainability has been enhanced and there are no adverse trends to suggest that the post-reform outcomes are not sustainable.

Of course, it is not certain that the experiences of South Carolina, New Jersey, and Massachusetts will apply to potential regulatory reforms enacted by other states or in other time periods. Prior to the reforms, these three states were among the most heavily regulated and their regulatory systems had unique features that led to many market distortions. The timing, nature, and extent of reforms differ across the three states; available evidence on the effects of the reforms is limited in some instances, particularly for Massachusetts, which enacted reforms later than the other states. All of these considerations may reduce the ability to generalize from these case studies.

It should also be kept in mind that, while far-reaching, the reforms in these states only reduce government oversight and do not amount to deregulation of automobile insurance rates. Remaining regulations and other features of the automobile insurance system in each state affect market outcomes and performance. Such considerations are no-fault insurance and insurance fraud, both of which have presented significant challenges in some state automobile insurance markets.

These caveats and limitations notwithstanding, the study presents a wealth of evidence that regulatory reform has improved automobile insurance outcomes for both consumers and insurers in South Carolina, New Jersey, and Massachusetts. The favorable performance of the more market-based pricing regimes introduced in these states provides support for the idea that strict government oversight of automobile insurance rate-setting is unnecessary, and may, in some cases, be detrimental for markets and consumers.

Section 1

Introduction

Insurance rate regulation is often viewed as a viable or even necessary mechanism to hold the line on high auto insurance prices. Many states in the United States require automobile insurance providers to obtain regulatory approval of their rates . In other states, automobile insurers face the threat of future regulation because legislatures often include such action among possible policy solutions when economic forces lead to rising prices.

This active regulatory environment persists despite the generally competitive nature of automobile insurance markets. Providers in an unregulated auto insurance market are of diverse size and characteristics. Profits are modest in comparison to providers in other industries, while price and product competition are readily apparent. Studies of price inflation generally point to rising loss costs as the main cause of premium increases.[1,2] Under these market conditions, the causes of premium price inflation will not be resolved by regulatory price controls.

A large body of research has produced a consensus among insurance scholars that automobile insurance markets do not require rate regulation to function efficiently and fairly. In fact, research suggests automobile insurance markets in which rates are determined competitively perform better on a wide variety of measures than do regulated markets. However, most of this evidence is obtained from studies that compare outcomes in regulated state markets to those in other states. Although conducted using methods that assure their statistical validity, these comparisons may suffer from concerns that conditions in states which choose to regulate rates differ from those in other states.

---

1 J.David Cummins, ed., *Deregulating Property-Liability Insurance* (Washington, D.C.:Brookings Institution Press, 2002), pp. 1-24.

2 Sharon Tennyson, "The Impact of Rate Regulation on State Automobile Insurance Markets," *Journal of Insurance Regulation*, 15(4): pp. 502-523.

Section 2

Background for the Study

With the exception of two states (Illinois and Wyoming), all U.S. states maintain active oversight of the automobile insurance rates charged to consumers. This means that insurers must provide regulators with detailed statistical justification for the rates that they charge in the market. In a few states, insurer's rate filings are largely informational in nature ("use-and-file" systems); in many other states, insurers must wait until regulators confirm that their rate filings meet regulatory standards before introducing the rates ("file-and-use" systems). Regulators in all of these states maintain the right to recall rates that they find to be excessive, however. In eleven states, insurers are required to wait until receiving regulatory approval for proposed rates prior to their market introduction ("prior approval" states). Six other states sometimes require prior approval, but only in cases where proposed rates differ from existing rates by greater than some pre-specified percentage ("flex-rating" systems).[3]

Although in principle regulators may disapprove rates for being either too low or too high, many studies have shown that regulation generally leads to rates lower than those that would exist under open competition.[4,5] States' regulatory jurisdiction extends to the approval of overall rate levels and of rate differences across driver classes and territories. Rate regulation may therefore operate to restrict rates for the entire market, or may impose rate restrictions only for consumers who face the highest prices (such as those living in urban areas).

In the context of competitive market conditions such as those existing in automobile insurance, lowering insurance rates by means of government regulations often means reducing rates below those that produce a competitive return for insurers. This will reduce insurers' incentives to sell automobile

---

[3] Data are from Insurance Information Institute (III), 2009; and Competitive Enterprise Institute's *Property and Casualty Insurance 2009 Report Card* by Eli Lehrer and Michelle Minton, 2009. Both sources note that the stringency of regulatory implementation often varies across states with nominally identical regulatory systems. For example, III notes that Delaware and Mississippi regulations are file-and-use but state regulators report that regulations are implemented as prior-approval.

[4] Scott E. Harrington, "A Note on the Impact of Automobile Insurance Rate Regulation, *Review of Economics and Statistics*, 1987, 69, pp. 166-170.

[5] Scott E. Harrington, "Effects Of Prior Approval Rate Regulation of Auto Insurance," *Deregulating Property-Liability Insurance*. (Washington, D.C.:Brookings Institution Press, 2002), pp. 285-314.

insurance in the market, as insurers will prefer to reject those risks for which the difference between expected servicing costs and regulated premium collections are large. This will lead to shortages of insurance supply relative to insurance demand, and more drivers will be relegated to the residual market. Thus, in states for which the regulated rates for some classes of risks are insufficient to permit insurers to yield a competitive return, the residual market will insure a larger proportion of drivers. Insurers will respond to persistent rate suppression by reducing their market share in the state, or, in extreme cases, by exiting the market. Nor will insurers want to enter a market in which rates are suppressed or in which future rate suppression is likely or possible. Regulatory constraints can also change the nature of competition among firms. Prices and product features will be less responsive to changes in consumer demand or to other market conditions if firms must seek approval for rate changes. A reduced threat of competitor entry may also dampen incentives for innovation. These effects suggest that stringent regulation of insurance rates will lead—over the long run—to a market with fewer firms and less vigorous competitive dynamics.

There is substantial evidence that insurance market supply responds adversely to rate regulation. Studies have shown that the relative number of insurance providers is lower in stringently regulated states than in less regulated states, and that the nature of firms operating in regulated markets is distorted toward less efficient firms.[6, 7, 8] Other research has found that when rate regulation significantly depresses automobile insurance rates below predicted levels, the proportion of drivers insured in the residual market increases.[9, 10]

Furthermore, a growing body of empirical research concludes that rate regulation ultimately results in higher costs for insurance consumers. Recent studies of automobile insurance find states that impose rate regulation experience significantly higher average loss costs and insurance claim

6 Paul L. Joskow, "Cartels, Competition and Regulation in the Property-Liability Insurance Industry," *The Bell Journal of Economics and Management Science 1973*, 4, pp. 375-427.

7 Mary A. Weiss and B. Paul Choi, "State Regulation and the Structure, Conduct, Efficiency and Performance of US Auto Insurers," *Journal of Banking and Finance*, 2008, 32, pp. 134-156.

8 Sharon Tennyson, "The Impact of Rate Regulation on State Automobile Insurance Markets," *Journal of Insurance Regulation*, 1997, 15, pp. 502-523.

9 Scott E. Harrington, "The Relationship Between Voluntary and Involuntary Market Rates: Regulation in Automobile Insurance," *Journal of Risk and Insurance*, 1990, 57, pp. 9-27.

10 Henry Grabowski, W.Kip Viscusi, and William S. Evans, "Price and Availability Tradeoffs of Automobile Insurance Regulation," *Journal of Risk and Insurance*, 1989, 56, pp. 275-299.

frequency, and that more stringent regulation is associated with a greater increase in losses and claim frequency.[11, 12]

The factors producing excess cost growth include the distortions to suppliers and residual markets discussed above. For example, residual markets typically run deficits. In many regulated states, regulators permit residual market losses to be passed on to drivers insured in the voluntary market. Insurance rate regulation also produces distortions to driving, insuring, and claiming decisions by disrupting market pricing and profit mechanisms. Consumers who do not bear the full premium costs of their insured risk are more likely to drive, to purchase insurance, and to purchase larger amounts of insurance. Because of higher accident rates associated with lower safety incentives or moral hazard and fraud incentives, consumers protected from cost increases will be more likely to file insurance claims. Consistent with these ideas, research has shown that regulated price subsidies lead to higher cost growth among subsidized driver classes or territories and that insurance claims fraud has been a significant problem in some regulated markets.[13, 14]

In a 2002 volume published by the AEI-Brookings Joint Center for Regulatory Studies, in-depth case-studies of the three states examined here concluded that rate regulation produced these types of adverse outcomes.[15] The states of South Carolina, New Jersey, and Massachusetts each experienced large residual markets, reduced insurance supply, and excessive cost growth in years when they were stringently regulated. In some years these states saw over 40 percent of drivers insured through the residual automobile insurance market.[16] Large, national insurers exited the automobile insurance market or reduced their market shares. Yet, despite the fact that rates were held to levels which

[11] Mary A. Weiss, Sharon Tennyson, and Laureen Regan, "The Effects of Regulated Premium Subsidies on Insurance Costs: An Empirical Analysis of Automobile Insurance," *Journal of Risk and Insurance*, 2010, 77, pp. 597-624.

[12] Laureen Regan, Sharon Tennyson, and Mary A. Weiss, "The Relationship between Auto Insurance Rate Regulation and Insured Loss Costs: An Empirical Analysis," *Journal of Insurance Regulation*, 2008, 27, 23–46.

[13] Sharon Tennyson, "Incentive Effects of Community Rating in Insurance Markets: Evidence from Massachusetts Automobile Insurance," *Geneva Risk and Insurance Review 2010*, 35, 19-46.

[14] Herbert I. Weisberg and Richard A. Derrig, "Fraud and Automobile Insurance: A Report on the Baseline Study of Bodily Injury Claims in Massachusetts," *Journal of Insurance Regulation*, 9, 1991, pp. 497-541.

[15] J. David Cummins, ed., *Deregulating Property-Liability Insurance*. (Washington, D.C.:Brookings Institution Press), 2002.

[16] This rose as high as 73 percent in Massachusetts (in 1989). Sharon Tennyson, Mary A. Weiss, and Laureen Regan, "Automobile Insurance Regulation: The Massachusetts Experience", in J. David Cummins, ed. *Deregulating Property-Liability Insurance*. (Washington, D.C.:Brookings Institution Press), pp. 25-80.

reduced insurers' profits below those in other states, insurance costs continued to rise.[17] The experiences of these states demonstrate the negative consequences of over-regulation of automobile insurance rate setting.

In response to the severe problems in their automobile insurance systems, the states introduced regulatory reforms intended to reduce government involvement and to allow insurers more flexibility in setting rates. South Carolina passed a comprehensive reform bill in 1997 (1997 S.C. Acts 154), with reforms becoming effective in 1999. Among other important changes, a flex-rating system was substituted for the strict prior approval system previously in place. Under the new system, insurers do not need prior approval to implement rate changes that are less than or equal to seven percent. The new system also allows for regulatory flexibility in approving rate changes larger than seven percent. Restrictions on rate classifications, merit rating, and rating territories were also relaxed, allowing insurers greater flexibility in establishing insurance rates.

Regulatory reform legislation embodied in the Automobile Insurance Competition and Choice Act was signed into law in New Jersey in June of 2003, with reforms becoming effective in 2004.[18] While keeping the main regulatory structures in place, the law modified or removed the most restrictive provisions, with the intent of allowing insurers more flexibility in pricing and underwriting decisions. Most important was the phasing out of the "take all comers" rule, which prevented insurers from cancelling policies of high risk drivers while simultaneously capping the rates that these drivers could be charged, creating severe shortages of insurance. Regulatory caps on rates loosened, the rate approval process became more efficient, and restrictions on insurer profits eased.

