

**AAA Update: C3 Phase 3 Project**

Three Academy Work Groups provided updates on their work related to the C3 Phase 3 (i.e., Risk Based Capital) project.

**Standards for Stochastic Methods Work Group**

The charge to this group is to recommend the most efficient method for supporting the use of stochastic interest rate and equity generators for calculating capital and reserves.

The group recommends:

- A company could use any of three methods, possibly varying by product, to develop stochastic scenarios:
  - 1) Prescribed generator, where the AAA would select the generator and specify the model parameters,
  - 2) Pre-packaged scenarios, where the AAA would provide a large number of scenarios and a scenario-picking tool, or
  - 3) Proprietary generator, where the generator meets calibration criteria developed by the AAA.
- Capital and reserves will utilize a CTE risk measure:
  - 1) CTE 90 for capital,
  - 2) CTE for reserves, but the level may vary.
- AAA will define how companies may use scenarios with respect to:
  - 1) Level of user flexibility,
  - 2) Aggregation of results,
  - 3) Applicability of certification or peer review process, and
  - 4) Implementation considerations.

These issues still need to be resolved:

- Use of proprietary pre-selected scenarios,
- Resources available to update scenarios and generators, and
- Responses to implementation from companies and regulators.

**Economic Scenario Work Group**

The charge of this group is to ensure consistency between the interest rate and scenario generators.

This group has reviewed the current C-3 Phase I interest rate/scenario generator:

- It plans to retain the parameter structure,



- It will change the long (i.e., 20-year Treasury) rate Mean Reversion Point from 6.55% to 5.4%, and
- It will determine the remaining parameters using Maximum Likelihood Estimation techniques.

#### Life Capital Work Group

The charge of this group is to recommend changes to the C3 component of the current Life RBC framework, in the context of life products valued under PBR.

The group has developed the following “working constructs”:

- The total asset requirement (TAR) is CTE 90,
- TAR determination uses a GPVAD (greatest present value of accumulated deficiencies) calculation,
- Capital requirements apply to all life products,
- The C3 calculation is solely stochastic, not the greater of stochastic or deterministic approaches,
- The calculation explicitly incorporates hedges if used by the insurer, and
- The actuary must certify the results, but it will not be subject to peer review.

These issues remain to be addressed:

- Handling of single premium whole life,
- Projection assumptions:
  - 1) Consistency with reserves or cash flow testing?
  - 2) Best estimate or prudent best estimate? and
- Discounting.

The Academy plans to expose the C3 Phase 3 approach and the recommended changes to RBC by December of 2006, with implementation by December of 2007.

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