June 12, 2015

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Chair
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National Association of Insurance Commissioners (NAIC)
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RE: CATASTROPHE RISK CHARGE IN THE P/C NAIC RISK-BASED CAPITAL (RBC) REQUIREMENTS – Conversion of Modeled Catastrophe Losses from the Occurrence Exceedance Probability (OEP) to the Aggregate Exceedance Probability (AEP) Basis

In response to the request for comment on the proposed OEP-to-AEP conversion factors for the calculation of catastrophe risk capital charges in the P/C Risk-Based Capital that are currently being tested by the National Association of Insurance Commissioners (NAIC), below we provide observations and recommendations that we hope you will find useful.

Importance of the Introduction of Catastrophe Charges in RBC

We strongly support your work to fill a significant gap in RBC by explicitly including charges for two of the most important risks and by basing the calculations of the charges on catastrophe modeling approach.

The choices you make are important also because it is preferable to build a framework that can be applied in the future, with necessary modifications, to other types of catastrophe risk that the regulators may decide to address through risk-based capital requirements. These are expected to include Tornado as an important natural catastrophe risk that has not been included in the current proposal because of the unresolved question of model credibility for tornado risk.

Ideally, the same general framework will be applicable, with only limited modifications, to the calculation of capital charges for risks such as Terrorism and Cyber Risk that can result in catastrophic losses to insurance companies. If catastrophe charges for these two risks are included in risk-based capital requirements in the future, it may also be necessary to reexamine the current assumption of independence and lack of overlap of catastrophic events, in order to take into account the growing risk of events such as those that can result from Cyber Terrorism.

The General Approach

It has been repeatedly mentioned that there are significant concerns with using OEP modeled data in calculation of the catastrophe risk exposure. We believe that the general approach of using the OEP modeled data is *flawed* and may result in

- possibility of manipulation and
- innocent mistakes leading to having a wrong view of the real catastrophe exposure of insurance companies.

We do not believe that the inherent flaws can be fully addressed by conversion factors that are applied uniformly to all companies. However, we understand that the practical realities of data availability and current practices of some companies might make it difficult to implement a sounder approach immediately. For this reason, *we support the proposed approach* of using such conversion factors as a temporary measure, with the understanding that it is intended to be a permanent solution to the problem.

Specific Comments and Recommendations

– Given the new explicit option of using modeled results on an OEP basis (with subsequent conversion to AEP), we want to bring your attention to the following sentence in the Instructions: "Using the worst year in 100 means that aggregate losses from possible multiple events in one year should be modeled and input, not the worst single occurrence one in 100 year event."

  This sentence seems to refer only to the AEP basis and not to cover the modeled results on the OEP basis. The sentence seems to refer to the input data and not the result of any subsequent OEP-to-AEP "conversion." The context also creates the impression that the statement also refers to the data for the worst year in 50, 100, 250, and 500 and not only to the worst-year-in-a-century modeled results for which the conversion factors are used.

– We also note that the following sentence has been inserted in the Instruction immediately following the sentence discussed above: "The contingent credit risk charge should be calculated in a manner consistent with the way the company internally evaluates and manages its modeled net catastrophe risk."

  Given the context, the sentence is unclear. We believe the intent is to have a narrow reference to the internal practices of modeling catastrophe risk, and further, to limit this reference primarily to the choice between the AEP and OEP modeling. The current statement appears to be too broad and subject to misinterpretation.

– We bring your attention to the need to edit (for grammar/style) the sentence of the Instructions referring to Column (7).

– We suggest that it be made clear to the industry that the current approach is temporary and that the AEP basis is preferred for catastrophe modeling and any related calculations. The current choice between the two approaches may create the impression that they are both equally acceptable.

– *We do not provide any comments on the specific values of the conversion factors chosen.*

Please note that these comments and recommendations represent my personal views and are not intended to reflect the position of the P/C Risk-Based Capital Committee of the American Academy of Actuaries, which I chaired until approximately a year ago, or the CAS Task Force on Cyber Risk, which I currently chair. These personal views should not be seen as a public policy statement nor as a position taken by any of these two organizations.

Sincerely,

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