The Massachusetts reforms did not require legislation because the rating law itself did not change. Massachusetts has long operated under a file-and-use system, but with a unique provision that allows the insurance commissioner to hold an annual hearing to determine whether competition is feasible and to impose state-set rates if it is not. In every year from 1978 through 2006, competition was found not to be viable and state-set rates were imposed. In 2007, this tradition was reversed.[19] A system of "managed competition" was

[17] Richard A.Derrig and Sharon Tennyson, "The Impact of Rate Regulation on Claims: Evidence from Massachusetts Automobile Insurance," *Risk Management and Insurance Review*, 2011, 14, pp. 173-200.

[18] New Jersey Senate Bill 63/House Bill 2625.

[19] Nonnie S. Burnes, "Opinion, Findings, and Decision on the Operation of Competition in Private Passenger Motor Vehicle Insurance in 2008," Massachusetts Division of Insurance Docket No. R2007-03, July 16, 2007.

allowed to begin in 2008. Under managed competition, firms may set their own rates and offer discounts and product variations, subject to state prior approval and a variety of restrictions on underwriting.[20]

This brief description of reforms makes it clear that automobile insurance prices in these states remain under the state's active oversight. Nonetheless, the reforms in each state reduced the artificial restrictions of regulation and moved the markets closer to open competition. This study examines the impact of these regulatory changes for consumers and insurers.

[20] For example, age, sex, income, and credit history may not be used in underwriting; and state-determined rating territories remain in force.

Section 3

Study Methods

The effects of regulatory reforms are documented by examining important indicators of market performance in each of the three study states before and after the regulatory reforms took effect. Using other states' markets as a comparison benchmark helps establish the baseline of change that may have been experienced if no reform had taken place. We compare the states both before and after enactment of regulatory reforms because markets may be different over time for reasons unrelated to implementation of reforms. This simple but powerful research design provides strong evidence of the effects of the reforms in the markets studied. When reading this study, it should be kept in mind that regulatory reforms evolve in a market over time and this may slightly blur the distinction between pre-reform and post-reform time periods. For example, in each state the comprehensive reform packages were preceded by more limited reforms in previous years, and the final implementation of the reform packages occurred many months after their announcement.

The key outcomes examined for each state are automobile insurance *affordability*, *availability*, *service quality*, and *market health*. The specific construction of each measure of these outcomes and the justifications for their use are developed and explained in detail in the sections that follow.

Section 4

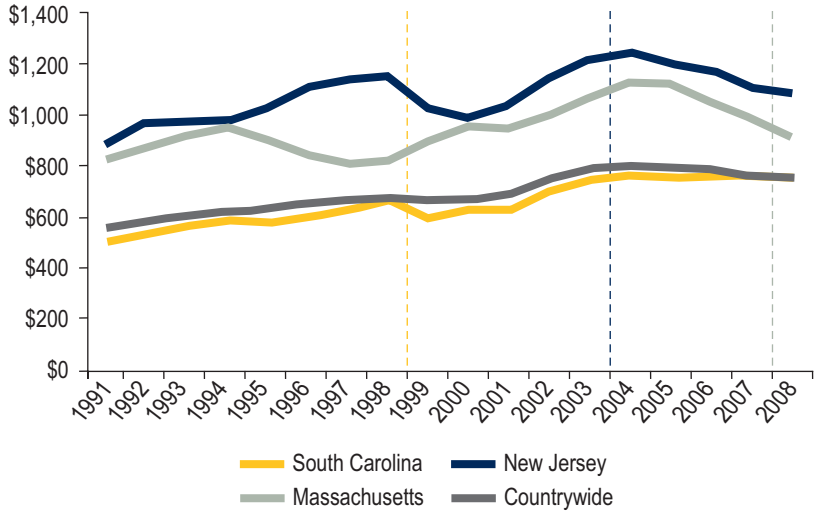
Insurance Affordability

Insurance affordability is an important concern for many drivers and is the primary objective of insurance rate regulation. As noted previously, rising premium expenditures are often a catalyst for imposing insurance rate regulation in a state. Similarly, consumers' fears that deregulation will lead to premium increases often play a major role in opposition to regulatory reforms. These fears have not been borne out in the states studied here.

This is demonstrated in Figure 4-1 below, which plots the national average auto insurance premium expenditure for years 1991 through 2008 (latest year available) against the averages for South Carolina, New Jersey, and Massachusetts. The comparisons use the annual average premium expenditure in each state for years 1991 through 2008 (the latest year of data available) published by the National Association of Insurance Commissioners (NAIC).

Figure 4-1

Average Auto Insurance Expenditures, 1991-2008

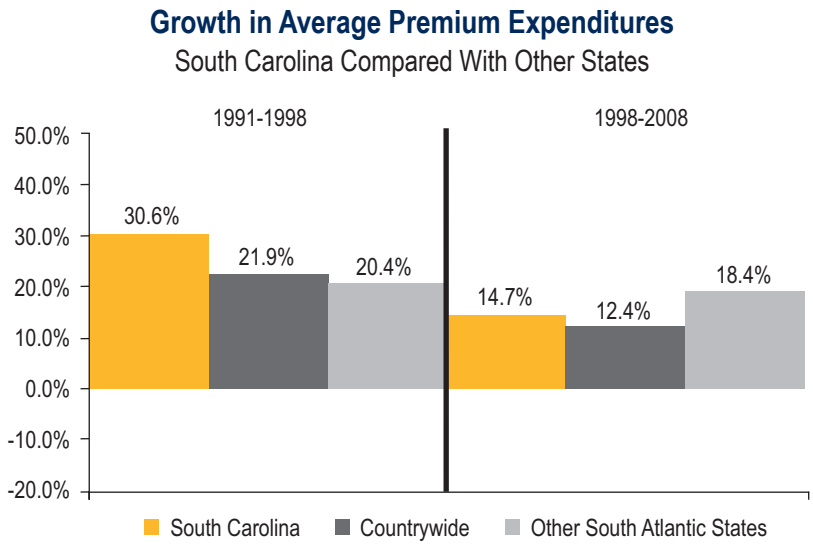


The figure shows that prior to the reforms in 1999, the average premium expenditure for an auto insurance consumer in South Carolina was just about the same as the national average, and remained there after the regulatory reforms. In New Jersey, average premium expenditures are much higher than the national average both prior to and after the regulatory reforms took effect in 2004. This pattern is also true for Massachusetts both before and after the reforms implemented in 2008. Cyclical patterns are apparent in all states' expenditures, and these may account for some of the apparent declines in expenditures in the later post-reform years. Even so, differences in expenditure growth patterns are hard to observe in the figure, consistent with the idea that reforms did not lead to dramatic premium increases. More direct comparisons of the pre-reform and post-reform periods in each state demonstrate that the regulatory reforms had a beneficial effect on auto insurance affordability, relative to the trends that prevailed under rate regulation. Figures 4-2, 4-3, and 4-4 illustrate these relative gains. Each figure compares a state's overall premium growth in the period prior to and after which reforms were introduced to the average growth countrywide and premium growth in surrounding states.

Figure 4-2 shows the (total) percentage premium growth in South Carolina relative to the countrywide average and to other states in the Southeast in the regulated period 1991 to 1998, and in the post-reform period 1998 to 2008. Average premium expenditures for South Carolina drivers grew faster than the national average and regional average in the regulated period—30.6 percent in South Carolina compared with 21.9 percent nationally and 20.4 percent regionally.[21] In the post-reform period 1998 to 2008, South Carolina's premiums still grew more rapidly than the national average, but the rate of excess growth was much smaller —14.7 percent versus 12.4 percent. Moreover, expenditure growth in South Carolina was below that in other South Atlantic states, where average auto insurance expenditures grew 18.4 percent.

[21] The other states in the South Atlantic region are Delaware, Maryland, North Carolina, Virginia, and West Virginia.

Figure 4-2



The trends in average automobile insurance expenditures for drivers in New Jersey and Massachusetts post-reform have been even more favorable. Figure 4-3 shows that between 1991 and 2003 the average automobile insurance premium expenditures in New Jersey grew 35.8 percent, compared with a 42.5 percent increase for the nation as a whole and a 47.7 percent increase for other states in the Mid-Atlantic region.[22] In contrast, between 2003 and 2008 average premium expenditures declined by 9.4 percent in New Jersey while expenditures fell by only 3.8 percent nationwide, and grew by 1.6 percent in other Mid-Atlantic states.

In Massachusetts (Figure 4-4) the average expenditure on automobile insurance grew 20.5 percent from 1991 through 2007, compared with 38.6 percent nationally and 22.5 percent in the other New England states.[23] Between 2007 and 2008 the average expenditure on automobile insurance in Massachusetts declined by 7.9 percent. In that same year, expenditures declined nationally by an average of only 1.1 percent, and in other New England states by 2.2 percent.

[22] The other states in the Mid-Atlantic region are New York and Pennsylvania.
[23] The other states in New England are Connecticut, Maine, New Hampshire, Rhode Island, and Vermont.

Figure 4-3

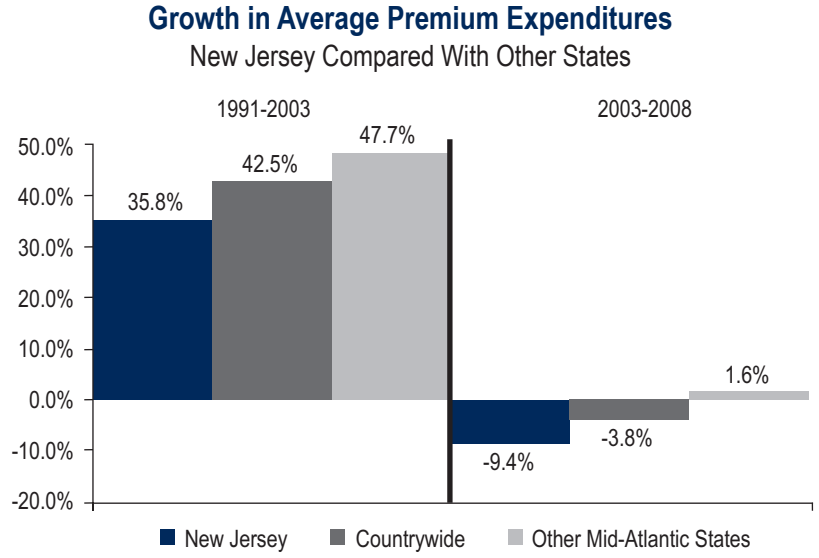
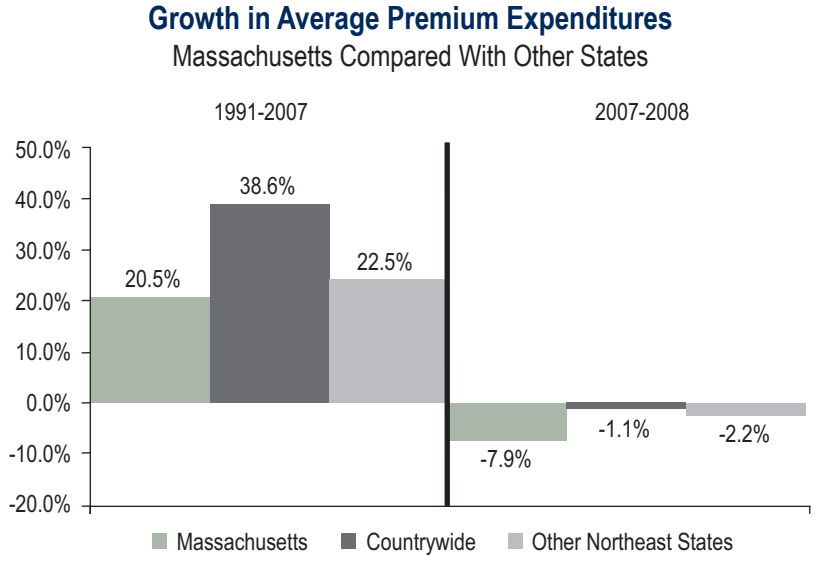


