

# Minimum Guaranteed Benefits on Variable Annuities

## Statutory and GAAP Requirements

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## GAAP and Stat Requirements Current

Benefit	Statutory		GAAP Reserves
	Reserves	RBC	
MGDBs	AG 34	none	varies
VAGLBs			
GMABs	accumulation of fees	interim formula	FAS 133
GMIBs	"	"	no reserves
GPAFs	"	"	FAS 133

## GAAP and Stat Requirements Potential Future

Benefit	Statutory		GAAP Reserves
	Reserves	RBC	
MGDBs	C-3 Phase II	C-3 Phase II	SOP
VAGLBs			
GMABs	C-3 Phase II	C-3 Phase II	FAS 133
GMIBs	"	"	no reserves
GPAFs	"	"	FAS 133

## New Valuation Requirement

- Will require Stochastic Analysis
- Applies to in-force and current issues!
  - GAAP SOP applies retroactively
  - RBC applies retroactively
  - Statutory reserve will likely be retroactive

## Statutory Reserves for VAGLBs Actuarial Guideline MMMM

- Change in direction
  - prospective method dropped
- Retrospective accumulation of charges
  - supported by standalone asset adequacy analysis at the benefit level
- Effective date 12/31/2002

## RBC for MGDBs and VAGLBs

- Current “interim” factors for VAGLBs
  - applied to total V/A reserve (net of reins)
  - High Risk C-3 factor (2%)
  - Medium Risk factor (1%) can be applied
- No explicit requirement for MGDBs

## RBC for MGDBs and VAGLBs C-3 Phase II Project

- Variable contracts with guarantees
  - to include VAGLBs and MGDBs
- Elements of CIA approach, including CTE
  - stochastic modeling
  - PV of accumulated stat income

## RBC for Guaranteed Benefits C-3 Phase II Project - Example

Year	Reserves (or CV)	Revenue	Benefits/ Expenses	Change in Reserves	Income	Cumulative Income
0	100					
1	110	25	20	10	-5	-5
2	150	30	15	40	-25	-30
3	120	25	3	-30	52	22

- Take PV of max loss for each scenario (floor at 0)
- Rank the results
- 90 CTE (avg. of highest 10%) is RBC
- If used for reserves, may be 60 or 65 CTE

## RBC for MGDBs and VAGLBs C-3 Phase II Project

- Can use approach to determine reserves
  - lower CTE level for reserves
  - could replace AG 34 and interim AG MMMM
  - could be used for “upside” MGDBs
- LHATF will be discussing
  - input from Academy
  - RBC could be ready for 12/31/2003

## RBC for Guaranteed Benefits C-3 Phase II Project

- Key issues to be resolved
  - treatment of reserves within analysis
  - CH behavior (e.g., annuitizations)
  - fund performance
  - fixed interest rates
  - discount rate(s) (incl. whether P/T or A/T)
  - safe harbors
  - grading

## GAAP Developments Variable Product Guarantees

- FASB Statement No. 133
  - All derivatives at fair value on balance sheet
  - EDs include insurance liabilities
- AICPA SOP on Non-traditional Products
  - exposed for comments through end of October
  - 1/1/04 effective date
  - Liability valuation includes MGDBs

## GAAP Treatment MGDBs

- DIG Issue Paper B7
  - MGDBs not an ED under FAS 133
  - identifiable insurable event
- Additional liability under AICPA SOP, if
  - mortality risk not insignificant (FAS 97, § 8)
  - fees not fixed and guaranteed
  - fees are not proportionate to benefits

## MGDB Mortality Risk

- SOP - PV cost versus PV of total revenue
  - Done at issue for new business
- Transition covers contracts in-force
  - actual results from issue
  - expected future results
- Could result in different results for in-force versus new business

## GAAP Treatment GMABs/GMWBs

- DIG Issue Paper B8
  - ED under FAS 133
  - Additional reserve at fair market value
- Valuation of ED
  - FAS 97 - historical / expected future volatility?
  - FAS 133 - implied volatility or cost of benefit?
    - Implied volatility is higher and more volatile than historical/expected
    - Can fees offset?

## GAAP Treatment GMIBs

- DIG Issue Paper B25
  - GMIBs not an ED under FAS 133
  - not net settled
- Liability valuation under AICPA SOP
  - FAS 97 paragraph 7
  - annuitization options not valued until elected
  - no additional reserve required (or allowed)

## GAAP Treatment GPAFs

- DIG Issue Paper B25 (modified by B34)
- During deferral period - not an ED
- During pay-out period
  - ED if period certain only
  - not ED if life contingent only (no w/d features)
  - period certain with life contingency contain ED