

**Presentation of Birny Birnbaum
Center for Economic Justice**

NAIC Property Casualty (C) Committee Hearing

RMS says that their models are developed independently, yet, their March 2006 report states clearly that RMS consulted with industry users of their models in the development of their models. See our letter of March 2006.

Why are the cat modelers not regulated as advisory organizations? The cat modelers and ISO perform identical functions – they collect data from insurers, analyze those data with other information and produce advisory loss costs. And in many states, the portion produced by cat modelers – the cat load portion of losses – is now greater than the non-cat losses provided by ISO.

ISO -- advisory loss costs
RMS/ Eqecat/AIR -- advisory cat costs

ISO and the cat modelers perform the same functions, yet one is regulated as advisory organization and the others are black boxes unexamined by most regulators. It is simply bizarre that such black box output would be permitted by regulators.

And AIR is a subsidiary of ISO. How is it that ISO is a licensed advisory organization, but its wholly owned subsidiary performing identical activities as ISO is not regulated by the states?

Reliability of Models – Implications for How Models are Used

Eqecat says that the cat models promote business stability by reducing the uncertainty in prospective finance of natural cat risk. That's what we were promised in 1992 after Hurricane Andrew – but that has hardly been the experience and results of cat models in recent years with massive changes to cat models and cat model results after each major event.

What are models? They are computer models with what Eqecat calls “lots of degrees of freedom.” This means that the point estimate of losses is associated with a wide range of likely outcomes.

At the 2006 Reinsurance Association of America Cat Modeling Conference, Frederico W Wiseman presented the latest in a series of comparisons of the major catastrophe models – comparing outputs from the models based on the same inputs into the models. He not only found wide variation among the modelers' output, but a wide range of likely outcomes for individual models. In some cases the point estimate of expected losses from one model was twice that of another model. The coefficient of variation among the models' outputs – the standard deviation of results divided by mean – ranged from 2 to 17.

The disparity among the models and the large range of likely outcomes should have implications for how the models are used. It is clear – not only from Mr. Wiseman’s presentation, but also from the almost annual

The Near Term Model

There has been much criticism of the RMS near term model. The model basically takes their standard model and does a back-end adjustment to increase expected losses by 40% in coastal states. The back-end adjustment is a result of “expert elicitation,” which means that RMS asked a number of scientists whether they thought the next ten years would be above the historical average in terms of hurricane frequency or severity.

Of course, this approach is not objective – at

The fact is that the modelers compete with one another for insurers' business. But even if we assume the best – that end users sole interest is simply finding the most accurate model – then how do insurers choose? And how does this fit in with the fact that reinsurers in Florida are pricing based on what the market will bear instead of prices based on reasonable expected costs.

Recommendations

1. ***Investigate practices of risk modelers in terms of potential anti competitive and antitrust activities.*** Our letters set out these issues in detail.
2. ***Regulate risk modelers as advisory organizations.*** Let us suppose that Nebraska had a massive hail storm one year and a ferocious heat wave the next year. Nebraska insurers then start filing rates with 100% increases and point to changes in computer cat models. The insurers can't explain the change and the cat modelers simply say they have incorporated the latest science and climate change. And then the next year, the models change and rates double again based on new versions of cat models. What would Nebraska do? Assume that insurers and modelers are doing the right thing and that consumers just need to adapt? Not likely. Clearly it is better to have a regulatory infrastructure in place before this happens, not after the fact.
3. ***Update and strengthen the model law provisions regarding advisory organization oversight and regulation to cover all advisory activities.*** The provisions in the current NAIC property casualty rating model laws as well as the proposed rate and forms model law from 2000 that is recommended in the draft Personal Lines Regulatory Framework report – are woefully outdated. These advisory organization provisions are not used to cover many activities of advisory organizations like ISO – such as computer claim settlement models – let alone the activities of cat models. We ask that the Committee consider the possibility of national advisory organizations where part of the oversight can be done by a consortium of states as opposed to individual states performing identical functions of identical issues. Individual state oversight would focus on state-specific issues.
4. ***Create a public computer catastrophe model for consistency for regulators to use for solvency and rate oversight and which identifies and incorporates key public policy assumptions.*** The Florida commission panel of experts reflects the diversity of interests necessary to inform public policy.

5. ***Identify and provide guidance on key assumptions that are more public policy than science.*** Modelers readily admit the models' outputs are estimates within a broad range of reasonableness. Models should be tools not dictators. Regulatory / public policy input on key assumptions is also a way for legislators and regulators to take back some of the power from rating organizations.

6. ***Build on the work of catastrophe modeling as part of a broader framework for loss prevention and loss mitigation and disaster response.*** As we have said many times in the past, the only long term solution to insurance availability and affordability in the face of existing and emerging catastrophic exposure is loss mitigation – reducing the loss of life and property from an event – and loss prevention – reducing the likelihood of a catastrophe event. The most important function of catastrophe modelers should be to inform loss mitigation and loss prevention efforts instead of simply providing insurers with a rationale for financial risk management and the transfer of risk onto consumers and taxpayers.