Figure 4-4



Of course, the cost of automobile insurance varies over time and across states because of variances in the demographic and insurance characteristics that determine the frequency and severity of auto accidents, accident-related injuries, and insurance claims. Previous studies have found that automobile insurance costs vary with state demographic and economic characteristics such as traffic density, household income and the costs of medical care; and state insurance requirements such as minimum compulsory liability amounts, the existence of first party (no-fault) benefits, and maximum payments for first party benefits.[24, 25, 26]

Because of these influences, which vary across states and years, a precise estimate of the effects of reforms on average automobile insurance premium expenditures requires a multivariate regression. The regression analysis combines the NAIC data on average auto insurance expenditures for each state with data on state characteristics and auto insurance requirements. The effect of regulatory reform is estimated by examining whether a state's average automobile insurance expenditure relative to other states—after accounting for these other explanatory factors—is significantly larger or smaller in the post-reform years than in the years prior to reforms.[27]

The estimated model takes the basic form seen below, where $Postreformyears_t$ is an indicator variable set equal to one in the years following regulatory reforms in a state and set equal to zero in other years. The impact of reforms on average premium expenditures is identified by including the interaction of a reform state (0-1) indicator ($Reformstate_s$) with the post-reform years: $Reformstate_s Postreformyears_t$. Including the indicator variable $Postreformyears_t$ separately as well as interacted with the reform-state indicator means that the estimates test for differences in a state's post-reform expenditures after accounting for any countrywide effects on average automobile insurance expenditures that occur in those years.

$$Ln(Average\ Expenditure)_{st} = \beta_0 + \beta_1 Postreformyear_{st} + \beta_2 Reformstate_s Postreformyear_{st} + \delta_1' OtherStateCharacteristics_{st} + \delta_2' A_{st} + \delta_3' T_t + \varepsilon_{st}$$

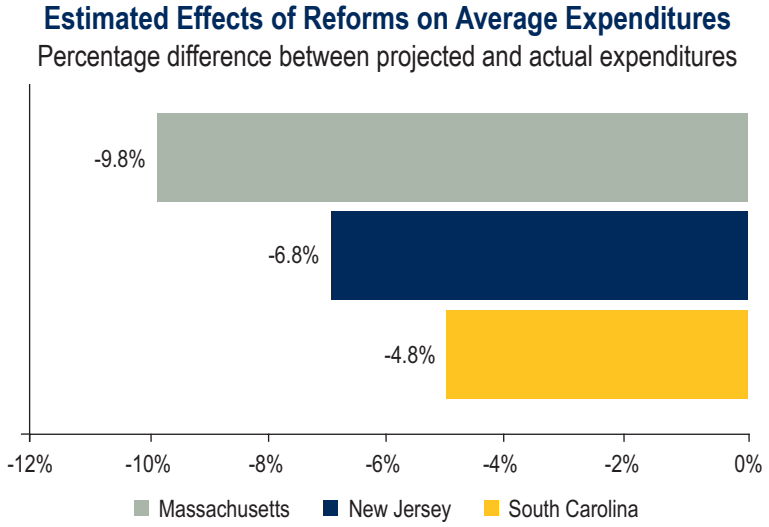
The entire list of variables included in the regression model is described in Appendix A. Of particular note, in recognition of the cyclical nature of automobile insurance markets as seen in Figure 4-1, one of the variables included in the set of control variables is the lagged statewide average

[24] Derrig and Tennyson, 2011, pp. 173-200.
[25] Weiss, Tennyson, and Regan, 2010, pp. 597-624.
[26] Regan, Tennyson, and Weiss, 2008, pp. 23-46.
[27] Derrig and Tennyson, 2011, use this methodology to estimate excess costs in Massachusetts during 1978-1995.

automobile liability loss ratio relative to the countrywide average loss ratio.[28] This variable will capture the effects of insurance market conditions in each state and year. Because automobile insurance expenditures in the nation as a whole may vary over time due to other unobservable factors, the model also includes an indicator variable for each year (T_t). An indicator variable for each state is included (A_s) to allow for permanent differences in the level of automobile insurance expenditures across states.

This model is estimated using data from 1991–2008 for all fifty states. The resulting coefficient β_2 provides an estimate of the difference between the average premium expenditure post-reform and the premium expenditure that would have been predicted in the absence of the regulatory reforms. Figure 4-5 shows these predicted differences, which are negative for all three states. Annual automobile insurance expenditures in Massachusetts during the post-reform period (2008 only) are 9.8 percent lower than predicted; New Jersey expenditures are an average of 6.8 percent lower than predicted in the post-reform period (2004–2008); and expenditures in South Carolina are an average of 4.8 percent lower than predicted during the post-reform period (1999–2008).[29]

Figure 4-5



[28] Loss ratios are constructed as state-wide liability losses (as defined in the text) divided by statewide premiums earned. The countrywide average loss ratio is the simple average of statewide loss ratios.

[29] The estimated expenditure declines are significantly different from zero at the 5 percent confidence level in Massachusetts and New Jersey; the estimated declines in South Carolina are not significantly different from zero.

To provide a year-by-year estimate of the effects of regulatory reforms on average premiums, a second version of each regression is estimated. In this estimate, the reform state indicator is interacted separately with each individual year in the post-reform period, rather than using a single indicator for the entire post-reform period. The new estimate will also have a separate term for each post-reform year, which provides an estimate of the difference between the average insurance expenditure observed in that year and the expenditure that would have been predicted in the absence of the regulatory reforms.

Figures 4-6, 4-7, and 4-8 plot the estimated effects for South Carolina, New Jersey, and Massachusetts, respectively. Each figure compares the observed average expenditure in the state (the solid line) and the percentage difference in expenditure that is predicted by the regression model in the absence of the regulatory reforms (the dotted line). The difference between the actual expenditure line and the predicted expenditure line represents the estimated impact of regulatory reforms on premium expenditures in each year.

Figure 4-6

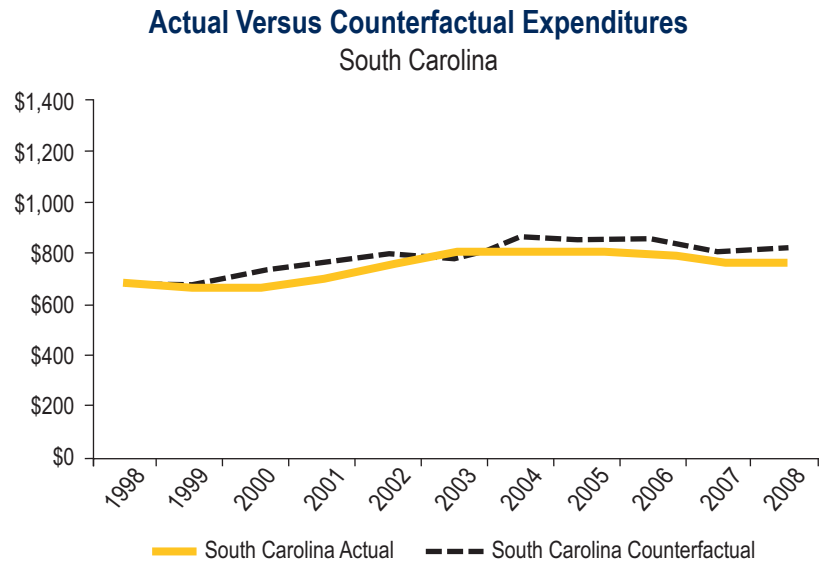


Figure 4-7

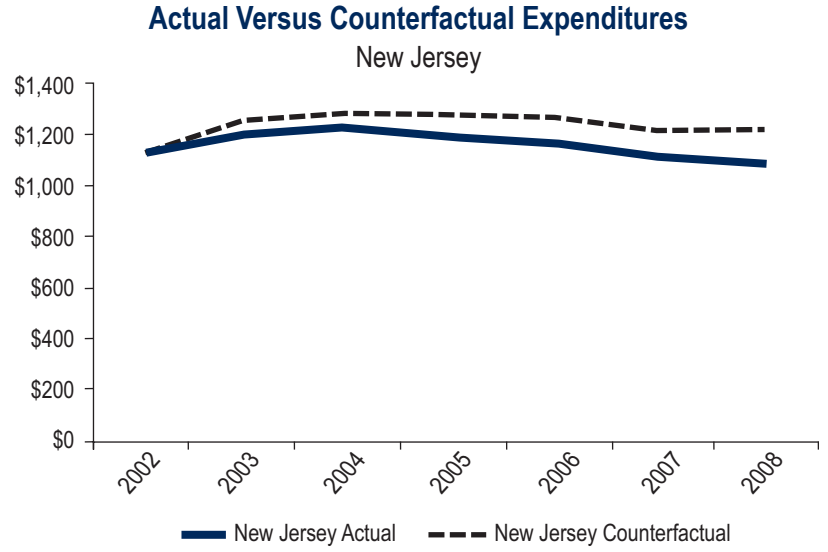
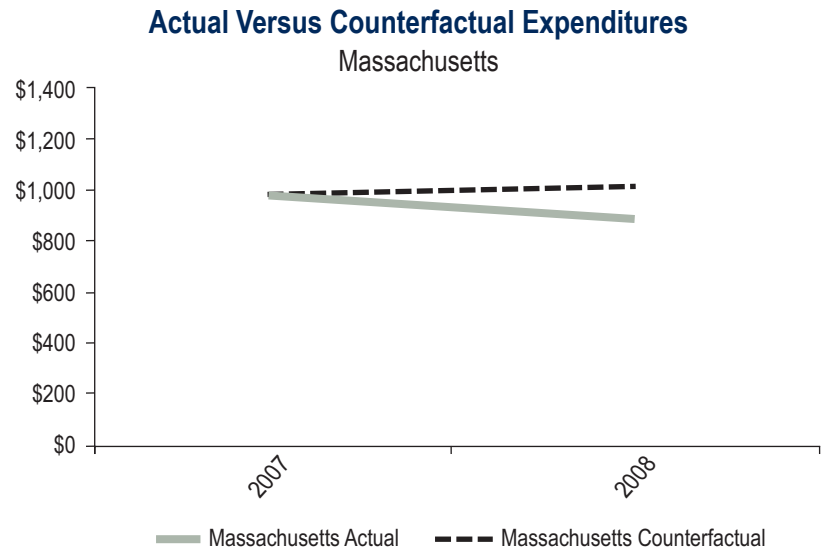


Figure 4-8



In each state, the predicted expenditure is greater than the actual expenditure in the post-reform years. This indicates that average auto insurance expenditures declined relative to expected expenditures in the aftermath of the reforms.[30]

[30] The annual predicted differences are not statistically significant in South Carolina for any year, however.

