



AMERICAN ACADEMY *of* ACTUARIES

April 13, 2012

Rep. Steve Riggs, Chair
Property-Casualty Insurance Committee
c/o Candace Thorson, Deputy Executive Director
National Conference of Insurance Legislators
385 Jordan Road
Troy, N.Y. 12180

Re: Natural Catastrophe Insurance Reform Options

Dear Rep. Riggs:

The Extreme Events Committee's Natural Catastrophe Subcommittee of the American Academy of Actuaries¹ welcomes the opportunity to respond to the National Conference of Insurance Legislators (NCOIL) on natural catastrophe insurance reform options.

The Natural Catastrophe Subcommittee believes that homeowners, insurers, and state governments would benefit from preparing to deal with the unpredictable timing and potentially severe impact of large catastrophic events, including the effects of multiple events in the same or several jurisdictions in a relatively short time span. Such events present substantial financial and societal challenges to state and federal governments and to insurers and present broad economic implications. The Natural Catastrophe Subcommittee supports public policy processes that focus on developing ways to deal with the substantial capital needs that are likely to arise in the wake of such "mega-catastrophes," and to do so in an actuarially appropriate manner.

While all states are potentially exposed to some form of natural catastrophes—hurricanes, earthquakes, tornadoes, hail, floods, winter storms, and brushfires—our subcommittee has primarily focused on hurricanes and earthquakes as the perils creating the greatest need. Our comments are organized into two sections: damage prevention and risk financing. The damage prevention section is focused on reducing the cost of natural catastrophes when they occur. Because natural catastrophes themselves cannot be eliminated, the risk financing section focuses on how we can help property owners rebuild after an event.

¹ The American Academy of Actuaries is a 17,000-member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

Damage Prevention

Damage prevention begins with proper land use planning (not building in harm's way) partnered with strong, well-enforced building codes, so that what is built can better withstand catastrophic events. At this point, this will only address new building stock, so improved land use planning and strong building codes are a long-range solution. Additional efforts to mitigate natural catastrophe damage to the current building stock are needed in the near term.

Current stock mitigation efforts should include education. The public must understand the need for, and benefits of, mitigation before it will willingly undertake any such efforts.² In addition, financial incentives can reduce the payback period (number of years for savings to offset the cost). Educational materials on mitigation currently exist for most natural catastrophe perils. But because much of it has been developed by insurers, some may view it as biased. The public is generally more likely to act on mitigation information if it is disseminated by perceived objective third parties.

Financial incentives need to be evaluated for how well they reduce the payback period for incurring mitigation costs. In addition, many property owners evaluate the payback period relative to how long they anticipate owning their property. The following are examples of financial incentives to mitigate:

- **Premium Credits**—Premium credits should reflect the reduction in losses expected from the presence of mitigation enhancements. Given the low frequency of catastrophic events for an individual building, the premium savings alone will not lead to a short payback period.
- **Grants for Retrofitting**—A state provides grants or matching grants to homeowners to share in the cost of improving a home. Such a program encourages the general public to recognize that it is in the best interest of the state to assist in reducing damage to homes that are in catastrophe-prone areas. Such grants have been developed in Florida and South Carolina.
- **Tax Deductions/Credits**—Another option is using personal income tax breaks to encourage consumers to retrofit their properties. Obviously, this is not an option in states that have no personal income tax. Additionally, in low-income households, tax credits may need to be provided to offset retrofitting costs.

Risk Financing

To participate in a market, insurers need to have a reasonable expectation of an adequate return on the capital exposed to catastrophes. In some of the greatest catastrophe exposure areas of the country, the amount of capital required to ensure payment of claims and replacement capital to remain in business after an event is deemed to be beyond the capacity of the private insurance market. In these cases, it has been necessary to engage additional capital sources, including

² For example, the [Insurance Institute for Business and Home Safety](http://www.insuranceinstitute.org/) provides information and expertise on building codes, mitigation, and retrofitting, among other topics. Key elements are statewide building codes that reflect the perils faced in various parts of a given state, strong licensing requirements for code officials and contractors, and mandatory enforcement of building codes. See also <http://homeownersinsuranceguide.flash.org/index2.htm> (last visited on April 11, 2012).

federal and state governments, insureds, securities markets, and the public, along with insurers and reinsurers.

Rate Adequacy

To participate in a market, insurers must have a reasonable expectation that they can charge an adequate rate, a rate that will cover both the expected losses to be paid and a reasonable return for their cost of capital. The main challenge for U.S. insurers in funding major catastrophe losses is the enormous amount of capital that is required to ensure payment of claims and the replacement of that capital after it is depleted. A \$100 billion or larger event is certainly plausible for natural disasters like hurricanes and earthquakes. Because exposing that much capital to loss entails a high degree of risk, capital markets require a significantly higher return to justify their investment.

For catastrophe risks, the following are critical components of an effective regulatory and/or statutory structure governing rate adequacy:

- **Use of Catastrophe Models** in ratemaking must be allowed. These models are the best source of information on projected losses. Actual history is inadequate for estimating losses, so historical loss information must be augmented with information provided by models. Statutory acceptance of models is necessary for achieving a reasonable loss component in rates.
- **Reflecting the Cost of Capital** is essential to obtain an adequate return. Many state laws and regulations do not explicitly address this aspect. In addition, because of the low frequency of catastrophe events, regulated rates often are held below the true costs of the underlying capital required to cover the uncertainty, the volatility, and the risk of impairment or ruin due to high severity losses. The cost-of-capital component is highly significant in high catastrophe areas due to the large volume of losses that can be generated. Reflecting true costs of capital can lead to profit loads in insurance rates that exceed historical levels—but those levels often are required for a fair return and to keep the market active.
- **Reflecting Reinsurance Costs** and other risk transfer funding in rates is essential. Reinsurance is a critical risk transfer component for insurers in catastrophe-prone areas to ensure capital sufficient to cover losses. Insurers transfer a portion of their risk to a reinsurer, and, in turn, reinsurers are able to diversify the risk by accepting risk from multiple companies in many diverse geographic areas. In catastrophe exposures, relatively high levels of loss are transferred to the reinsurer. The high cost of capital for commensurately high levels of catastrophe exposure must be recognized and reflected in rates.

