

Standards for Stochastic Methods: Update to Life Risk-Based Capital Working Group

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Update

- Report provided to LHATF at the September, 2006 NAIC meeting



SSMWG Recommendations: Alternative Methods for Developing Stochastic Scenarios

- **Prescribed generator**, where the AAA's Economic Scenario Work Group would provide the generator and specify the model parameters. Example: C3Phase2 generator.
- **Proprietary generator**, where the generator meets the calibration criteria developed by the AAA's Economic Scenario Work Group.
- Each of these methods will produce equivalent results.
- A company could choose to use different methods for different products, since the underlying methodology produces equivalent results.
- The AAA's Economic Scenario Work Group will be responsible for providing the technical guidance for the implementation and use of the generators (generator, parameters & calibration criteria).



SSMWG Recommendations: Use of Stochastic Scenarios

- **AAA work groups' responsibilities:**
 - Define use of scenarios in the calculation of reserves/capital
 - Define standards for user flexibility, aggregation, peer review/certification
- **Actuary's responsibilities:**
 - Determination of the appropriate number of scenarios & scenario weights to be used in reserve/capital calculations
 - Demonstration that using fewer scenarios results in a reserve or capital charge that is at least as great as the result obtained when using a scenario set and model that has not been reduced for calculation expediency
 - Rationale for using a smaller set of scenarios (i.e. a compressed model) and all model assumptions and parameters would be subject to peer review



SSMWG Recommendations & Next Steps

- AAA's Life Economic Scenario Work Group will develop the technical specifications and provide direction to the AAA Life work groups.
- AAA Life work groups will incorporate SSMWG recommendations in their respective work products.
 - Life Reserves Work Group (LRWG)
 - Annuity Reserves Work Group (ARWG)
 - Variable Annuity Reserves Work Group (VARWG)
 - Life Capital Work Group (LCWG)
- Focus of next steps:
 - Implementation (e.g. directions regarding use of scenarios)
 - Demonstration of reasonableness of cash flow model results when using variance reduction techniques