Section 5

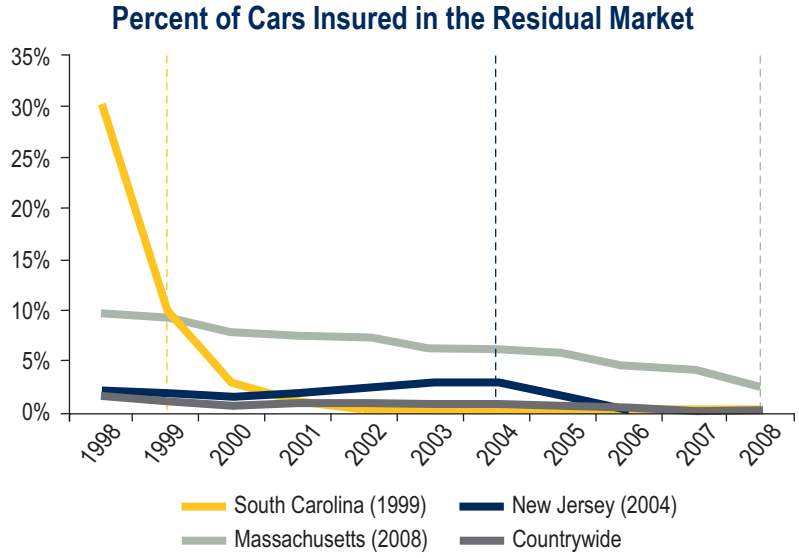
Insurance Availability

The percentage of cars that are insured through a state's residual automobile insurance market is the most commonly used measure of the availability of insurance in the open market. States in which insurers are reluctant to insure some drivers at prevailing or allowed premium levels will see larger percentages of drivers who must obtain insurance through the "involuntary" residual market mechanism. As noted above, rate regulation can lead to a larger residual market if regulation reduces rates (for some drivers or all drivers) below those that will allow insurers to earn a competitive rate of return.

Figure 5-1 compares the size of residual markets in South Carolina, New Jersey, and Massachusetts to the nationwide average for years 1998 through 2008 (the latest year of data available). In the late 1990s, South Carolina, New Jersey, and Massachusetts each experienced residual markets that were much larger than average and were outliers among the states.

After the reforms in 1999, the size of South Carolina's residual market began to decline dramatically; smaller, but similarly important declines were seen in New Jersey's residual market after the reforms in 2004. By 2008, the automobile residual market in each of these states was close to or below the national average, indicating that previous problems of insurance availability have been alleviated.

Figure 5-1



Massachusetts's residual market shows a more gradual decline throughout the time period, but remains higher than the national average throughout. Nonetheless, in the wake of the reforms, the residual market size decreased by over one-third—from 4.2 percent of the market in 2007 to 2.8 percent of the market in 2008. The effects of the Massachusetts reforms are seen in only one year in this figure, and as such are not likely to have been fully realized.

Section 6

Insurance Service Quality

Researchers often use consumer complaints as a rough measure of insurer service quality, and that measure is examined here. Only complaints regarding automobile insurance, and complaints that the regulator has determined to be valid, are included in the measure. No complaint data specific to automobile insurers are available for South Carolina, so complaints are analyzed only for Massachusetts and New Jersey.

Massachusetts's annual complaint statistics for years 2005 through 2010, as compiled and reported by the Massachusetts Division of Insurance, are displayed in Figure 6-1. The table shows the total number of complaints in each year, the mean complaint ratio by company, and the median company's complaint ratio. Complaint ratios in Massachusetts are compiled per $10 million in premiums. There is an overall downward trend in complaints from 2005 through 2010. In 2008, there is a small increase in the mean complaint ratio relative to 2007, but the median company's complaint ratio for 2008 is smaller than that for 2007. Both the mean and median complaint ratios are lower in 2009 and 2010 than in previous years. These trends suggest that consumer satisfaction with automobile insurance provider services has increased in the post-reform period.

Figure 6-1

Automobile Insurance Complaints

Massachusetts

Year	Number of Complaints	Mean Company Complaint Ratio (per $10M premiums)	Median Company Complaint Ratio (per $10M premiums)
2005	908	0.0324	0.0199
2006	759	0.0226	0.0191
2007	694	0.0205	0.0176
2008*	599	0.0216	0.0156
2009*	537	0.0161	0.0145
2010*	621	0.0158	0.0161

*Indicates post-reform year.

New Jersey's automobile insurance complaint statistics for years 2002 through 2010 are obtained from the New Jersey Department of Banking and Insurance and are reported in Figure 6-2. The table shows the total number of complaints in each year, the mean complaint ratio by company, and the median company's complaint ratio. Complaint ratios in New Jersey are compiled per 1000 insured vehicles. Complaint ratios are available for two years prior to the reforms (2002 and 2003), but are unfortunately not comparable to those for the post-reform years because of a change in the state's reporting methodology. Thus, the large declines in complaint ratios after the reforms cannot be attributed to an increase in consumer satisfaction. The small numbers of complaints in total for each year in the post-reform period nonetheless indicate a high level of consumer satisfaction. The ratios suggest that on average New Jersey's regulators receive only one complaint per 25,000–35,000 vehicles insured in a given year.[31] Moreover, the downward trend in complaints over the years 2004 through 2010 suggest that consumer satisfaction has increased over time.

Figure 6-2

Automobile Insurance Complaints

New Jersey

Year	Number of Complaints	Mean Company Complaint Ratio (per 1000 vehicles)	Median Company Complaint Ratio (per 1000 vehicles)
2002	509	0.1763	0.1400
2003	693	0.2579	0.1500
2004*	250	0.0753	0.0550
2005*	154	0.0425	0.0278
2006*	180	0.0347	0.0344
2007*	186	0.0353	0.0324
2008*	165	0.0319	0.0387
2009*	135	0.0258	0.0301
2010*	140	0.0267	0.0242

*Indicates post-reform year.

[31] This figure can be calculated by dividing 1,000 by the mean (or median) complaint ratio. For example, in 2010 insurers received an average of one complaint for every 37,453 vehicles insured (1,000/0.0267).

Section 7

Insurance Market Health

Measures of insurance affordability, insurance availability, and insurance service quality are either improved or have remained about the same in the years following regulatory reforms in South Carolina, New Jersey, and Massachusetts. These trends make it clear that automobile insurance consumers have not been harmed by the reforms. But whether these beneficial outcomes can be expected to continue over the longer term depends on the health of the insurance markets in these states, and how this has been affected by the reforms.

A healthy insurance market provides insurers with incentives and opportunity to enter and serve the market at prices that lead to a normal (competitive) rate of profit. This, in turn, leads to a market which is serviced by a sufficient number of firms so that insurance is readily available, and firms must compete for consumers' business. In this environment, insurers will have incentives to compete through lowering costs and prices and raising service and product quality. As a result, in a healthy insurance market, most drivers will be willing and able to purchase insurance. A healthy insurance market will also provide insurance consumers with incentives to hold down insurance costs by pricing insurance so that premium charges are adjusted to reflect expected claims costs. Firms will be able to earn enough profits to sustain their insurance operations, but profits will not be higher than the competitive norm for the industry. The effects of regulatory reforms on these aspects of automobile insurance market performance are examined in the sections that follow.

Uninsured Motorist Claims

The rate of uninsured driving in a state is a good indicator of consumer participation in the automobile insurance market. Problems of insurance affordability may be a cause if uninsured driving if drivers feel that they cannot afford insurance. This is distinct from affordability as measured by the average insurance expenditure because it focuses on those drivers who choose not to purchase insurance. Alternatively, uninsured driving may arise because of problems of insurance availability, if drivers choose to drive uninsured because they have difficulty finding an insurance agent or company or if they find the application process confusing or burdensome. Automobile insurance has many components, but the main component is

liability insurance. Drivers impose costs on others in the form of increased accident risk and accident costs. The purchase of liability insurance helps to assure that those costs are borne by the appropriate party through the premium paid for the insurance and the promise of the insurer to pay losses that the insured driver imposes on others. When a driver chooses to drive without liability insurance, accident costs are shifted to other drivers if the uninsured driver does not have sufficient resources to pay.

This means that high rates of uninsured driving are a burden for the insurance system. A driver's insurance must cover at least some of the costs of accidents with uninsured drivers, and these costs will be incorporated into higher insurance premiums. The increase in premiums caused by uninsured motorists may in turn lead more drivers to decide that insurance is unaffordable. Most states attempt to deal with the uninsured motorist problem by requiring all drivers to purchase liability insurance.[32] Rate regulation may also be used as a policy to make uninsured driving less likely. Rate regulation often attempts to reduce the cost of insurance, especially the costs to high-risk drivers who may be the most likely to drive uninsured.

For all of these reasons, it is important to examine the impact of rate reforms on uninsured driving. Unfortunately, measuring the rate of uninsured driving is difficult. State motor vehicle registrations, which often require liability insurance, occur at one moment in time, while insurance must be carried throughout the year. States' registration requirements and record-keeping also vary, and registration of an automobile can be avoided or falsified. The most readily available and standardized information on uninsured driving is obtained from insurance claims. Drivers injured in an accident with an uninsured motorist who is at-fault for the accident may file an "uninsured motorist (UM)" claim with their own insurer. The number of these claims provides an indicator of the rate at which insured drivers are injured in accidents involving uninsured drivers. While this does not actually measure the number of uninsured drivers, it does measure the rate at which uninsured drivers transfer costs onto the insurance system.

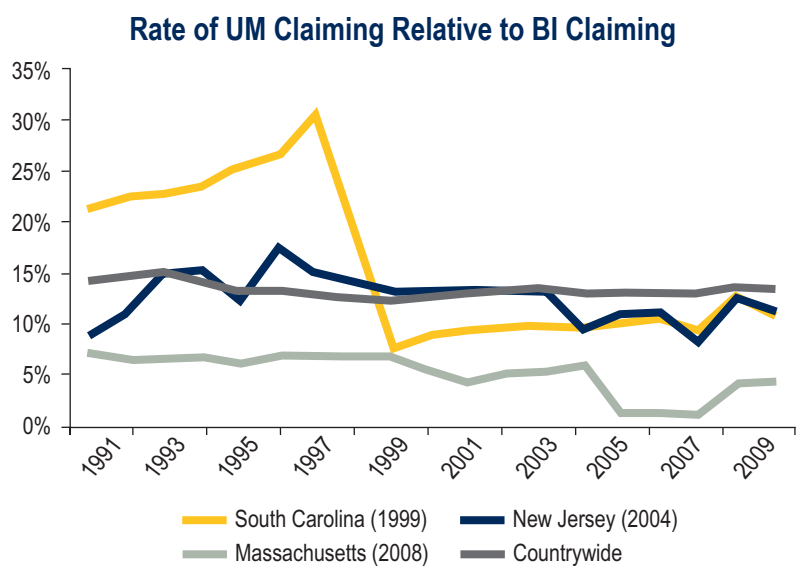
Following convention, uninsured driving rates are approximated here as the rate of uninsured motorist claims (UM) relative to the rate of bodily injury liability (BI) claims (UM/BI ratio). Because drivers turn to their UM coverage to receive payment for injuries caused by a driver who does not carry automobile liability insurance, the UM/BI ratio measures the proportion of injury-producing

[32] State requirements have evolved over time; currently, all states except New Hampshire have compulsory automobile insurance laws. Insurance Research Council, *Uninsured Motorists*, (Malvern, PA: Insurance Research Council, 2010).

accidents in which the at-fault driver was uninsured. Dividing the number of UM claims by the number of BI claims adjusts for differences in the rate of injury accidents across states and years.

