


ACSW--Principle Based
Approach (PBA),
Reserves (PBR),
Capital C3Ph3(RBC)

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PBR, Net Premium Reserves (NPR)

- Scope
 - Sentiment for Reduced Scope
 - Key Plans—Competitive Term,
Universal Life with Long Term
Guarantees (UL2G), Variable and
Equity Indexed Life (VL)

PBR,NPR

- Reasons for Changing Sentiment
 - Delays
 - Concerns, Cost, Practicality
 - FIT Uncertainty, IRS2008-18
 - Widespread Belief that Formulaic is OK for Traditional Plans

PBR,NPR

- Sentiment for Reduced Scope Increasing
 - Regulators
 - Industry
 - Matter of Fact Comments on Calls
 - Even NCOIL legislators

PBR,NPR

- Reduced Scope Proposal
 - Academy Subgroup
 - Exclude preneed
 - Options
 - Limit Scope to Term,UL2G,VL;or
 - Exclude Other Products; or
 - Defer Other Products

PBR,NPR

- NPR Proposal
- ACLI, December, 2008
 - Primarily, FIT Driven
 - Emphasis PBR Approach for Above Key Plans
 - No Explicit Scope Limit

PBR,NPR

- FIT Notes
- FIT Reserves, Prescribed Elements
 - Interest
 - Mortality
- Also, Statutory Reserve Basis
 - Qualify as “Life Insurance Reserves”
 - Answer 2008-18 Concerns

PBR,NPR

- All New Products, Similar to CRVM
- Prescribed interest, mortality
- Prescribed lapse
- No Dividends, NGEs
- New Prescribed Expense(s) Allowance

PBR,NPR

- NPR Definitions
 - Factors Preset at Issue
 - Exception-Factor Changes with New Mortality Table

PBR,NPR

- FIT Hope for NPR
- Statutory Elements Answer FIT Concerns
 - Prescribed Portions
 - Anticipated Reserve Levels vs. FIT
- Retain PBR Tie

PBR,NPR

- NPR Process
- All New Products Use Two Tests
 - Stochastic Exclusion Test (SET)
 - $\leq 4\%$ Ratio = "Pass", Less Volatility
 - $> 4\%$, Volatile, Asset/Liability Mismatch
 - Gross Premium Adequacy, Net vs. Gross (No Deficiency Reserves)

PBR,NPR

- Expectations of Two Tests
- Traditional Products "Pass"
- Hold NPR Only
 - Regular CV, Zero Floors
- SET, Lapse Retain PBR Tie

PBR,NPR

- Expectations of Two Tests
- Competitive Term
 - Pass SET
 - Don't Pass Gross vs. Net
- Hold Gross Premium Reserves (GPR), per VM20
- NPR Floor (Aggregate, Not Seriatim)

PBR,NPR

- Expectations of Two Tests
- UL2G,VL
- Pass Gross vs. Net, NOT SET
- Hold Stochastic Reserves (GPR+Excess, Stochastic>GPR)
- NPR Floor (Aggregate,NotSeriatim)

PBR,NPR

- Introduced 12 08
- Seemingly Fast Track
- No Regulatory Objections
- Detailed Test Calculations
Required to Satisfy

PBR,NPR

- Results of Tests So Far
- Traditional, Little Difference
From Formulaic
- More Tests Needed

PBR,NPR

- Tests So Far
- Term Details
 - To Expiry, Not Segment
 - Mortality Same After Segment
 - Zero Out Any Negatives
 - NPR Serve As Floor, Not Base

PBR,NPR

- NPR Calculations
- Prescribed Lapse
 - Long Term Justification
 - Grade to Zero? When?
- Prescribed Expense Allowance, How to Justify?

PBR, NPR

- Technical Points
 - Flexible Premium Contracts
 - Net Level Premium, Prescribed Assumptions, to Mature Contract("N")
 - Net Level Premium, Guaranteed Assumptions, to Mature Contract("G")

PBR, NPR

- Technical Points
- Prescribed Expense Allowance
 - Include Non-Level Acquisition Expense
 - Amortize Non-Level, Sooner Than End?
- Segments-No?
 - Shock Lapse<100%,High Lapse After?
 - No Mortality Increase After Segment?