Increased Private Market Involvement

The more companies that participate in a market, the broader the capital base and the more widely available coverage can be. As a result, efforts to increase private market involvement can lead to easing of availability issues. Some examples of incentives to increase private market involvement are:

- **Premium Tax Credits** would allow states to use premium tax credits to encourage more insurance company involvement in the catastrophe market. However, while this could be marginally helpful, the potential amount of premium tax credit would not be large enough to encourage companies to change their policies in coastal areas. The tax credits can be viewed as an additional marginal return on capital, but they do not provide a sufficient volume to solve the issue of increased capital.
- **Higher Deductibles** would help by allowing insurers to share the costs of losses with insureds, broadening the capital available to fund losses and allowing insurers to offer coverage to a broader portion of the market. With a premium credit commensurate with a higher deductible, insurance premiums are more affordable. This also encourages property owners to take more personal responsibility to mitigate losses—both before and after an event—to reduce their ultimate costs.
- **Residual Market Buyout Strategies** have been attempted to get new carriers to enter a market and depopulate residual markets. The experience in Florida does not show this to be a long-term success. Several companies initially entered and depopulated the residual market, but after the three-year requirement was over, this business reverted back to the residual market. Market conditions had not changed significantly during that time, so the private market was not able to sustain all of the exposure. Such a buyout program would be more effective if used in conjunction with other programs that change the market dynamics to make the private market more attractive and encourage new entrants to stay.

Residual Market Mechanisms

Private market capital is leveraged to support multiple lines of insurance, and, if exhausted, it would impede the ability of insurers to continue writing all lines of insurance. The threshold for public involvement in the natural catastrophe insurance industry must be at a level below that which would exhaust private market capacity and yet not compete with the private industry. Residual market pools or funds are a means to create a broader capital base to support catastrophe risk. These residual market mechanisms use various components to develop this broader base, several of which are addressed below.

- **Tax-Free Surplus Buildup**—Rather than distribute profits, the residual market should retain any unused funds in a year and be permitted to build them up as additional funds for use in the event of a loss. The residual market should be designed to qualify for tax-free surplus buildup, which would accelerate significantly the accumulation of funds.
- **Post-Event Assessment**—It takes time for funds to accumulate to cover the cost of an event. Assessments levied after an event are a means of spreading the capital need over a longer period of time, and “borrowing” against the future. Consideration must be given to the potential weight of these assessments on future premiums so they do not lead residents and/or businesses to leave the state or go uninsured. In addition, significant post-event assessments, especially in cases in which insurers advance funds and recoup losses from future surcharges, can discourage insurers from staying in catastrophe-prone markets.
- **Broader Assessment Base**—Residual markets often include additional lines of business in the post-event assessments. This helps to broaden the base of contributors by bringing in

insureds that would not otherwise participate. While this allows the assessment in each line of business to be lower, the cumulative cost of all assessments on a policyholder must be considered, and care must be taken to ensure that the aggregate assessment cost on individual policyholders is not onerous.

Residual markets can have cost advantages over private markets, primarily by using post-event capability in lieu of holding capital. Since residual markets are intended to augment, not supplant, the private market, rates should be set at an adequate level to ensure that the residual market is not competing with the private market. Residual markets should operate as markets of last resort. Limits on the ability of residual markets to charge adequate rates require subsidies, which are counter-productive even in the short term.

Federal Tax Policy

We would be remiss if we did not emphasize the potential benefits of a targeted change to federal tax policy on natural catastrophe insurance, even though we recognize this is beyond NCOIL's scope. Changes to federal tax policy may offer the greatest beneficial opportunity for improvement by promoting and encouraging pre-funding of an event. It would take a period of time to build up the funds, however, so the benefit would be minimal for the purpose of funding a catastrophe that occurs in the first few years. Tax reform options include:

- **Allowing insurers to build up tax-free catastrophe reserves**—In years of low catastrophe losses, insurers currently must treat the unused catastrophe funds as profit and pay taxes on it. If these funds were allowed to accumulate tax-free as a designated reserve for catastrophes, it would alleviate the pressure to hold other capital. The funds after taxes now accumulate as retained earnings, and they are treated as any other capital. The insurer has to decide whether to put this capital at risk to underwrite additional business in the catastrophe area or use it in some other aspect of its business. By creating dedicated catastrophe reserves, the capital only can be used to support catastrophe business.
- **Allowing insureds to have tax-free catastrophe savings accounts**—With the prevalence of higher deductibles (hurricane, wind, or earthquake), property owners are facing greater additional costs in the event that their property is damaged. Allowing insureds to build an account on a tax-free basis to cover the deductible will better position them to avoid adverse effects after a loss.

We hope that you find these comments helpful. The subcommittee would be pleased to assist NCOIL in the further development of its natural catastrophe insurance reform proposal. If you have any questions, please contact Lauren Pachman, the Academy's casualty policy analyst, at pachman@actuary.org.

Sincerely,

Jeff McCarty, FCAS, MAAA
Chairperson, Natural Catastrophe Subcommittee
American Academy of Actuaries