Figure 7-1 compares the UM/BI rates in South Carolina, New Jersey, and Massachusetts to the countrywide average in each year 1991 through 2009 (latest year available). The UM/BI rate in South Carolina was much higher than the national average prior to regulatory reforms in 1999 and decreased markedly in the post-reform period, to rates that are below the national average. Similar, smaller effects are apparent in New Jersey after the reforms in 2004, although, prior to reforms, New Jersey's UM/BI rate was about the same as the national average. Massachusetts experienced UM/BI rates much lower than the national average throughout the 1991–2009 timeframe, and the regulatory reforms in 2008 did not change this.[33]

Figure 7-1



Automobile Insurance Suppliers

A healthy insurance market will be served by a large number of firms; no single firm will dominate the market with a large share of business; and the most efficient sellers who are best able to meet consumers' desires will be present and successful in the market. Comparing the number and

[33] The increase in Massachusetts's UM/BI rate in 2008 and 2009 is likely because of the recession rather than the regulatory reforms; notice that this same pattern is observed in the other states as well.

characteristics of automobile insurance sellers in these states to those in other states will provide evidence of the relative health of insurance supply in these states.

Figure 7-2 reports on the number and the relative market shares of automobile insurance sellers in South Carolina, New Jersey, and Massachusetts. For comparison purposes, the table also reports the average value across all states. The figure reports the number of firms selling automobile insurance,[34] the number of these firms who are active in the market (as measured by having at least a 0.1 percent market share), and several measures of the distribution of market shares across sellers. Figure 7-2 provides information for 2010, to provide an assessment of the current structure of these automobile insurance markets relative to others.

The variables C1, C4, and C8 reported in the figure are the aggregate share of the market served by the largest 1, 4, and 8 firms, respectively. Higher values of these variables mean that the largest firms in the market serve a larger share of the market, and suggest that competition is less robust than in a market with lower concentration. The Herfindahl-Hirschman Index (HHI) reported in the figure is an alternative measure of market concentration which takes into account the market shares of *all* firms. The HHI is calculated as the sum of the squared values of each firm's market share. By squaring the market shares before adding them, firms with larger market shares are weighted more heavily in the Index, leading to higher HHI's when market shares are unevenly distributed across firms than when shares are evenly distributed. Because the HHI is smaller when there is a larger number of firms and when no firm has a large share of the market, it serves as a measure of how closely the structure of supply in an industry conforms to that of perfect competition.

Figure 7-2 shows that in 2010 the number of sellers in both New Jersey and Massachusetts are lower than the mean and median values for the country, while the number of sellers in South Carolina is higher. The automobile insurance markets in both Massachusetts and South Carolina are more concentrated than the mean or median state, meaning that a few firms serve a larger share of the market in these states. On the contrary, the market concentration measures in New Jersey are lower than or at about the same levels as those in the mean or median state.[35]

[34] Data are constructed from SNL Financial data services, and represent insurance groups and single companies. An insurance group that sells through several different subsidiaries in a state is counted here as a single firm.

[35] Conclusions are similar if each state is compared only to other states in their same region.

Figure 7-2

Measures of Automobile Insurance Market Concentration 2010

	South Carolina	New Jersey	Massachusetts	National Average
Number of Sellers	76	48	33	65
Number of Sellers with > .1% share	44	34	25	39
Market Share of Largest Seller (C1)	24.74%	14.84%	28.20%	20.78%
Market Share of 4 Largest Sellers (C4)	58.84%	52.64%	59.37%	54.57%
Market Share of 8 Largest Sellers (C8)	79.25%	79.77%	79.00%	75.08%
Herfindahl-Hirschman Index (HHI)	1162	935	1265	1028

Most importantly, all of the market characteristics in the reform states are consistent with competitive insurance environments, according to U.S. Department of Justice (DOJ) and Federal Trade Commission (FTC) guidelines. An industry with a very large number of firms, each with a small but equal market share, would have an HHI that would be close to zero (for example, the HHI in a market with 1,000 firms, each with a 0.1 percent market share, would be 10). A monopolistic market with only one seller would have an HHI equal to 10,000 (100 percent squared). The DOJ/FTC guidelines set threshold values for the HHI to distinguish markets with different degrees of competition. Markets are characterized as unconcentrated if the HHI is below 1000; moderately concentrated if the HHI is between 1000 and 1800; and concentrated if the HHI is above 1800. Most DOJ/FTC actions regarding lack of competitiveness take place in concentrated markets, for example, those that have HHI greater than 1800.[36] The state automobile insurance markets fall in the unconcentrated or moderately concentrated range and would therefore not raise concerns about lack of competition.

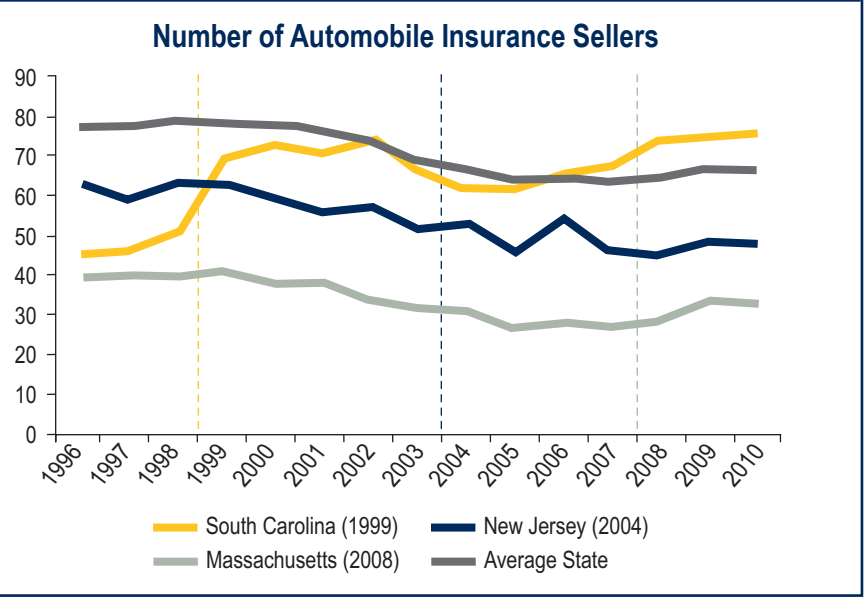
In terms of the other market structure measures, DOJ and FTC rarely investigate lack of competition in markets with more than 10 significant competitors. The agencies' guidelines assign an informal cut-off value of C1 equal to 35 percent as the point at which concerns about concentration of market power might be raised. Thus, by all market structure measures these state automobile insurance markets fall well within the ranges that federal regulators would consider indicative of competition.

[36] U.S. Department of Justice and Federal Trade Commission, *Commentary on the Horizontal Merger Guidelines*, (Washington, D.C., 2006), 68 pages.

Trends in the market characteristics after the implementation of reforms are also of interest. Figure 7-3 displays how the number of sellers in each state has changed over time, compared to national average trends. The most dramatic changes are observed in South Carolina, where the number of automobile insurance sellers has increased by more than 30 firms since the 1999. Massachusetts has also seen an increase in the number of sellers since the 2008 reforms, although there remains far fewer automobile insurers there than in the average state. New entrants into that state include important national sellers, however, and the data reflect only two years post-reforms.

New Jersey also has fewer automobile insurers than the average state, and this is the result of the state's long experience with strict regulation. Fourteen insurers exited this market in the 1990s because of the unfavorable business climate, and at least six others had exited in prior years.[37] During the time period shown in the figure, the number of auto insurers in New Jersey generally mirrors the slight downward national trend, and there is no evident increase in the number of sellers after the 2004 reforms. These numbers are not able to capture what would have happened in the absence of the reforms, however. In years 2001 and 2002, eleven insurers, including two large national insurers, had filed plans to withdraw from the state's automobile insurance market. Because of the reforms the two national insurers reversed their decisions and

Figure 7-3

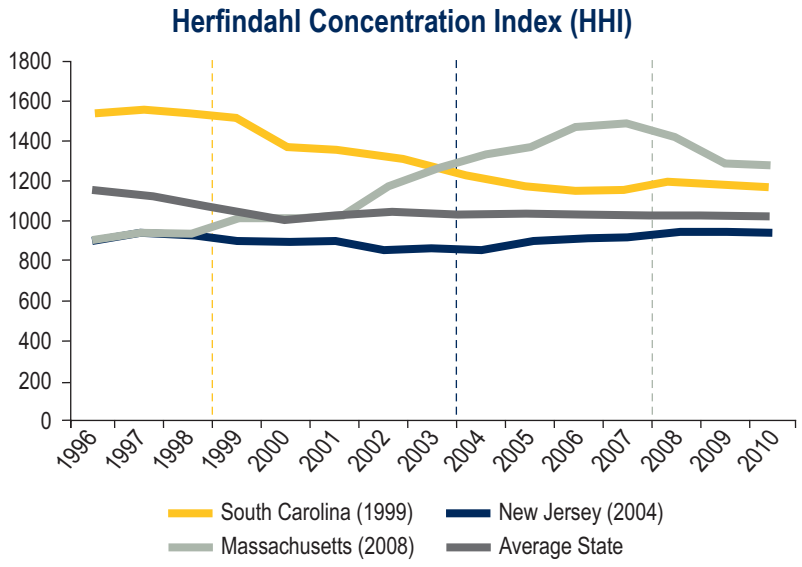


[37] Insurance Council of New Jersey, *Reforming New Jersey's Automobile Insurance System: Five Years Later*, (Ewing, N.J.: Insurance Council of New Jersey, 2008).

remained in the market, and seven new firms entered. The timely reforms prevented a rapid drawdown of suppliers, and the number of sellers stabilized.

Figure 7-4 displays the annual HHI concentration values for years 1996 through 2010 for the three states studied, compared to the countrywide mean. The comparisons show that South Carolina's HHI has declined steadily since 1999, the year that regulatory reforms became effective in the state. Massachusetts's HHI increased substantially throughout the period until 2007, reflecting the retrenchment and exit of firms in response to regulation. The HHI has trended downward since the 2008 reforms in Massachusetts. HHI has trended slightly upward in New Jersey since the 2004 reforms, after trending downward slightly in the years prior to reforms. However, these changes are modest and the HHI in New Jersey is below the mean for the country in all years.

Figure 7-4



To provide a more detailed comparison, Figures 7-5, 7-6, and 7-7 show trends in market concentration in each of the reform states compared with the average over all states and with trends in their closest neighboring states, for years 1996 through 2010. The figures show the C8 measure, the share of the market served by the largest eight competitors in each state.