PBR,NPR

- Technical Points
 - CSV Floor-Pre-Reinsurance Credit
 - Allocate Excess Reserves to Contracts
 - GPR>NPR
 - Stochastic>GPR and >NPR

PBR, NPR

- Technical Points
- For SET, Suitability of 4%?
 - Especially for Nonpar Permanent
 - Critical for NPR
 - Critical for PBR, in General

PBR,NPR

- Outlook for VM20
- Outside chance, 12 09 (Life)
- Large number of Issues
- NPR Is Very Key Part

PBR,NPR

- So Far, Health, Non-Variable Ann.
- No PBR Work, No PBR, No NPR
- Arguably, NPR for Life “Sets Tone”

PBR,NPR

- Company Requirements
- NPR Factors, All New Products
- SET Calculations
 - All New Products
 - Broad Product Groups

PBR,NPR

- Company Requirements
- NPR Floor Tests, Aggregate, Seriatim
- GPR Factors, Some New Products
- Stochastic Software, Some New Products

Unresolved Issues-VM

■ Discount Rate

- New York-risk free +50BPs or similar, day1
- AAA
 - Net asset earned rate during asset lives
 - Possible compromise-limits to investment grade, no “exotic” securities
- Key question-PBR reserve magnitudes
- Affects both stochastic and deterministic

Unresolved Issues-VM

■ Discount rate

- LHATF-tentatively approved AAA proposal
- AAA also proposed prescribed, higher default formula, tentatively approved
 - Still technical, more testing needed
 - “Net” discount rate back to New York’s?

Unresolved Issues-VM

■ Aggregation

- Offset worse results against others or not
- New York-minimal aggregation
- Trending-against aggregation
- Aggregation impact
 - Countless stochastic scenarios
 - Deterministic-term vs. perm., UL vs. fixed, etc.

Unresolved Issues-VM

■ Reinsurance

- Compute net of ceded and ceded credit
 - Some regulators want ceded for assumer also
 - Cash flows difficult for direct?
- Complete risk transfer?
 - Currently, only complete
 - No UL2G cession after AV=0

Margins-Mortality

- Long History
- No credibility—go direct to standard table
 - CSO 2001
 - Underwriting Scoring
- Some Credibility
 - Weighting
 - Details Unresolved
- Full Credibility—Own Experience

Unresolved Issues-VM

- Margins and techniques
 - Lapses
 - Credibility
 - How to utilize
 - How to measure impact
 - Expenses and Commissions
 - Credibility relevant?
 - No GRET
 - Margins relevant?
 - Inflation rates?

Unresolved Issues –VM

- Margins themselves
 - Per assumption
 - Aggregate margins
 - New York-per assumption
 - Overall reserve impact?

Unresolved Issues-VM

- Margins Themselves
- Size of Margins, No Industry Table

Unresolved Issues-VM

- Expenses

- Fully allocated
- Critical mass question
- Going concern?
- Key for many small companies

Unresolved Issues-VM

- Commissions

- Agent turnover
- Vesting
- Effect on projected cash flows

Unresolved Issues-VM

- Experience Reporting-VM50,VM51
 - Calendar year, not policy year

 - Some simplified reporting, “small” cos.

 - Additional exemptions proposed, unresolved
 - Exempt if \leq \$75 million premiums; OR
 - Limit reporting to mortality
 - Utilize valuation runs

Unresolved Issues-VM

- Experience Reporting
 - Key is regulator ability to use data
 - On PBR, partial credibility of data still requires experience maintenance

Unresolved Issues--VM

- Experience Reporting
- NAIC Proposal As Data Collector
- Proposal Included “Scrubbing”
- Understanding of All Prior Discussions?

Unresolved Issues-VM

- Non Variable Annuities-VM22
- Health, incl. LTC-VM25
- NO PBR Proposals Yet
- Preliminary Hints-All Stochastic

Resolved Issue

- Mortality assumption-no improvement after valuation date

Risk Based Capital (RBC)

- C3Phase3 Project
- For life insurance
- All issue years
- Originally, 100%stochastic processing

RBC, C3Phase3

- Strive for greater PBR consistency
- Use same SET for less volatile/risky products i.e. traditional products
- These retain current C3 factors

RBC C3Phase3

- To use current C3 factors
 - Stand alone asset adequacy test
 - Periodic update SET analysis

RBC C3Phase3

- Another possible exemption-Alternative Amount calculations
 - Not precisely defined
 - Show with rigor that, in actuarial judgment, results of reserves + capital provide 90CTE

RBC C3Phase3

- Approach if stochastic
 - Compute separate stochastic reserve, 90CTE
 - This = "TAR"
- TAR less regular reserve=RBC, C3Phase3
- NOTE-AFTER FIT discount rate

SET Technical Questions— PBR and RBC

- All 16—Quarterly or Annual—Choose 3,6,9, or 12
- After 2008, Same Starting Point?
- Dynamic Assumptions (Dividends)?

