

# **Proposed SOP: Nontraditional Long-Duration Contracts and Separate Accounts**

## **Valuation of Liabilities**

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## **Valuation of Liabilities**

### **Accretion Model**

- **Accrued account balance equals**
  - Deposits net of withdrawals
  - Plus credited amounts (contractual and additional)
  - Less fees and charges
- **At the rate that would accrue to the balance available in cash, or its equivalent, at the earlier of the reset date or contract maturity**
- **When multiple account values → Highest account value available in cash or equivalents**
- **No reduction for surrender charges or MVA**
- **No liability for annuitization features during accumulation phase**

## Valuation of Liabilities

### Return Based on Pool of Assets or Index

- For contracts not covered by FASB Statement No. 133
- If return based on contractually referenced pool of assets (index)
  - Accrued account balance based on fair value of assets (index)
- True even if assets not carried at fair value

## Valuation of Liabilities

### Annuitization Features

- **Market Value-Adjusted Annuities**
  - Do not meet SA criteria ¶ 10(d)
  - Account balance based on the contractually specified rate....
    - ....the MVA is considered as a surrender charge or credit
- **Two-Tier Annuities**
  - “An annuitization option is an elective benefit that is not part of the accumulation phase”
  - Account balance based on the lower tier rate....
    - ....the account balance accumulated at the lower tier is the amount available in cash at maturity

## Valuation of Liabilities

### Annuitization Features

- **Guaranteed Minimum Income Benefits**
  - If the GMIB can be net settled (e.g., reinsured)....  
....the GMIB is an embedded derivative → FAS 133 applies
  - If not (general case)....  
....liability is the accrued account balance
- **Change in accounting at transition for many annuitization options**
- **Payout phase reserve defined by valuation rate needed to equate the income stream to the cash value at annuitization**

## Valuation of Liabilities

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### Significance of Mortality and Morbidity Guarantees

- Contracts classified either as “insurance” or “investment”
- Significance determined at contract inception (other than transition)
- Compare present values of
  - Excess benefit payments  
versus
  - Contract holder assessments (i.e., revenues)
- Look at “*reasonably possible outcomes*”
  - Stochastic valuation strongly implied
  - No specific guidance; left to company discretion

## Valuation of Liabilities

### Contracts with Death or Other Insurance Benefits

- Requires an additional liability for “insurance” contracts when....
  - ....amounts assessed for the insurance features are not proportionate to insurance benefits provided during the period
- Recognizes the portion of assessments that compensates the insurer for benefits to be provided in future periods

## Valuation of Liabilities

### Contracts with Death or Other Insurance Benefits

- Additional MGDB liability equals
  - Current benefit ratio  $\times$  cumulative assessments
  - Less cumulative excess payments and related expenses
  - Plus accreted interest
- Benefit ratio equals (determined over the life of the contract)

$$\frac{\text{PV of total expected excess insurance payments and expenses}}{\text{PV of total expected assessments}}$$

- Use historic experience from issue to valuation date, and expected experience thereafter

# Valuation of Liabilities

MGDB Example

Assumptions

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# Valuation of Liabilities

MGDB Example

Benefit Ratio Derivation

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# **Valuation of Liabilities**

**MGDB Example  
Liability Calculation**

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# **Valuation of Liabilities**

**MGDB Example  
Liability Calculation**

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# Valuation of Liabilities

MGDB Example  
Liability Roll-Forward

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## Valuation of Liabilities

### Contracts with Death or Other Insurance Benefits

- Additional MGDB liability never less than zero
- Expected experience based on a range of reasonably possible scenarios
- Estimates regularly re-evaluated for actual experience
  - Changes to the additional liability reported as a charge or credit to benefit expense
  - A type of dynamic unlocking
- EGPs should be adjusted to change in MGDB liability
  - Affects DAC amortization

## **Issues/Concerns With Proposed SOP**

- **MGDB**
- **Recognition**
- **Measurement**
- **Timing of SOP in Light of International & National Accounting Issues**

## **MGDB Concerns**

- **Mortality Significance Test - What is “significant”?**
- **Benefit Ratio Definition - Are Revenues the Right Base?**
- **FAS 60 Approach with Dynamic Unlocking**

## **Source of Recognition Criteria in SOP**

- **The proposed SOP refers back to FASB Statement No. 97, paragraph 7: “A contract provision that allows the holder of a long-duration contract to purchase an annuity at a guaranteed price on settlement of the contract does not entail a mortality risk until the right to purchase is executed. If purchased, the annuity is a new contract to be evaluated on its own terms.”**

## **Recognition Questions to Consider**

- **When should a liability be recognized?**
- **Was FAS 97 Paragraph 7 written to cover testing for presence of mortality risk or to state when to report earnings of an economic event?**
- **Should a contract be defined for accounting purposes differently than for the legal contract?**
- **Should annuity benefits be smoothed with other revenues & expenses or recognized only when elected?**

## **Additional Question**

- **FAS 5 requires disclosure of a contingency when there is at least a reasonable possibility that a loss or an additional loss may have been incurred.**
- **Was it an intentional or unintentional desire to not carry this into FAS 97 (and the SOP)?**

## **Measurement - Can it be Done? Paragraph 69 of SOP**

- A present value of cash flows model was considered, but questions were raised as to appropriate factors to use for such assumptions as the future incremental annuitization benefits, discount rate, mortality, and probability of annuitization

## **Measurement - How Should it be Done?**

- Probability of Annuitization - GMIB vs. 2 tier
- Discount Rate for Payout - Sufficient to cover payout + expenses
- Can actuaries agree on a reasonable approach here?

## **Larger World of Current Acctg Issues**

- Will SOP conflict with probable additional disclosure requirements stemming from Enron, etc.?
- Why adopt if IAS standards to apply just a year or two later?
- With current default use of US GAAP worldwide, have implications for products in other countries been considered?
- IASB & FASB have set Recognition as a priority project. This SOP clarifies importance of Recognition question.

# **SOLUTIONS**

**Respond to SOP by 10/31/02**