Figure 7-5

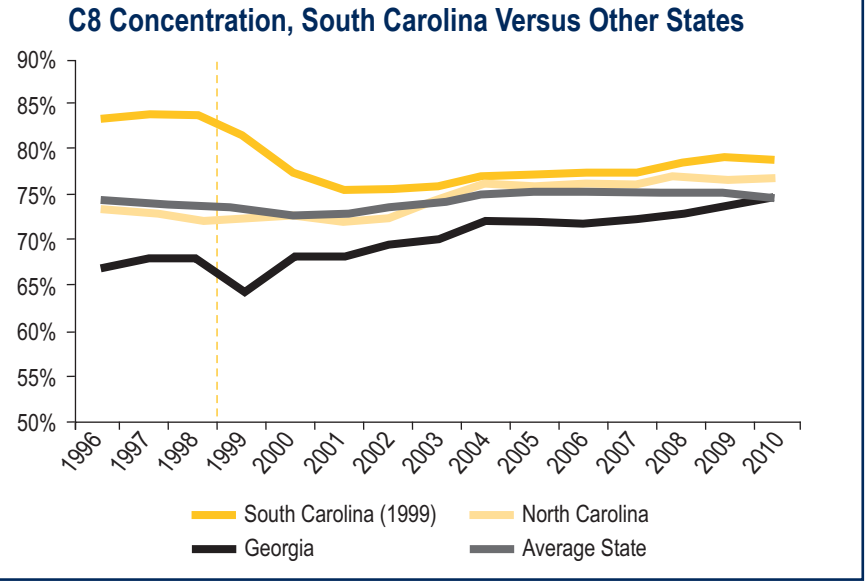
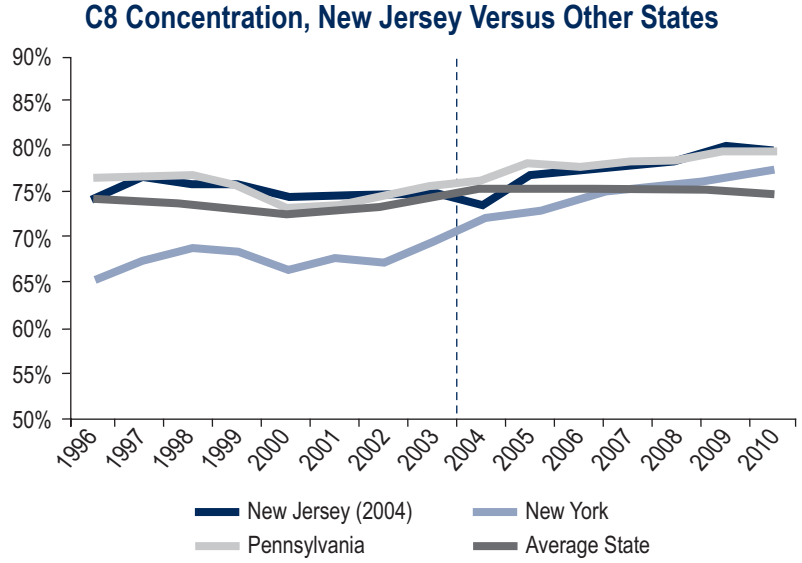


Figure 7-5 shows that market share concentration in South Carolina was much higher than the national average and in neighboring states prior to the 1999 reforms. After the reforms, concentration levels declined to levels in line with the national average and with those in nearby states.

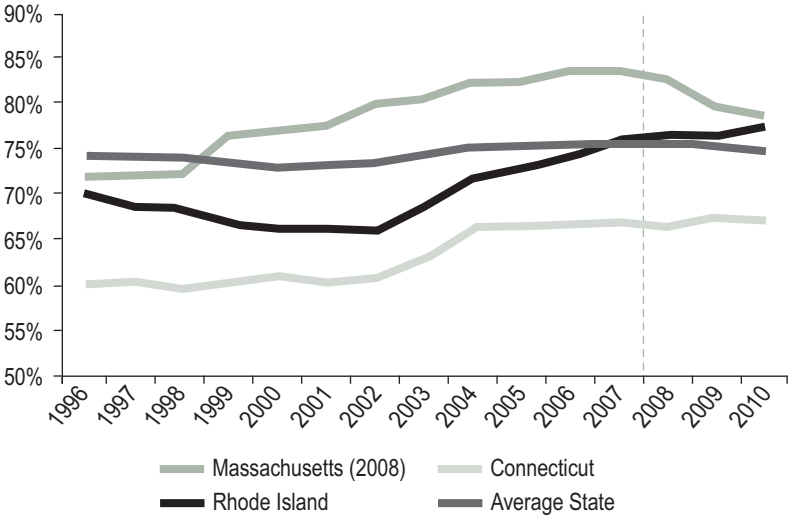
Market share concentration in New Jersey (Figure 7-6) is comparable to the national average throughout most of the time period included in the figure, and is very similar to that in Pennsylvania. Concentration unexpectedly trends upward in New Jersey after the 2004 reforms, but, because this trend is also observed in the neighboring states of Pennsylvania and New York, it may be caused by other factors.

Figure 7-6



In contrast to New Jersey, Figure 7-7 shows that market share concentration trends in Massachusetts are distinct from national trends and trends in nearby states. Concentration increased rapidly from 1996 until the 2008 reforms, reaching levels higher than the national average and much higher than levels in neighboring states. Massachusetts's market concentration declined markedly between 2008 and 2010.

Figure 7-7



Overall, competitive trends in the automobile insurance markets of South Carolina, New Jersey, and Massachusetts have been favorable since the implementation of regulatory reforms. New firms have entered the markets, market concentration has not increased, and concentration has declined after the reforms in Massachusetts and South Carolina—the two states that are more concentrated than average.

Automobile Insurance Loss Ratios

Insurer profitability levels are another important indicator of market health for the long term. Insurer profits must be sufficient to provide a normal rate of return in order to keep insurers operating in the market. However, excessive profits may indicate a lack of competition in the market. An indication of the profitability of auto insurance writings in a state may be gauged by comparing insurers' premium revenues relative to the cost of losses. This "loss ratio"—the ratio of losses incurred to insurance premiums earned—provides a rough measure of the percentage of premiums that go toward covering claims costs.

Some mark-up of premiums over losses is generally needed to cover insurer expenses and to provide a normal rate of return to capital; but a large mark-up may indicate that auto insurance premiums are excessive. Low loss ratios indicate a large mark-up of premiums over losses leading to high underwriting profits; high loss ratios indicate that mark-ups are small and underwriting profits are low. Year-to-year variations in the loss ratio arise because of random variations in claims and to cyclical factors inside and outside of insurance markets that may affect premiums; thus this measure should be evaluated "on average" over a number of years rather than on a single-year basis.

Figure 7-8 displays the statewide average loss ratio for automobile liability insurance for each of the reform states compared to the national average loss ratio in each year 1996 through 2010. Figure 7-9 displays the same loss ratio comparison for automobile liability and property damage insurance combined. For each measure, the national average loss ratio varies (cyclically) between 0.6 and 0.8 over this time period. This means that roughly between 60 and 80 percent of premiums collected are returned to consumers in the form of loss payments.

Figure 7-8

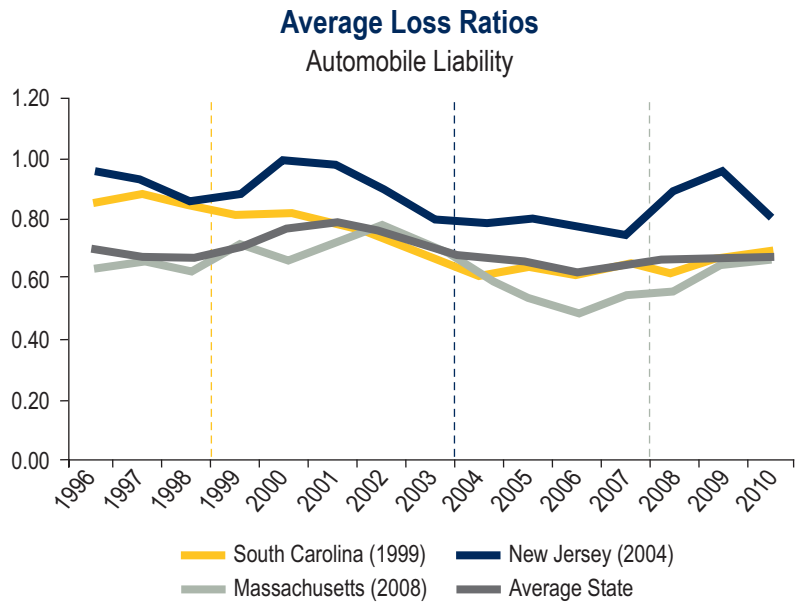
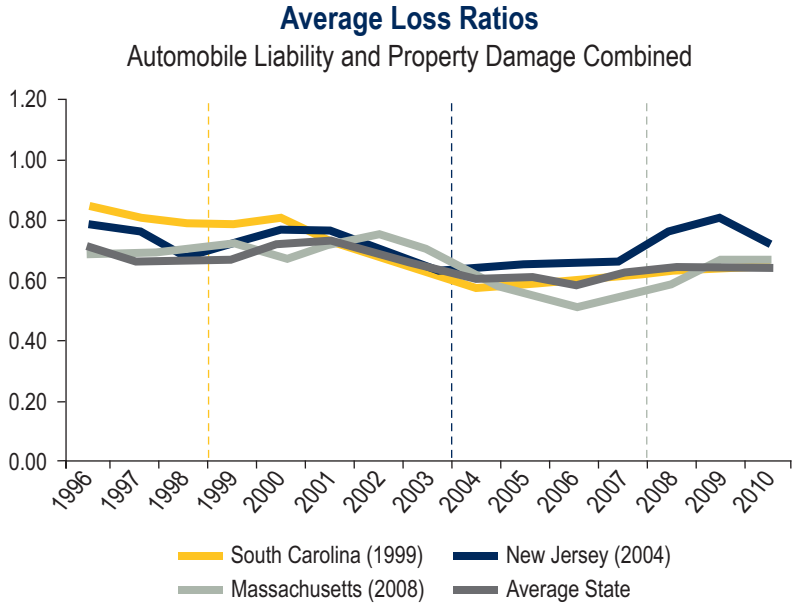


Figure 7-9



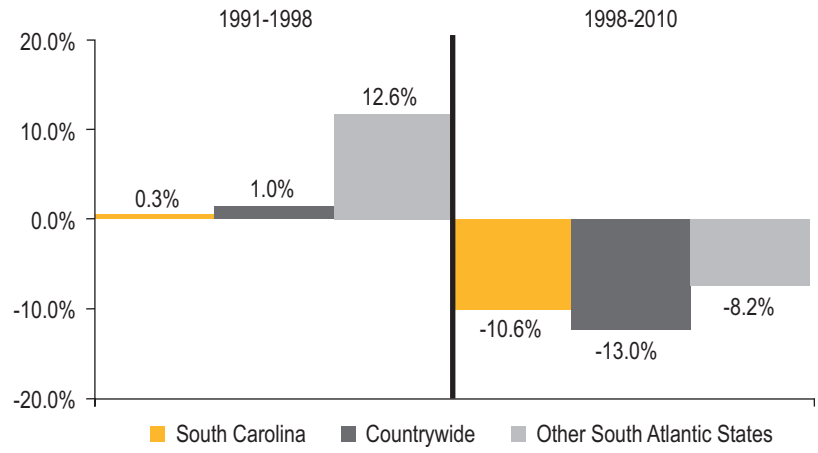
Except for a few years in Massachusetts, the average loss ratios in the reform states are above the national average, suggesting that insurers in these states devote more of the premium dollar to loss payments than in the average state. Automobile liability loss ratios for New Jersey are particularly high, in both the regulated and post-reform years. There is no indication that they are lower after the reforms. Prior to reforms in 1999, South Carolina's automobile insurers experienced a higher loss ratio than the national average. Loss ratios decreased to levels consistent with national averages after the reforms. The loss ratios in Massachusetts are generally close to the national average ratios, especially when liability and property damage are considered together. All in all, these patterns provide no indication that regulatory reforms have reduced insurer loss ratios to levels that indicate insurers are charging excessive premiums.

The Rate of Liability Insurance Claiming

The rate of automobile accidents in a state hinges on many factors, including weather, driving conditions, and road conditions. Nonetheless, comparing accident rates in a state to rates in other similar states may provide evidence on the incentives for safe driving that are provided by the automobile insurance system. Because automobile liability insurance is mandatory and most accidents damage the automobiles involved, the number of property damage liability (PD) claims per insured car is often used as an indicator of automobile accident rates in a state. With this in mind, aggregate changes in the pre- and post-reform periods are shown in figures 7-10 and 7-11 compared with countrywide average changes and with changes in nearby states, in the years prior to and after which reforms were introduced.

