



AMERICAN ACADEMY *of* ACTUARIES

**Update of the American Academy of Actuaries’
Life Capital Work Group**

**Presented to the National Association of Insurance Commissioners’
Life RBC Working Group**

March 2008

The American Academy of Actuaries is a national organization formed in 1965 to bring together, in a single entity, actuaries of all specializations within the United States. A major purpose of the Academy is to act as a public information organization for the profession. Academy committees, task forces and work groups regularly prepare testimony and provide information to Congress and senior federal policy-makers, comment on proposed federal and state regulations, and work closely with the National Association of Insurance Commissioners and state officials on issues related to insurance, pensions and other forms of risk financing. The Academy establishes qualification standards for the actuarial profession in the United States and supports two independent boards. The Actuarial Standards Board promulgates standards of practice for the profession, and the Actuarial Board for Counseling and Discipline helps to ensure high standards of professional conduct are met. The Academy also supports the Joint Committee for the Code of Professional Conduct, which develops standards of conduct for the U.S. actuarial profession.

Life Capital Work Group

Peter Boyko, F.S.A., F.C.I.A., M.A.A.A., Chair

Nancy Bennett, F.S.A., M.A.A.A.
Martin Claire, F.S.A., M.A.A.
Arnold Dicke, F.S.A., M.A.A.A.
Allen Elstein, F.S.A., M.A.A.A.
Shawn Loftus, F.S.A., M.A.A

Craig Morrow F.S.A., M.A.A.A..
Dave Neve, F.S.A., M.A.A.A.
Stuart Silverman, F.S.A., M.A.A.A
David Smith, F.S.A., M.A.A.A
Kenneth Vande Vrede, F.S.A., M.A.A.A

At the request of the NAIC's Life RBC Work Group (LRBCWG), the Academy's Life Capital Work Group (LCWG) is submitting this report to update the LRBCWG on its recent activities and future plans.

I. Background

The most recent LCWG report, July 2007 Report of the American Academy of Actuaries' Life Capital Work Group Presented to the National Association of Insurance Commissioners' Life Risk Based Capital Work Group, was discussed on a LRBCWG conference call in mid-July. The basic structure of the recommendation was that C-3 for life products would be an after-tax CTE90 TAR less the statutory reserve held on the policies being evaluated, and that the calculation would apply to all policies in force. A number of suggestions were made to improve the clarity of the report. The July report was exposed for comment through Labor Day and LRBCWG had a call to discuss the comment in mid-September.

On the September call LCWG was asked to prepare a document which better describes the purpose and use of the Alternative Amount and also provides an example of how the Alternative Amount might be determined.

The Alternative Amount serves as a means of simplifying the calculations – the actuary would determine this using systems and methods deemed appropriate by the actuary, so long as the amount determined was consistent with the CTE90 TAR that would have been calculated had the stochastic paths been run.

It was also requested on the call that the LCWG extend the comparison of C-3 Phase III and C-3 Phase II to include a comparison to the Life Reserves Work Group's (LRWG) proposal for life reserves.

The LCWG submitted a preliminary Modeling Report, but no further discussion has occurred yet.

II. Recent Activities

Since mid-September the LCWG has been working on four different documents for submission to the LRBCWG:

1. An updated modeling report.
2. An updated report/recommendation reflecting the comments/changes resulting from exposure and subsequent discussion.
3. A mock up of the necessary changes to the 2007 RBC instructions to enable the C-3 Phase 3 project to be effective YE-09 assuming no further changes to the recommendation.
4. The Alternative Amount discussion document describing its purpose and possible calculation.

Each of these four documents has been drafted but are not ready to submit to the LRBCWG because there were a number of core parts of the proposal being further discussed within the Work Group, for example as Prudent Estimate Assumptions versus Anticipated Experience Assumptions, and the definition of Working Reserve. The LCWG concluded that more modeling and/or adjustments need to be made to the documents.

Recently, the LCWG has reached consensus on a number of outstanding issues and will be updating our recommendation to reflect the conclusions from those discussions. The Life Capital Adequacy Subcommittee (LCAS) affirmed that Prudent Estimate Assumptions should be used rather than Anticipated Experience Assumptions, so no change is needed to our proposal. However, the LCWG concluded it should change the definition of Working Reserve from what was initially proposed. LCWG initially proposed that the Working Reserve equal an estimate of statutory reserve with certain safe harbors (i.e., CSV for products with cash values and PV net cashflows for those without). The Work Group has now concluded that it should base calculations with a Working Reserve of zero, and then adjusting that result by using “exit value.” In this context “exit value” represents the amount the company would need to give to another insurer in order for the insurer to take on the insurance liabilities under the scope of the calculations.

The LCAS is preparing a document that outlines the issues regarding the Working Reserve definition. That document will need to be discussed in concert with the updated report from the LCWG.

III. Future Plans

The LCWG plans to do the following:

1. Update the report/recommendation for the change in WR definition, leaving the adjustment for “exit value” as an item to be determined. Update that document to reflect the work of the Consistency Work Group regarding definitions and treatment of PBA items. Update the C3P3/C3P2/LRWG comparison to reflect recent changes to the Life Reserves proposal in the Valuation Manual.
2. Work with the LCWG Modeling Group to develop numbers in support of possible adjustments to address the use of a zero Working Reserve in the calculations. Add the results of this work to the modeling report if the information can be developed in a reasonable time, otherwise publish the modeling report. In either event, the modeling results will then be discussed with the LRBCWG.
3. Complete additional work on the Alternative Amount document.

The LCWG has been considering including in the C-3 Phase 3 process what was previously referred to as the Material Tail Risk Test (now referred to as the Stochastic Exclusion Test) in the LRWG proposal.

The purpose of the Stochastic Exclusion Test is to identify those blocks of policies where the reserve amount is not sensitive to changes in interest rate or equity returns. Those policies that pass the test, and therefore are deemed not to have much interest rate or equity return risk, are not the focus of the LCWG since this is a C-3 calculation. The Work Group is proposing that for those blocks the existing C-3 factors only be used. The Work Group believes this is consistent with the concept of the Alternative Amount. This is equivalent to explicitly developing an Alternative Amount calculation where the Alternative Amount calculation turns out to be less than the current factor-based amount, but due to the currently proposed minimum, is floored at the current factor-based amount.

To recap the LCWG current projects::

1. An updated Modeling Report.
2. An updated Report / Recommendation.
3. Draft RBC instruction changes.
4. An Alternative Amount discussion document.

In terms of timing, the LCWG should be able to deliver all of the above items to the LRBCWG for discussion in April following the NAIC meeting with the proviso that the updated Modeling Report may or may not include analysis regarding possible changes to the proposal.