



AMERICAN ACADEMY *of* ACTUARIES

Memorandum

To: NAIC HRBC Working Group

From: American Academy of Actuaries HRBC Task Force, Chair, Al Ford

Date: 12/8/01

Re: Report on LTC and Stop Loss RBC projects of the Academy HRBC Task Force

Both the LTC and Stop Loss RBC Work Groups have made considerable progress recently. Reports from their chairpersons are below. The two Groups need to select the final set of assumptions and parameters for the models that they are using, make the final runs, complete their reports and expose to the full membership of the Academy of Actuaries' Life RBC and Health RBC Task Forces. We hope to be able to make recommendations to the NAIC Life and Health RBC Working Groups at the March NAIC meeting.

Progress Report of Stop Loss Risk Based Capital Subgroup

Tim Patria, chair

Very good progress was made over the quarter to analyze a wide variety of projections using multiple claim distribution functions. A range of assumptions were also tested for each distribution function. This wide range of assumptions and distributions aid the process of honing in on the dominant drivers of the results and allow us to see the effects of various pricing assumptions such as expected profit margin and loss ratio as well as see the effect of using industry experience from the early 1990's versus the late 1990's. One dominant driver that warrants our further attention is the large impact of two industry experience data points that seem out of range. A data point represents the claims experience for a single company for a single year. Our current range for the RBC recommendation is 20%-30% of premium for aggregate and individual stop loss combined if we exclude these two data points and 30%-40% if we include both points. We will work through the Academy to check the accuracy of this data. Additional projections are scheduled for the next quarter to further refine the ranges stated above.

Bob Yee, Chair

During the past two months, we have focused on the selection of assumptions to be used in the modeling process. We have made corrections to a few of the anomalies in the loss ratios data. Using the results of the survey we have done earlier, we have begun to settle on a set of ranges of model assumptions. We have made initial modeling runs to assess the sensitivity of each model assumptions. Moreover, we have made decisions regarding the following:

- the selection of model assumptions to account for the growth of the LTC market during the next 5 to 10 years,
- the impact of policy termination experience during the modeling horizon, and
- the use of industry-wide data and individual company's data for claim variability.

We intend to complete the modeling by the middle of January and prepare to present our findings and recommendations during the Spring NAIC meeting.