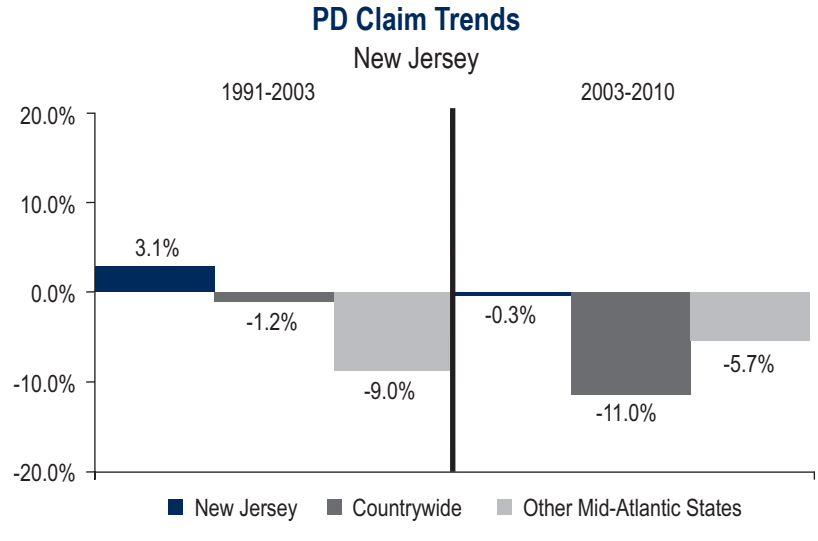
Figure 7-10 shows that PD claim trends in South Carolina are favorable relative to neighboring states. PD claims grew only 0.3 percent between 1991 and 1998 period, compared to 1 percent nationally and 12.6 percent in neighboring states. In the post-reform period, South Carolina's claim rates decreased more rapidly than in the surrounding region (–10.6 percent compared to –8.2 percent).

Figure 7-10



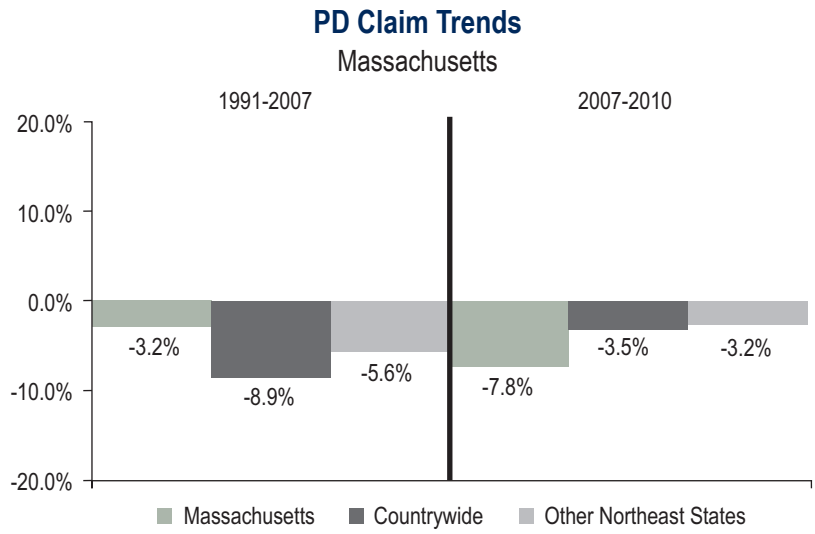
Comparisons for New Jersey are displayed in Figure 7-11. Between 1991 and 2003, the state's PD claim rate grew 3.1 percent, a much more rapid rate of growth than the 1.2 percent decline for the nation as a whole and particularly high relative to other states in the region, which experienced a decline in claims of 9 percent. In the post-reform period, New Jersey experienced a decline in PD claims of 0.3 percent. While this rate of decline was smaller than both the national average (11.0 percent) and that of other states in the region (5.7 percent), the increasing trend in claims was reversed.

Figure 7-11



Changes in PD claim rates for Massachusetts compared with other states have declined since 2008, as shown in Figure 7-12. While trends were favorable prior to the 2008 reforms, Massachusetts experienced only a 3.2 percent decrease in claims, compared with 8.9 percent nationally and 5.6 percent for other states in the region. In the 2007–2010 period, Massachusetts PD claim rates decreased 7.8 percent, a larger decrease than the 3.5 percent national average and 3.2 percent average for other states in the New England region.[38] Thus, reforms are associated with a relative improvement in PD claim rates in Massachusetts.

Figure 7-12



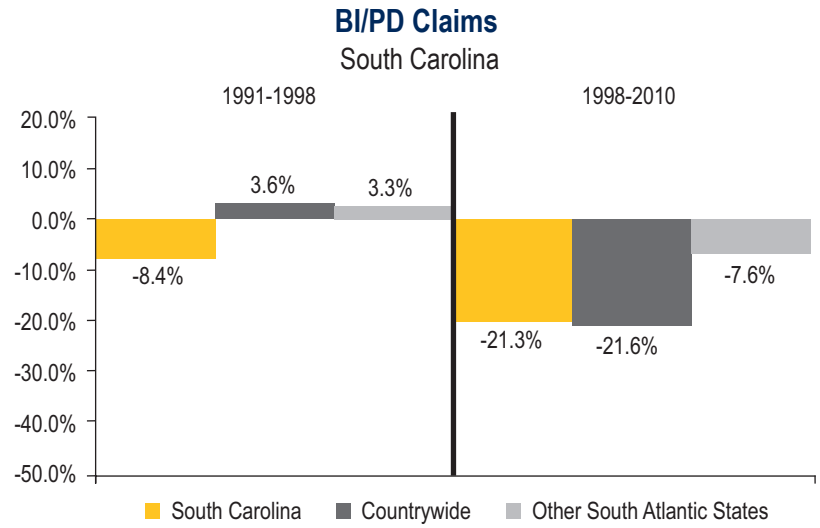
The percentage of PD claims that are accompanied by a claim for bodily injury (BI) may be viewed as providing information on the severity of accidents in a state. High rates of BI claims suggest that more accidents lead to injuries and that the accidents tend to be more severe. In addition, the rate of BI claims relative to PD claims (BI/PD) may provide information about the propensity to file unwarranted claims. Motorists may have incentives to file unwarranted BI claims because the payoff from a successful claim includes payments for non-economic losses, such as pain-and-suffering, which provide compensation in excess of actual out-of-pocket losses. Previous studies have shown that BI/PD claim rates are higher in states with stringent regulatory

[38] Results of multiple regression analysis, similar to that undertaken to analyze changes in average automobile insurance expenditures by state, confirms that the reduction in Massachusetts's PD claims rate post-reform is significantly greater when compared to other states. Regression analysis also confirms that there were no significant changes in PD claim rates in South Carolina and New Jersey post-reform, when compared with other states.

controls on automobile insurance premiums,[39] in states where consumers have more accepting attitudes toward insurance fraud,[40] and in states with fewer penalties for insurance fraud.[41] For these reasons, high rates of BI/PD claims are often used as an indication of excessive or fraudulent claiming in the automobile insurance system.

Figures 7-13, 7-14, and 7-15 compare the changes in BI/PD claiming in the pre- and post-reform periods for each state with countrywide average changes and with changes in surrounding states. In contrast to trends in PD claims, the BI/PD claim rate appears to be significantly different pre- and post-reform. Figure 7-13 shows that trends for South Carolina compare favorably with both the national average and with other states in the South Atlantic region in both the pre-reform and post-reform periods. BI/PD claim rates decreased in the pre-reform period 1991–1998, while increasing for both the surrounding region and for the nation as a whole. In the 1998–2010 time period, BI/PD claim rates decreased in South Carolina by an amount comparable to the national average, while neighboring states saw a lesser decline.

Figure 7-13



[39] RRegan, Tennyson, and Weiss, 2008, pp. 23-46.

[40] J. David Cummins and Sharon Tennyson, "Moral Hazard in Insurance Claiming: Evidence from Automobile Insurance," *Journal of Risk and Uncertainty*, 12, 1996, pp. 29-50.

[41] Robert E. Hoyt, David B. Mustard, and Lawrence S. Powell, "The Effectiveness of State Legislation in Mitigating Moral Hazard: Evidence from Automobile Insurance," *Journal of Law and Economics*, 49, 2006, pp. 427-450.

Figure 7-14

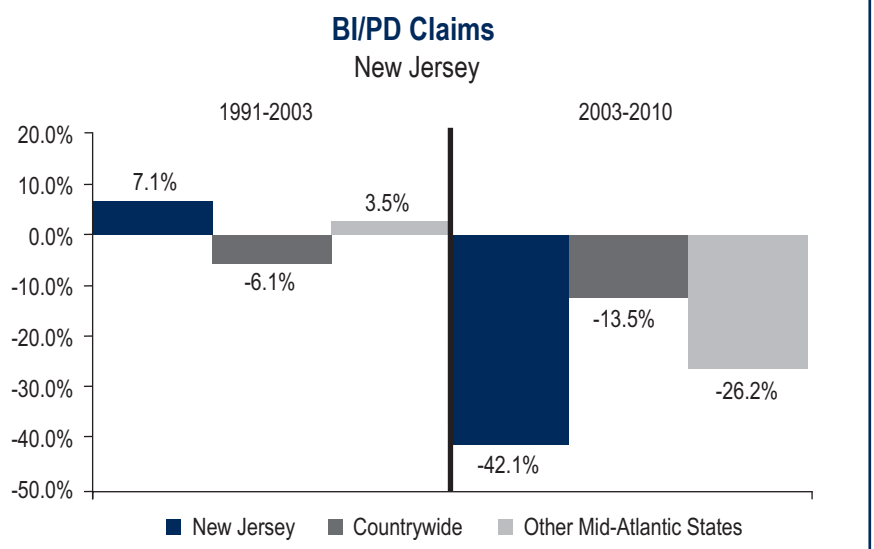
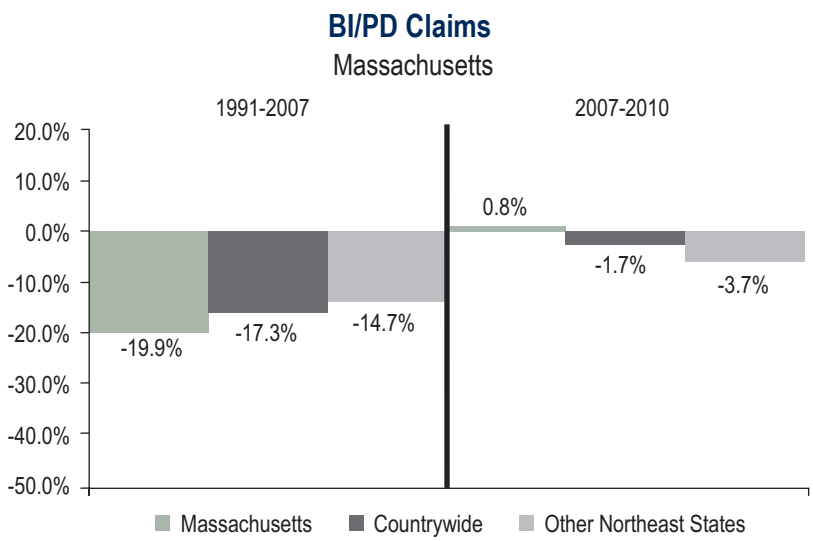


Figure 7-14 shows that New Jersey saw relative improvement in BI/PD claim rates in the post-reform years compared to 1991–2003. New Jersey BI/PD claim rates increased by 7.1 percent in the pre-reform years, compared to a 6.1 percent decline in the national average rate and a 3.5 percent increase in other Mid-Atlantic states. After the reforms, New Jersey BI/PD rates declined a startling 42.1 percent, compared with a 13.5 percent decrease nationally and a 26.2 percent decrease in neighboring states.

