LRWG Report to LHATF

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David Neve

Co-chair, Life Reserves Work Group

Gary Falde

Chair of LRWG Asset Subgroup

Agenda for LRWG Presentation

1. Describe changes since the December drafts
2. Summarize outstanding technical issues
3. Present LRWG priorities for 2007
4. Open discussion of LHATF concerns with LRWG proposal
5. LHATF vote to expose for comment the updated draft of the LRWG proposal
6. Discuss alternative simplified approaches to the LRWG proposal

Summary of Recent Changes to Proposed LRWG Approach

1) LRWG proposal has been combined into single document

- The 3 documents exposed for comment at the December LHATF meeting (Model Regulation and 2 Actuarial Guidelines) have been combined into a single document.
- Uses a "requirements format" that is the common template that will be used for all requirements placed in the Valuation Manual.
- Thus, this draft of the LRWG proposal is now in a form that is ready to be placed in the designated section of the Valuation Manual.
- This "requirements format" template is not final, but putting the LRWG proposal into this format will provide an example of what the Valuation Manual might look like.

Summary of Recent Changes to Proposed LRWG Approach

2) Identified risks that can be excluded from LRWG reserve calculation

- A drafting note was added to Principle 1 that lists the types of risks that are not required to be included in the reserve calculation (i.e., risks that are of a general business nature that are not readily quantifiable, which include risks historically viewed as C4 risks).
- This was done in response to the decision of the Consistency Work Group to add the following statement to the definition of a Principles-based system for statutory reserves and RBC:

  “ Reflects risks and risk factors in the calculation of reserves and capital that may be different from one another and may change over time as products and risk measurement techniques evolve, both in a general sense and within the company’s risk management processes.”

Summary of Recent Changes to Proposed LRWG Approach

3) A new Principle was added (Principle 2) to require that all Risk Factors included in the company's risk assessment and evaluation processes shall be reflected in the reserve methodology (with exceptions if certain conditions are met).

4) Expanded Principle 5 (which addresses the determination of assumption margins) to include a reference on the importance of achieving an appropriate aggregate impact of margins on the Reported Reserve.
   - Wording is consistent with VACARVM
   - Additional wording is needed in the requirements to address concerns on how Principle 5 will impact the determination of Margins on each Risk Factor

Summary of Recent Changes to Proposed LRWG Approach

5) Scope section has been eliminated
   - Scope will be addressed elsewhere in the Valuation Manual.
   - Prior LRWG draft identified products that were excluded from PBA; the current draft is silent.
   - Leaves open the possibility of alternative PBA approaches, such as “PBA Lite” and phase-in of certain products.

6) Reporting of experience requirement has been dropped (is now in proposed new SVL)

7) “Best Estimate” and “Prudent Best Estimate” terminology has been changed to “Anticipated Experience” and “Prudent Estimate” respectively.

Summary of Recent Changes to Proposed LRWG Approach

8) The requirement to use a prescribed credibility method for blending mortality experience with an Industry Table (e.g., the Canadian Normalization Method) was replaced with a requirement that allows the actuary to select the credibility method, but the credibility method must meet certain conditions.

9) The description of the stochastic modeling exclusion was enhanced and clarified.

10) The requirements to determine policyholder behavior assumptions were:
    - Streamlined to eliminate duplicative wording that, subject to adoption by the ASB, may be in the new PBR ASOP; and
    - Reorganized to add clarity to the requirements

Summary of Recent Changes to Proposed LRWG Approach

11) A new "Provision for Model Understatement" (PMU) was added

- Added after the comparison of the Deterministic Reserve to the Stochastic Reserve to determine the final Reported Reserve
- Purpose of the PMU is to reflect the aggregate impact of material approximations, simplifying assumptions or simplified techniques used in the cash flow model (not covered by assumption margins) that results in the Reported Reserve being understated
- Primary motivation was to address concerns over the limitations of the cash flow model to appropriately model complex derivative programs.
- The PMU concept is replacing the 3 pages of guidance that came from VACARVM

Summary of Recent Changes to Proposed LRWG Approach

"Provision for Model Understatement" (cont)

- PMU cannot be negative
- PMU does not add to or supersede other requirements
- There are no specific requirements on the method used by the actuary to determine the PMU.
  - Will involve actuarial judgment
  - The actuary might choose to use an enhanced version of the cash flow model, or a model outside the cash flow model to estimate the PMU
  - Practice note will describe possible approaches

Summary of Recent Changes to Proposed LRWG Approach

12) The requirements on modeling derivative instruments and derivative programs, including hedging strategies, was revised and streamlined.

