



AMERICAN ACADEMY *of* ACTUARIES

October 1999 PROGRESS REPORT

AMERICAN ACADEMY OF ACTUARIES DI/RBC/SL/LB RBC WORKING GROUP

Chair: Burt Jay

TO: NAIC LIFE RBC WORKING GROUP
NAIC HORBC WORKING GROUP

September 20, 1999

The Academy of Actuaries DI/LTC/SL/LB Working Group continues to work on developing long term recommendations for the RBC formula factors for disability income, long term care and stop loss products for the Life and MCO RBC formulas. Progress has been made but bottlenecks have occurred, mostly related to the collection of experience data from insurance companies writing these products.

Concurrent sessions at the Valuation Actuaries Symposium in September and the SOA Annual Meeting in October will describe the methods, progress and goals of the Working Group. A number of changes to the NAIC HORBC and MCORBC formulas have been approved earlier this year by the NAIC.

DI SUBGROUP

Work of this Subgroup has been delayed during the data gathering process. Final long-term recommendations are now expected in early March of next year.

The Subgroup has contacted over 50 companies to provide historic statutory data for several types of disability products. Only a few had been returned by the third week of September, but more are expected over the next several weeks. This Group has developed a simplified Excel spreadsheet model designed to relate the historic volatility of loss ratios directly to RBC requirements. The more complex model used in the 1994 study will also be employed on a limited basis as a consistency check.

LTC SUBGROUP

This Subgroup has collected experience data from the NAIC from Form A of the Annual Statement. This should speed up the data gathering process from what it would have been if experience were collected directly from insurance companies. This Group is using both the model (updated) used in the 1994 study and, as a consistency check, another model furnished by one of the Subgroup member's company. This Subgroup is

still hoping to present a recommendation in late November, for the December NAIC meeting.

STOP LOSS SUBGROUP

This Subgroup is also still targeting the December NAIC meeting for a long term RBC recommendation for Stop Loss coverage. They will send out a letter and spreadsheet to companies that write this line of business around the end of September. Modeling will soon begin with a variety of assumption sets. When the experience data is gathered, the results of the modeling assumption sets that match the actual experience most closely can be selected for the RBC recommendation. This allows data collection and modeling to take place concurrently.

American Academy of Actuaries

DI Subgroup Report

Dennis Lauzon, Chair Nick Bieter Kevin Farley Scott Hagland Robert
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 Leigh Wachenheim

Timeline

The current timeline, below, extends the prior time line approximately 4 months.

DI Subgroup – Plan (9/17/99)

Step	Time
1. Final Submission of methodology Questions	2/5/99
2. Phone conference on methodology questions	2/12/99
3. Model group outline model changes needed based on methodology	2/26/99
4. Data group to outline data gathering plan	2/26/99
5. Methodology group to report on past practice	2/26/99
6. Conference to review status, timing steps, deliverable to March NAIC.	2/26/99
7. Methodology group to provide pros and cons of open questions	3/13/99
8. Conference to finalize methodology questions	3/19/99
9. Report on model group of work and timing to adjust model	4/2/99
10. Data group to provide plan for gathering data	4/2/99
11. Gather initial data for testing	5/21/99
12. Modify model	5/21/99
13. Conference on work to finish data gathering and model	9/24/99
14. Test model with raw data	10/11/99
15. Prepare template for final report	10/18/99
16. Scrub data	11/23/99
17. Provide preliminary results	12/6/99
18. Phone conference on results and next steps additional analysis needed.	12/13/99
19. determine \$ impact of changes	12/20/99
20. Review new work.	12/27/99
21 Prepare preliminary results for NAIC and public comment	1/17/00
22. Consider steps/work to incorporate public comment	2/8/00
23. Prepare final recommendations for NAIC	3/5/00

Issues Addressed

A presentation has been prepared for the 1999 Valuation Actuary Symposium and the 1999 Annual meeting of the Society of Actuaries. The presentation will help communicate the work being done by the subgroup and solicit feedback.

Over 50 companies have been contacted to provide historic statutory data by the following disability product types:

- 1. Group LTD**
- 2. Group STD**
- 3. Individual Non-can**
- 4. Individual Other**
- 5. Credit DI**
- 6. Accident only DI**

Six surveys have been returned, but we are expecting several more over the next several weeks.

Review of the data submitted and follow up question is currently underway.

A second version of an excel spreadsheet to model the risk based capital for DI products will be circulated among the subgroup for review by late September.

LONG TERM CARE SUBGROUP

Bob Yee, Chair
Mike Abroe
Linda Ball
Bob Darnell
Mark Dinsmore
Norm Hill
Yang Ho
Roger Martin

Dan Nitz
Amy Pahl
Jerry Rankin
Jim Reiskytl
Larry Scheinson
Allen Schmitz
Larry Segal
Marc Slutsky

October 1999 RECOMMENDATION TO THE NAIC

Our mission is to:

1. Make recommendations on RBC formulas for LTC for the year 2000 & beyond.
- and
2. Develop a plan for periodic review/refinement in the future.

We organized into 2 smaller groups of 5-6 member each. One group is examining the data issue & the other is dealing with modeling issues.

The Subgroup has received Annual Statement (LTC Experience Form A) experience data from the NAIC. A preliminary review indicates that the data received is usable and will provide experience loss ratios at around 1,000 data points.

The Subgroup plans to utilize two models, one furnished by Milliman & Robertson and one furnished by Northwestern Mutual. These models have been studied and their similarities and differences identified and documented. The Northwestern Mutual model will be used as a reasonableness check against the Milliman & Robertson model.

The actual modeling is planned to start on October 15, after the NAIC data is scrubbed and the Subgroup has agreed on the model assumptions. A draft of the recommendations for new LTC RBC factors for the MCORBC and Life RBC formulas is expected by November 20, 1999, after the Subgroup has signed off on the validity of the models in representing actual experience.

Progress Report of American Academy of Actuaries Stop Loss Risk Based Capital Subgroup

Tim Patria, chair
David Hanson
Jim Mange

Darrell Knapp
Leigh Wachenheim

The group continues to target the December 1999 NAIC meeting for a stop loss RBC recommendation to be applied to years after 1999. This date would be pushed into the future if sufficient experience information from the industry is not available by the end of October. We continue to support our proposed interim RBC recommendations for use in 1999.

The group has built the letter and the spreadsheets to be distributed to the industry to solicit experience information. These items will be sent to the target companies within the new couple of weeks. We have requested responses by the end of October.

The group has chosen the assumptions and sensitivities to use in the projection model. We will soon begin to use the model to produce sensitivity analysis on the various model assumptions concurrently with the solicitation of the industry experience data. This should allow us to use these projections to develop the final recommendation once the industry data has been collected without the need to rerun the models.

September 17, 1999

