

VACARVM
or
Actuarial Guideline 43

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1. Current statutory rules for reserving Variable Annuities

- Actuarial Guideline 34 for GMDB
- Actuarial Guideline 39 for GLB
- Asset Adequacy Analysis (aka Cash Flow Testing)

2. Rules that become effective on 12-31-09

- Actuarial Guidelines 34 and 39 repealed
- Actuarial Guideline 43 (VACARVM) becomes effective
- Reserve = max (Standard Scenario, CTE Method)
- For CTE method, have a choice between multi-scenario modeling or Alternative Method

2. Rules that become effective on 12-31-09

- Can view the Standard Scenario as a replacement for AG 34 and 39, with the CTE method being an Asset Adequacy Test with additional rules

3. Process by which the new rules were adopted

- LHATF asked Academy for assistance
- Academy established Variable Annuity Reserve Work Group
- LICONY and ACLI negotiations with NYID

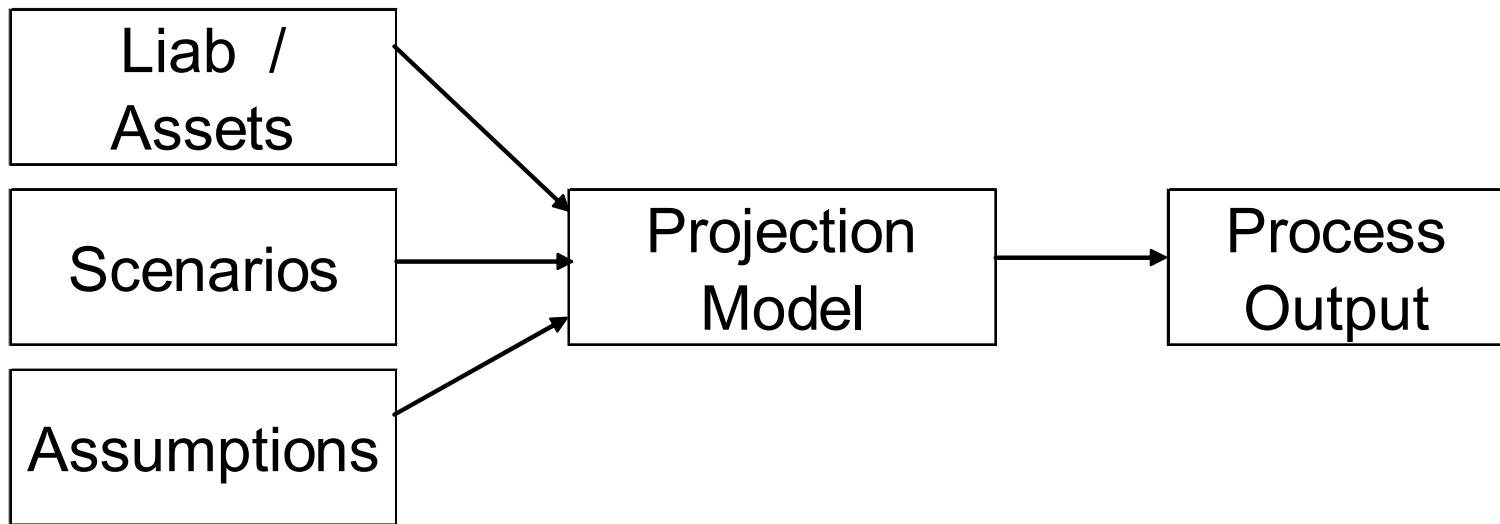
4. Comparison to RBC rules

- RBC
 - After Tax
 - CTE 90
 - Applies to all VAs
- Reserves
 - Before Tax
 - CTE 70
 - Applies to all VAs subject to CARVM
 - Many detail instructions added

4. a. What is in scope?

- Variable annuities, both deferred and immediate
- Group annuity contracts not subject to CARVM, but include guarantees similar to GMDBs or VAGLBs
- All other products that contain guarantees similar to GMDBs or VAGLBs

5. The Modeling Method



5. a. Build a projection model

- Model what is important
- Simplify what is less important

5. b. Choose assumptions

- Prudent Estimate Assumptions
- Experience Studies

5. c. Choose scenarios

- Need enough scenarios to assure that reserve is not understated
- Need to satisfy calibration rules
- “Variance reduction techniques”

5. d. Create Inventory Files

- Build liability in force and assets owned files
- Probably need modeling on both sides, but need to verify that the modeling doesn't lead to understatement of reserve

5. e. Run model

- Push the button

5. f. Process output

- Scenario reserve is starting assets plus worst present value of surplus
- CTE method reserve is CTE 70 of the scenario reserves

6. Alternative Method

- Factor Based
- Choice (contract by contract) whether to model it or to use the AM
- Can't use Alternative Method for contracts with GLBs
- Can't use Alternative Method for contracts that aren't VAs

7. Standard Scenario

Must use standard scenario for all contracts,
no matter which choice is used for the
CTE method

8.a. Prepare sensitivity tests and other analyses

- Need reserves before and after reinsurance
- Sensitivity test major assumptions

8.b. Prepare required paperwork

- Certification
- Methods and Results memo

8.c. Prepare documentation

- This is your own internal documentation:
 - Run instructions
 - Any details you want to keep at hand, but didn't see a need to put into the formal memo

9. Asset Adequacy Analysis

The Actuarial Guideline says that Asset Adequacy Analysis must be performed to support the reserve determined.

10. Stand-alone GMDB/GLB

Look again at the chart on slide 8. Do the same things as in the normal situation, except when processing the output only pick up the revenues, expenses, and benefits that flow through the books of the insurance company.