NAIC NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

# Resilient Regulatory Systems in a World of Complexity

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## ABSTRACT

The U.S. system of state-based insurance regulation has existed for over 150 years, and its state-based foundation is an anomaly in financial services regulation. The resilience of state-based regulation is due to its decentralized structure, which prioritizes experimentation, coupled with the collaboration fostered through the NAIC, which creates the foundations for efficient intervention when necessary. This balance is well-suited to regulating insurance markets, which are best described as complex adaptive systems.

1. This article is based on a keynote address at the NAIC Center for Insurance Policy and Research (CIPR) program, "Emerging from a Crisis – Building a Construct for Lessons Learned for State Insurance Regulation," Dec. 14, 2021.

## 1. Introduction

The U.S. system of state-based insurance regulation has existed for over 150 years. As a state-based system, it is an anomaly in an environment of increasing regulation by the U.S. federal government. Federal regulatory involvement in insurance regulation has increased in recent years, particularly in the context of health insurance regulation, but the system remains one that is fundamentally state-centric.

It is unlikely that the system would have remained this way for so long without some advantages to its structure. This paper, based on a keynote address delivered at a symposium celebrating the 150th anniversary of the NAIC, argues that insurance markets exhibit the characteristics of complex adaptive systems, and the structure of state-centered oversight, with states working in collaboration through the NAIC, is well-suited to regulating complex markets. The state-based system is characterized by continuing experimentation and exploration, and changes are incremental rather than revolutionary. These characteristics best meet the dynamic features of complex markets.

## 2. Some History

The record of the NAIC, previously the National Conference of Insurance Commissioners (NCIC), offers a rich history. State insurance regulators can be seen responding to the issues of the day, but over the years, themes begin to emerge. These themes reflect the industry's role in society and the challenges of adapting to an evolving risk environment that accompanies technological, societal, and economic change.

Throughout history, one can see state insurance regulators responding to the impact of financial crises on the industry. The financial crisis of 2008–2009 had parallels not only in the Great Depression but in other financial crises in the late 1800s and early 1900s. The debates in these cases were eerily similar. One could pick up the conversations from the NAIC proceedings on these prior crises and drop them right into the debate of 2008–2009. State insurance regulators discussed the nature of the liquidity risk and how to value assets where market prices had dropped precipitously. The state insurance regulators took action to alleviate the short-term stress insurers were under–i.e., regulatory forbearance–by simply changing the way the assets were valued. It is not the first time it has happened, and it was not the last, as it happened again in the most recent crisis.

Later in the 1930s, state insurance regulators can be seen struggling with how to think about the growth in annuity and single premium policies written by life insurers, the low interest rate environment, and how reserving requirements should evolve in response; and there were frequent references to the difference between bankt-te1writ fires in Baltimore and San Francisco in 1904 and 1906. Again, one can take those discussions about tackling availability and affordability issues and drop them right into today's discussions about earthquake, flood, hurricane, wildfire, and other risks.

Throughout history, state insurance regulators have partnered with others to promote risk mitigation (e.g., that was the main solution to the conflagration problems) and experimented with programs to help consumers adversely affected by risk-based pricing.

There are many more examples, but the bottom line is that the historical record provides a fascinating look at the issues of the day; what the industry was dealing with; and by implication, what state insurance regulators were dealing with. There are common themes, but the specific problems vary over time. The issues reflected broader trends in the country and world; i.e., economically, societally, and technologically. Regulatory actions were incremental and adaptive, not revolutionary, with the policy choices benefiting from the diverse perspectives of different states and the robust debates that ensued.

## 3. Insurance Markets as Complex Adaptive Markets

Over the past few decades, a new approach to understanding markets has emerged in academic circles, one that treats markets as complex adaptive systems.[2] In a nutshell, the traditional way of looking at regulation focused on the process of correcting market imperfections. In theory, policymakers were supposed to look at the features of the market that deviated from a perfectly competitive system or, at a minimum, workably competitive system, and focus their attention on those deviations. By bringing the market closer to perfect competition, the system could achieve equilibrium, maximizing the benefits that are distributed across the market.[3] In this case, a top-down regulatory system that corrects market imperfections might appear most efficient.

However, in a complex adaptive system, equilibrium is fleeting. Markets are made up of many heterogeneous–i.e., diverse–companies and individuals. They do not have perfect knowledge, but they observe, learn, and react. They watch what others in the system are doing, they form expectations about the implications and the future, and they decide what actions to take. They keep watching and learning, and their decisions and interactions evolve over time, each company and person acting based on their own motivations and understanding. They compete, and they cooperate. They are separate actors, but their actions affect the system, and they affect how others in the system

depends on a variety of factors, which essentially come down to the level of trust, facilitated by repeated interactions among the actors; the limited number of network participants; and the existence of shared understandings, routines, and conventions.

## 6. Assessing the U.S. State-Based Insurance Regulatory System

Let us consider the current U.S. system of state-based regulation in the context of these features.

### 6.1 Diversity and Exploration

Exploration is a strength of the U.S. state-based system. Diversity is an inherent characteristic, with different states having different cultures and market challenges. Our system is characterized by tension. The historical record is filled with debate. Sometimes

The reality is that states come together to hash through the issues, but they come with different backgrounds and perspectives. There is a tension between compromise and collaboration versus sticking to your guns. Given the decentralized structure and the constantly changing markets, uniformity is unachievable, and differences create friction and added costs. Some limiting mechanism is necessary.

In the U.S. system of state-based regulation, the NAIC acts as the primary mechanism for constraining diversity, while the ever-present threat of federal regulation and preemption acts as a second force.

The role of the NAIC in constraining regulatory diversity is clear from the historical record. From the beginning, there have been efforts to improve coordination and build connections across the states. A number of committees were appointed in 1871 to tackle issues, including the Committee on Blanks and a Committee on Investments. In the 1895 *Proceedings*, commissioners can be seen discussing various ways of improving coordination, and the ancestors of many of the NAIC's current initiatives can be seen there, including coordinated exams, the Financial Analysis (E) Working Group, Receivership Financial Analysis (E) Working Group, and the Valuation Analysis (E) Working Group for principle-based reserving (PBR).[7] Progress has been made over the years, although not as quickly or broadly as some in the industry would like.

Model laws may not be uniformly adopted by all 50 states, but they undoubtedly influence the ways in which states approach an issue. For example, not all states have joined the Interstate Insurance Product Regulation Commission (Compact), but it has gone far to constrain, albeit not eliminate, diversity in this area. Of course, if the system gets too far out of balance, the U.S. Congress (Congress) or other external forces will exert their own pressure.

The NAIC's Accreditation Program drives a level of uniformity in solvency regulation across the states, including statutory accounting as the primary foundation of regulatory exists to promote efficient exploitation. To summarize, the system benefits from diversity, but not too much, and the NAIC is the incubator that both fosters learning across the system while keeping the diversity of the system in check. The system tends toward diversity and must work hard to keep it in balance.[9]

The NAIC functions best as a collaboration and coordination mechanism, but

## References

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