SOA Research on PBA

- Webcast 9 2 09
- Detailed Report Now Available
- Results Still Preliminary

SOA Research—Key Observations

- CV Floor—Can Have Dilutive Impact
- Wide Range Outcomes vs. Statutory
- Traditional & UL Reserves—PBR Close to Statutory
- Results Also Depend on ALM

SOA Research—Key Observations

- Traditional, Term—SET Usually $\leq 4\%$
- UL2G—SET Not Always $> 4\%$
- More Traditional Tests Needed

SOA Research—Key Observations

- Term GPRs < Statutory
- UL2G—Stochastic Reserves Not Always
>GPR—More Testing Needed
Traditional—Wide Range, Not Greatly
<>Statutory—More Testing Needed

SOA Research—Key Observations

- RBC, C3Ph3, Complete Stochastic—
Almost All (TAR Less Stat Res) <0
- Almost All RBCs = Zero
- Possible Call for Overall Minimum RBC

SOA Research—Key Observations

Weighted Aver. Res.—VM20/Stat.

- Term (No Defic. Res.) 69.1%
- UL 98.8%
- Traditional Whole Life 98.3%

SOA Research—Key Observations

Caution Needed in Interpreting Reserves

- Seriatim--Sometimes Negative for Term
- Seriatim--Pre CV Floor
- Per Policy-->0, Reflects CV Floor
- Anticipated Experience—Per Policy w/o Margins
- Prudent Estimate—Per Policy w/ Margins
- C3Ph3Stochastic—TAR, 90%CTE

SOA Research—Key Observations

Stochastic Exclusion Test—Weighted %s

- Term 3.53%
- UL 5.54%
- Traditional Whole Life .98%(1)

(1) Most Plans Are Par WL

SOA Research—Key Observations

- Key Assumptions Not Available (Required for VM31)
- UL Combines W/ and W/O Long Term Guarantees
- NY Asks-On Later Term, Any Profits?

Enterprise Risk Management (ERM)

- Implied close ties to PBR and RBC
- Insurance =risk assumption
 - Assets don't perform, interest or principal
 - Liabilities require more cash

ERM

- Tied to corporate governance
 - Role of Board of Directors vs. management
 - Communications required
- Implied use of broad range of projections

Systemic Risk

- Implied close tie to ERM
- Not precisely defined
 - One company's risk affects all
 - Diversification doesn't modify

Economic Capital

- The "Right" Amount of Capital
- Not Precisely Defined
- Ties to PBR Projections?
- Multiples of RBC?

PBA Approach

- Recommendations for Action
 - C3Phase3
 - More Imminent, 2010 Implementation
 - Gear to All Issue Years
 - Allocate Plans, SET, Stochastic

PBA Approach

- Recommendations for Action
 - C3Phase3
 - SET
 - Interest Scenarios Needed
 - Combine w/Current Portfolio
 - All Inforce Tested Together

PBA Approach

- Recommendations for Action
 - C3Phase3
 - Test 16 Ratios for 4% SET Test
 - Modify Assumptions if Practical
 - Modify Investments if Practical

PBA Approach

- Recommendations for Action
 - C3Phase3
 - If Stochastic Required
 - Need Interest Generator
 - Need Substantial Computer Time

PBA Approach

- Recommendations for Action
 - Reserves (PBR)
 - Compute SET Results
 - Same 4% Threshold as C3Ph3
 - Divide into Broad Product Gps

Increased Expenses

- Valuations with Seriatim GPR Factors
- Reprogram Reserve Floor(s)—Seriatim?
- Increased Rigor in Assumption Analysis
- Experience Reporting
- Install Stochastic Software for Products
- Additional Tests to Reach 70CTE?

Status of Projects

- Prior Issues Pre—PBR
 - Continue Formulaic
 - Term Deficiency Reserve Release?
- Heavily Prescribed
- VM Resolution Without Legislative Appeal?
- Lack of Legislative Enthusiasm

Outlook Difficulties

- Lack of Stable Product
- Unresolved Issues
- Value, Other Than Term, UL2G?
- Actuaries Taking Seriously Yet?

Where Do Things Stand?

- One Actuary—"After 3+Years, I'm PBR'd Out"
- Even So, Much to Monitor
- NAIC, SOA/AAA, Calls, NCOIL, Even Treasury and Congress

Recommendations

- Watch VERY CAREFULLY
- Watch Proposed Types of Projections
 - Legal Requirements
 - State or Federal