



AMERICAN ACADEMY *of* ACTUARIES

Status Report of the Stop-Loss Risk-Based Capital Work Group to the NAIC Capital Adequacy (E) Task Force

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This progress update was prepared by the American Academy of Actuaries¹ Stop-Loss Risk-Based Capital (RBC) Work Group.

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Status Report

The Academy was charged with proposing a set of RBC factors for excess of loss products to the NAIC. The current Stop-Loss RBC Work Group is updating the work done previously by the Academy and last reported to the Health RBC Working Group of the Capital Adequacy (E) Task Force in 2002.

The work plan for the group was split into 3 phases:

- I. Data Collection and Transformation;
- II. Model Selection & Assumptions; and
- III. Variance and Ruin Modeling.

To date, we have progressed through Phase I and Phase II. As of December 2006, we have begun work on Phase III of our work plan. We have highlighted below our progress through the work plan as well as our expected next steps. We welcome any thoughts or comments from the Task Force, its members, or interested parties.

Phase I: Data Collection and Transformation

After reviewing the past Academy work, the Work Group focused on developing and circulating a survey that would include data from 1994 through 2004. Twenty companies

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that have the relevant blocks of business were contacted and we were able to capture data from a large percentage of those contacted. As part of our survey, we developed and circulated a data transformation that protects participant confidentiality and supports modeling. In order to ensure confidentiality and encourage company participation, participants were assured that, in addition to the confidentiality agreements, no member of the Work Group would see individual company experience as reported to the Academy. Consequently, no actuary has seen the data.

The Task Force should understand that the data review was only of the transformed data points and not the direct submissions. Nevertheless, the review of the transformed data points was thorough and meticulous, and the Work Group believes that it identified and addressed all questionable data points that might have a material effect on its conclusions. In our review, we emphasized gathering as much data as possible, taking the risk that some extraneous data might pass through our screen.

Phase II: Model Selection and Assumptions

A modeling small group, led by Jim Mange, was then charged to make determinations regarding model selection. Having reviewed past work, including the work done on RBC for long-term care (LTC) and disability insurance (DI), this group debated the merits of building a new model. After careful consideration, it was determined that it would be most effective for this Work Group to modify and use the existing DI model.

In addition to selecting which model would best suit our purposes, the Work Group has been moving forward in the development of assumptions. The final list of assumptions that will function in our modeling will require sensitivity testing. This will have the effect of extending the duration of time required to complete Phase III.

Phase III: Variance and Ruin Modeling

The Work Group has elected to break Phase III into two (2) distinct steps. The first step will be to focus on developing loss ratio variance assumptions for ruin modeling. Once that has been completed, the second step will focus on the ruin modeling. We have identified an individual outside of the Work Group, who will be tasked to assist us in the development of loss ratio variance assumptions. We anticipate that this work will be completed before the end of the year. Once the assumptions are in place, work on the modeling of ruin will commence.

Next Steps

As we look to early 2007, the Work Group will continue to make progress on this updated report. Our next steps include completing Phase III, finalizing our recommendations, and drafting complete documentation of both the process and the ultimate findings of this Work Group. We anticipate completing this project by the end of the first quarter in 2007. Should the Task Force prefer, we should be able to provide a preliminary report during the Spring 2007 meeting, which would then be followed by the final and more complete report at the Summer 2007 meeting.

We appreciate the opportunity to provide this progress report to the Task Force and look forward to coming before you in early 2007. If you have any questions or comments on this progress report, please do not hesitate to contact Geralyn Trujillo, staff liaison to the Work Group, at (202) 785-6924 or trujillo@academy.org.

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