Massachusetts's relative rates of BI/PD claims are shown in Figure 7-15 below. BI/PD claim rates increased in the post-reform years, after declining at a more rapid pace than national or regional trends in the 1991-2007 period. Between 1991 and 2007, Massachusetts saw a 19.9 percent decrease in BI/PD claim rates, compared with a 17.3 percent decrease nationally and a 14.7 percent decrease in surrounding states. From 2007 to 2010, BI/PD rates in Massachusetts increased by 0.8 percent while neighboring states experienced a 3.7 percent decline and the national average decreased by 1.7 percent.[42] These trends were slightly less favorable than in other states, but followed a period of exceedingly rapid declines.

[42] Regression analysis confirms that the BI/PD claims rate in Massachusetts was not significantly affected by the regulatory reforms, while the states of South Carolina and New Jersey both experienced statistically significant declines in BI/PD claim rates after the reforms.

Figure 7-15



Summary

A large number of measures that reflect the health of automobile insurance markets have been examined in the pre- and post-reform time periods and compared with national and regional averages. Although the results vary somewhat depending on the specific measures and states, there are no adverse trends to suggest that the post-reform outcomes in the reform states are not sustainable. Rates of uninsured driving (UM/BI claim rates) declined in each of the three states in the study and are lower than the national average. New sellers have entered the automobile insurance markets of each reform state, and market concentration levels and trends suggest that competition among firms is likely. Insurer loss ratios are also consistent with the occurrence of market competition. Trends in loss ratios show levels that are close to national averages, and reforms have not led to high premium levels relative to loss payments. There is also no evidence of adverse safety or claiming incentives created by the reforms, since liability claim rates are changing in line with or more favorably than rates in other states. Taken together, these measures provide a clear indication that reforms have not adversely affected insurance market health.

Section 8

Conclusions

This study provides evidence of the positive impact of regulatory reforms in the automobile insurance markets of South Carolina (reformed in 1999), New Jersey (reformed in 2004), and Massachusetts (reformed in 2008). Regulatory reforms have led to a number of positive developments in these markets without leading to increases in insurance prices or reductions in insurance availability. In each reformed state, insurance premium expenditures have declined relative to previous trends or projections; insurance availability has increased or been maintained at previous levels; insurer underwriting results have been maintained or improved to be more consistent with regional or national averages; and underlying claim rates have decreased or have remained at pre-reform levels.

Of course, it is not certain that the experiences of South Carolina, New Jersey, and Massachusetts will generalize to regulatory reforms that may be enacted by other states or in other time periods. Prior to the reforms, these three states were among the most heavily regulated, and their regulatory systems had unique features that led to many market distortions. Moreover, the timing, nature, and extent of reforms differ across the three states, and available evidence on the effects of the reforms is limited in some instances, particularly for Massachusetts, which enacted reforms later than the other states. All of these considerations may reduce the ability to generalize based on these case studies.

It should also be kept in mind that, while far-reaching, the reforms in these states only reduce government oversight and do not amount to deregulation of automobile insurance rates. Remaining regulations and other features of the automobile insurance system in each state will affect market outcomes and performance. Important considerations are no-fault insurance and insurance fraud, both of which have presented significant challenges in some state automobile insurance markets.

These caveats and limitations notwithstanding, this study has presented a wealth of evidence that regulatory reform has improved automobile insurance outcomes for both consumers and insurers in South Carolina, New Jersey,

and Massachusetts. The favorable performance of the more market-based pricing regimes introduced in these states provides support for the idea that strict government oversight of automobile insurance rate-setting is unnecessary, and may in some cases be detrimental for markets and consumers.

Appendixes

I. Details on Expenditure Regressions

II. References

Appendix 1

Details on Expenditure Regressions

The regression model uses National Association of Insurance Commissioner (NAIC) data for annual average automobile insurance premium expenditures for years 1991–2008 for all fifty states. As noted in the text, a log-linear model is constructed using a specification which estimates whether the difference between each reform state's expenditures and other states' expenditures (after controlling for state characteristics) is greater or smaller in the post-reform period as compared with the pre-reform period. The regression model includes control variables for time-varying state characteristics and state-specific fixed effects, which account for any non-time varying differences in automobile premium expenditures across states. The standard errors of the estimates are corrected to allow for heteroskedasticity and for correlation within each state across time.

The control variables in the model include demographic and economic characteristics of a state that are expected to affect average automobile premiums. These are measured as traffic density, defined as total vehicle miles driven divided by total miles of roadway in the state; median household income; the statewide average expenditure per Medicaid beneficiary, defined as total Medicaid expenditures divided by the number of Medicaid beneficiaries; and the automobile fatality rate, defined as the number of automobile fatalities per mile driven. Data on miles driven, miles of roadway, and traffic fatalities were obtained from the U.S. Department of Transportation. Data on registered automobiles were obtained from the Automobile Insurance Plans Services Office (AIPSO). Data on median household income were obtained from relevant editions of the U.S. Statistical Abstract, and data on state Medicaid expenditures and beneficiaries were obtained from the Centers for Medicare and Medicaid Services (CMS).

Control variables reflecting a state's legal and regulatory environment for automobile insurance are also included in the model. These consist of an indicator for whether automobile liability insurance is compulsory; indicators of a state's laws on rate regulation and no-fault auto insurance; and an indicator of the availability of first-party injury benefits outside of a no-fault regime (so-called "addon" benefits). Data on states' rate regulation regimes in each year were obtained from Harrington (2002) and from the Insurance Information Institute (III, 2009). Data on states' no-fault and compulsory automobile insurance laws were also obtained from III.

The model also recognizes that a state's average automobile insurance expenditure will be affected by insurance purchase amounts. Differences in household income (included in the model) will partially account for different average purchase amounts across states, but state minimum and maximum coverage limits will also play a role. Thus, the regression model includes the minimum required coverage limits (if any) for bodily injury and property damage liability insurance, and the maximum first-party limits offered in no-fault (and add-on) states. These data are obtained from III.

A final control variable in the model is the lagged automobile liability loss ratio in a state divided by the lagged countrywide average automobile liability loss ratio. This variable will capture the effects of insurance market conditions that vary by state and time, including effects associated with insurance cycles or financial market conditions. Inclusion of this control variable reduces the likelihood that these other effects are mistakenly attributed to the effects of regulatory reforms. Loss ratios are constructed as statewide liability losses divided by statewide premiums earned. The countrywide average loss ratio is the simple average of statewide loss ratios. Data on statewide losses and premiums are obtained from A.M. Best and SNL databases.

Given the inclusion of a lagged variable, the regression models are estimated using data for 1992 through 2008, and thus the number of observations in the sample is 850 (17 years times 50 states). Summary statistics for all model variables are included in Table 1.

Table 1

Summary Statistics

Variable	Mean	Std Dev
Traffic Density	0.7365	0.4809
Median Income (2008 $)	$50,031.95	$8,012.79
Fatalities per Mile Driven	0.0162	0.0044
Medicaid Spending per Beneficiary (2008 $)	$5,644.43	$1,770.02
Lag (Loss Ratio/National Loss Ratio)	1.0000	0.1197
Compulsory Liability Insurance	87.06%	
Minimum Liability Limits Bodily Injury (2008 $)	$27,493.66	$9,445.57
Minimum Liability Limits Property Damage (2008 $)	$16,795.73	$11,131.19
Compulsory First-Party Benefits (No-fault)	25.59%	
Add-on First-Party Benefits	20.12%	
PIP Payment Maximum if No-fault (2008 $)	$43,566.33	$185,760.00
PIP Payment Maximum if Add-on (2008 $)	$1,285.43	$3,683.97
Rate Regulation	56.35%	
Medicaid Spending per Beneficiary (2008 $)	$5,644.43	$1,770.02
Unemployment Rate	5.04	1.36
Uninsured Motorist (UM) Claim Frequency	0.16	0.10
Median House Price (2008 $) in (000)	$158.66	$48.96

Appendix II

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Automobile Insurance

***Trends in Auto Injury Claims*, 2008 Edition**, January 2008, 100 pages.
This report examines the frequency, severity, and loss costs associated with auto insurance claims under the PD, BI, and PIP coverages from 1990 to 2006. National and state statistics are provided. Also included is information on total auto injury loss costs and average written liability premiums from 1990 to 2004. Cost: $300 electronic version (pdf) and $315 printed version, postpaid.

Alternative Medical Treatment in Auto Injury Insurance Claims, September 2007, 60 pages.
This IRC report investigates the utilization and cost of alternative medical treatment in BI and PIP auto insurance claims. The report also documents the wide variation in the utilization of alternative treatment in different states. Cost: $125 electronic version (pdf) and $140 printed version, postpaid.

Paying for Auto Injuries: A Consumer Panel Study of Auto Injury Compensation*, *2004 Edition, June 2004, 98 pages.
The IRC's fifth consumer panel study, this report analyzes the cost of auto injuries from the perspective of persons injured in an auto accident. The study contains auto injury claim details, plus several additional measures, such as payment sources other than auto insurance, decisions about attorney involvement, and satisfaction with claim settlement. For more information, visit the IRC's Web site at www.ircweb.org.

Accuracy of Motor Vehicle Records: An Analysis of Traffic Convictions, June 2002, 72 pages.
This report examines over 50,000 traffic convictions in four states to study the accuracy of MVRs with respect to traffic convictions. It also contains details about traffic schools and other conviction avoidance methods across the United States that restrict how complete a picture of driving histories MVRs may provide. For more information, visit the IRC's Web site at www.ircweb.org.

Property-Casualty Insurance

Insurance Fraud: A Public View, June 2003, 66 pages.
This report explores public awareness of and tolerance for various forms of insurance fraud, including application fraud, property damage claim fraud, and injury claim fraud. Because recent indicators have suggested that auto insurance fraud has been on the rise in New York State, the report also explores differences between the attitudes of New Yorkers and respondents countrywide. For more information, visit the IRC's Web site at www.ircweb.org.

Fighting Insurance Fraud, Survey of Insurer Anti-Fraud Efforts, December 2001, 56 pages.
A collaboration of the IRC and Insurance Services Office, Inc. (ISO), this report presents results of a survey of companies representing 73 percent of the property-casualty insurance market. Findings show how insurers perceive the problem of fraud and the strategies and resources their companies have dedicated to fighting it. For more information, visit the IRC's Web site at www.ircweb.org.

For a complete list of available IRC publications, please contact the Insurance Research Council, 718 Providence Rd., Malvern, PA 19355-3402; phone: 610.644.2212; fax: 610.640.5388; Internet: www.ircweb.org.

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The Insurance Research Council is a division of The American Institute For Chartered Property and Casualty Underwriters (The Institutes), a not-for-profit organization dedicated to providing educational programs, professional certification, and research for the property-casualty insurance business. The Council's purpose is to provide timely and reliable research to all parties involved in the public policy issues affecting risk and insurance, but the Council does not lobby or take legislative positions. The Council is supported by leading property-casualty insurance organizations.

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