Key Elements of Derivatives Provisions

- Encompass broader scope of programs than VACARVM, appropriate to general account and separate account products
- Derivative Program definition and treatment in methodology
- Conditions on modeling of Derivative Programs
- Relationship to the Stochastic Modeling Exclusion
- Relationship to the Provision for Model Understatement
- Documentation / certification requirements

Derivative Programs Defined

- Individual derivative instruments viewed in context of “programs” of the company approved by a company’s Board or subcommittee
- Includes both hedging and non-hedging programs (e.g., replication, income generation)
- “Derivative Asset Programs”—combined with asset cash flows in the model (i.e., handled the same as an asset)
- “Derivative Liability Programs”—combined with liability cash flows in the model
- Actuary determines whether each program is more appropriately grouped with assets or liabilities—any change must be disclosed
- Actuary judges how to allocate Derivative Liability Program cash flows to individual policies for Deterministic Reserve—still an open issue needing more review

Conditions on Modeling of Derivative Programs

Subsections 5(E)(8)-5(E)(9)

- Existing derivatives allocable to a block—always modeled for both Stochastic Reserve (SR) and Deterministic Reserve (DR)
- Future transactions related to the block
  - If part of a hedging program that qualifies as a Clearly Defined Hedging Strategy (CDHS), they shall be modeled for both SR & DR
  - If part of a hedging program that does not qualify as a CDHS, they cannot be modeled in either the SR or DR
  - If part of a non-hedging Derivative Program, they shall be modeled as part of investment strategy for both SR and DR if normally modeled in the company's risk assessment and evaluation process
- CDHS qualifications similar to VACARVM
- Drafting note recommends review of CDHS requirements and treatment of non-qualifying hedging strategies as NAIC gains experience with PBR and as hedging programs mature

Derivatives and Stochastic Modeling Exclusion

Subsection 5(H)(5)(f)

- Derivatives' effect on eligibility of a block for exclusion
  - Existing positions may be considered in determining eligibility, i.e., that tail risk has been hedged, subject to evaluation of any residual risk exposure (subparagraphs (c)(ii) and (d)(v) of subsection 5(H)(5))
  - Blocks with investment strategies that include Clearly Defined Hedging Strategies (i.e., with future transactions) are not eligible—strategy needs to be modeled over the stochastic scenarios
  - Placeholder for NAIC-approved exceptions
- Modeling of derivatives under Modified Deterministic Reserve if exclusion has been elected
  - Existing positions always modeled
  - Future transactions not allowed, whether for hedging or non-hedging programs

Derivative Programs Additional Provisions

- Ultimate goal is for the Cash Flow Model to recognize all benefits, risks, and costs of Derivative Programs (examples are given in the requirements)
- Material risks of Derivative Programs that are not fully captured in the Cash Flow Model shall be reflected in the aggregate estimate of the Provision for Model Understatement
- Documentation of Derivative Programs
- Certifications similar to VACARVM
  - Actuary
  - A company financial officer

Outstanding LRWG Technical Issues

1) Determination of assumption margins
   - On each of the individual risk factors, or in the aggregate?
   - What to do when experience data is lacking?
2) Risks to be excluded from reserves (purpose of reserves vs. capital)
3) Reinsurance issues (such as treatment of non-proportional and/or catastrophic coverages)
4) Additional guidance on modeling derivative programs
5) Grading period for mortality credibility weighting
6) Address concerns with the calculation of the Margin Ratio
7) Additional guidance on Non-guaranteed elements

LRWG Priorities for 2007

1. Finalize outstanding technical issues.
2. Develop recommendations on prescribed elements.
   - CTE level
   - interest rate and equity assumptions for Deterministic Reserve
   - net spreads on reinvestment assets
3. Perform additional product modeling and analysis.
4. Consider suggestions resulting from discussion between the ACLI and with U.S. Department of Treasury.
5. Review comments received on the exposure draft.
6. Address alternative, simplified PBA approaches.

Alternatives to current LRWG Proposal

1. Subgroup under Mike Boerner's Valuation Law and Manual Team was formed to address transitional issues and concerns raised by small companies.
2. Discussion was held with LHATF on 2/9 via conference call on possible alternatives to the "full blown" LRWG approach.
3. Three possible alternative approaches under discussion:
   - Phase in the LRWG requirements by product type.
   - Add simplifying elements to the current LRWG approach to address the concerns above.
   - Develop a new "PBA Lite" approach that is outside the LRWG framework, but still meets PBA principles.

Status of LRWG Proposal

- The LRWG believes the proposal is ready from an actuarial perspective to be included in the current draft of the Valuation Manual.
- Consideration will need to be given to the amount of desired "final readiness" that is needed in order for it to be placed in the Valuation Manual as part of its expected exposure in May.
- Since it is expected that needed "tweaks" and refinements after the Valuation Manual is adopted can be implemented via the process to update the Valuation Manual, until this process is finalized, we may need to defer calling the LRWG proposal "final" even though it is contained within the Valuation Manual.

Status of LRWG Proposal

What areas of concern does LHATF have with the current draft of the proposal?

Action Item:

Vote to expose for comment the updated versions of the LRWG's Proposed Requirements for Principles-based Approach for Life Insurance Reserves