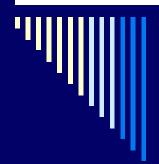


PBR—What it is and Where We Are

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Central Actuarial Associates
December 11 2007



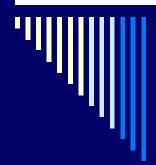
Introduction

- □ PBR introduced at Dec. 2005 NAIC
- Scope expanded to include all lines
- Current life reserves formulaic
- Original PBR very free form, realistic assumptions, stochastic
- □ Opposition in 2006: onerous, useful?
- Creation of Subgroup 4: Continuing Requirements / Transition Subgroup of VLMT



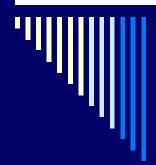
Purpose (VM-20 Life)

- A—Define minimum valuation standard for individual life by PBR as defined in the Valuation Manual
- B Method of calculating reserves defined herein IS CRVM
- C Reserve for supp benefits / riders must be consistent



Guiding Principles - 1

- 1 Prospective valuation method that captures material risks of policies/assets
- 2 Must reflect all risk factors explicitly /implicitly included
- 3 Deterministic approach may be sufficient but stochastic may be necessary
- 4 If company has some control over risk (e.g. mortality), must blend experience with prescribed assumptions credibly



Guiding Principles - 2

- 5 If assumption is not stochastically modeled, include margins for uncertainty
- 6 Assumptions not determined at issue but updated
- 7 Long statement about limitations of models and compensatory use of assumptions and risk management



Some Key Features - 1

- Relation of when deterministic and when stochastic to be used still being worked on
- Independent PBR review Actuary position created
- Procedures for setting mortality, policyholder behavior (e.g. lapse, etc.), expense, assets, reinsurance and revenue-sharing assumptions described in separate sections



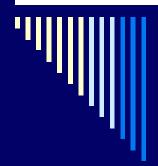
Some Key Features - 2

- Must submit experience for mortality, policyholder behavior, assets and expenses, sent to a central authority
- An extensive report
- One goal: allow detailed professional standards to be updated; thus a lot is in the Valuation manual



Role of Subgroup 4

- □ Project of AAA (American Academy of Actuaries)
- Working groups (Life, Annuity, Health)
- □ Life Valuation Law and Manual Team (VLMT)
- Subgroup 4: Continuing Requirements / Transition



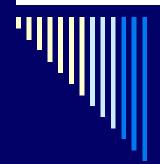
Smaller Company Concerns

- Key products are XXX term, UL with 2ndary guarantees, variable
- Smaller companies tend not to write these
- Often small face life, credit, health
- Large number of small companies; lot of work for regulators
- Smaller tend to have larger surplus



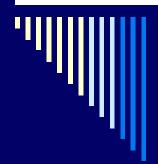
Possible Exemptions Thresholds 2005 Data

Total Asset Threshold	Number of Companies	Ratio of C&S to TA	Mean General Expenses	Median General Expenses	Mean Net Income	Median Net Income
< \$20 million	322	57%	683,000	160,000	176,000	91,000
<\$40 million	410	49%	1,007,000	242,000	309,000	140,000
<\$100 million	518	42%	2,086,000	412,000	556,000	211,000
<\$500 million	700	27%	5,087,000	936,000	1,736,000	351,000
Total Industry	1,022	7 %	46,119,000	3,655,000	39,576,000	974,000



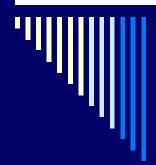
Subgroup 4 March Report

- □ 1 Process to justify exclusion from stochastic too complex; expensive; unnecessary
- □ 2 Cost of independent review actuary
- □ 3 Experience reporting perceived as unnecessary for companies with no credible experience
- 4 Cost may put small companies at a disadvantage



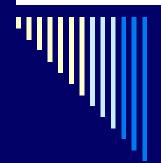
Stochastic modeling

- Major accomplishment to recognize that stochastic not always best
- Exemption test requires 12 scenarios
- Must be done within 12 months of valuation
- Process being worked out
- Divide maximum difference by an anticipated economic scenario



Independent Review Actuary

- Initially, struggle over whether state appointed or company appointed
- Final AAA: Company appointed but state can veto
- Cannot be from same firm as ValActuary
- □ LHATF SURPRISE: This position was deleted by a heavy vote



Significance

- Was a long-standing struggle over who would choose independent actuary
- Regulators wanted to do so
- Industry: was part of Valuation Actuary function
- Current AOMR allows regulators to hire an actuary at Comp. expense to check work (rarely used)
- Small Co. Impact: cost of Ind. Acty. Eliminated; states not likely to extend hiring for traditional business



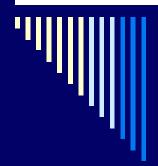
Experience Reporting

- □ Simplified procedure, not exemption
- Mortality: as yet unspecified premium volume
- Other assumptions: as yet unspecified
- Different Lines of business
- See Subgroup 3 survey in Nov. "small talk" on experience exclusions (pp. 23-25)



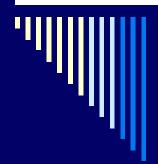
Time Frame

- Not exposed at LHATF meeting prior to NAIC
- Will be voted on in a separate phone call later in Dec.
- □ Voted on in 2008 (March?, June?)



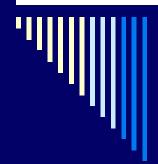
Workload Problem

- Some regulators concerned about workload if implemented all at once
- □ Subgroup 4 sent out a survey on preferences for phased introduction (See "small talk", Nov. 2007, pp. 26 et seq.)
- Phase in not mentioned in PBR documents for Winter NAIC meeting (LHATF will consider 3-5 year phase in)



Other LHATF Activity

- LHATF commissioned AAA to come up with PBR
- Now LHATF has taken control of LRWG product (not ARWG or HRWG yet)
- Reserves must be calculated no more than 3 months prior, not 6 months (AAA)
- Not content with stochastic exclusion
- Want catastrophic events considered
- Considering many other changes



Summary

- Certain products benefit from regulation: XXX term, 2ndary guar. UL, variable
- Smaller companies with traditional products will not benefit
- □ In Canada after PPM introduced in 1992 smaller companies faded away
- All inclusiveness a problem
- No one has estimated what the typical cost might be