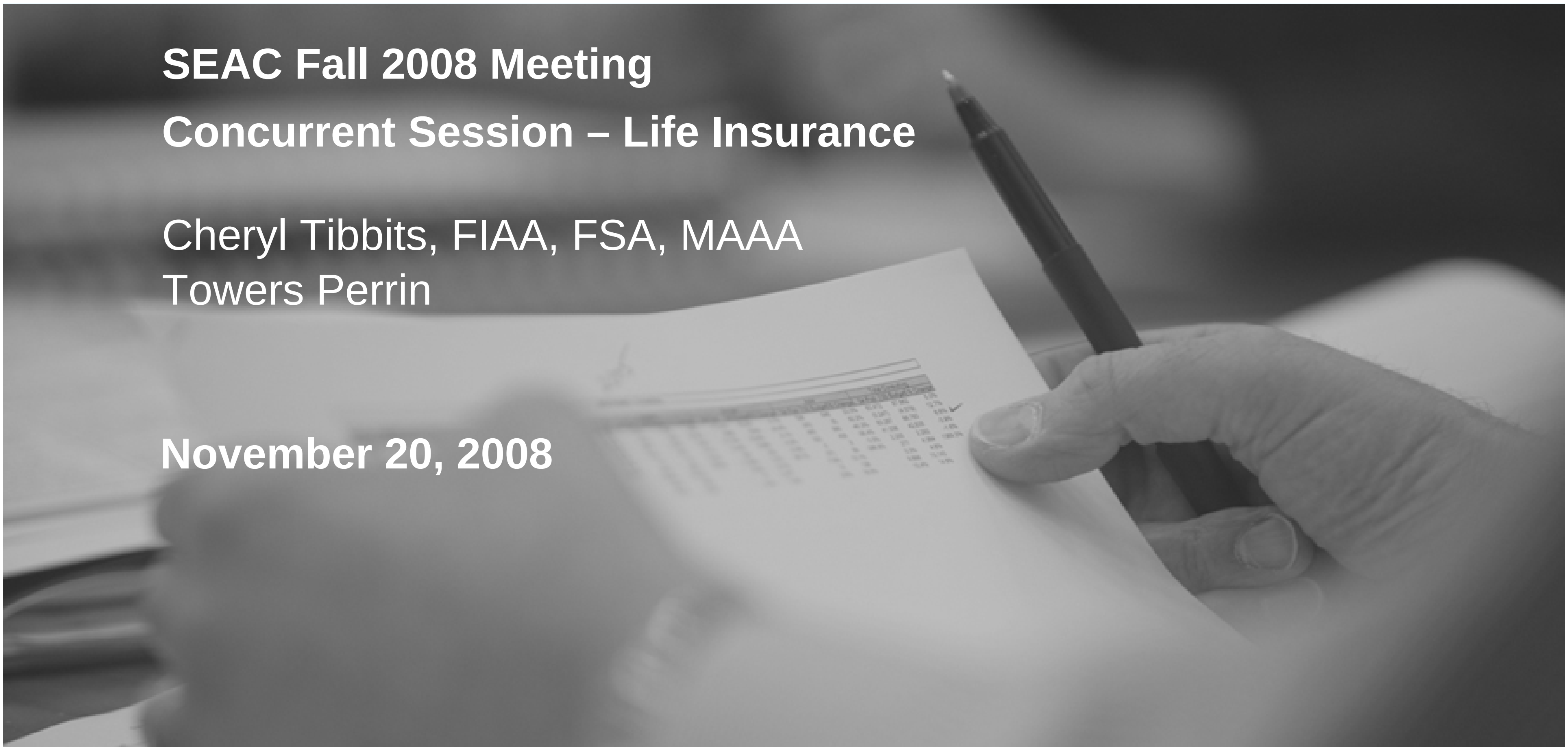
Principles-Based Update - Annuities



SEAC Fall 2008 Meeting

Concurrent Session – Life Insurance

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Current Status of PBA for Annuities

- Variable Annuities
  - Reserves
    - —Actuarial Guideline VACARVM adopted as AG 43
    - —12/31/2009 effective date
    - —Replaces AG 34 and AG 39
  - Capital
    - —C-3 Phase 2 in place since year-end 2005
- Other Annuities
  - Reserves
    - —Component of Valuation Manual (VM 22)
    - —ARWG working on issues papers
  - Capital
    - —Subject to C-3 Phase 3

VA CARVM (AG 43) effective December 31, 2009

- Decision made September 2008, after many years of work
- Redefines CARVM for all variable annuity products
  - Focus is on variable annuities with guaranteed death & living benefits
- Deterministic Standard Scenario
  - Calculation with prescribed assumptions (drop and recovery)
  - Similar to but still different than current rules-based calculations
- Stochastic testing
  - Conditional tail expectation (CTE 70)
- Reserve is maximum of:
  - Cash surrender value
  - “Basic” reserve using AG 33
  - Standard Scenario
  - Additional stochastic amount allocated back to contract level

VA CARVM (AG 43) effective December 31, 2009

- Conceptually similar to C-3 Phase 2; key differences:
  - Definition of standard scenario
  - Limits on revenue sharing
  - Fundamental differences related to reserves vs capital
    - — tax
    - — seriatim vs aggregate
  - VACARVM further developed
    - — anticipated experience vs best estimate
    - — prudent estimate vs prudent best estimate
    - — more guidance on assumption setting
- Next steps:
  - Planned update to Practice Note
  - Comparison (consistency?) of AG 43 and C-3 Phase 2
  - Implementation!

Aside: Interim Measures Proposed by ACLI

- In response to “current market turmoil” and perceived redundancy in current reserving / capital requirements
- Proposals for VA:
  - Eliminate stand-alone asset adequacy testing for AG 39
  - Waive standard scenario floor for C-3 Phase 2 for year-ends 2008 and 2009

Another Aside - Regulatory Perspectives

- Discussion of recent developments / observations on PBA
  - With Fred Anderson, NYSID and
  - Allen Elstein, Connecticut Insurance Department
  - Both are experienced in reviewing C3P2 and other filings
- Disclaimers
  - Did not review any particular companies filings
  - Comments are generalized and not focused on any one or set of companies
  - Nothing in this summary represents the official guidance or is an official report from either insurance department

Level of Documentation - C3 Phase 2

- Documentation has improved since 2005 LHATF review
  - Particularly from large companies
  - Some of the improvement has been from regulatory reviews and / or requirements like the NY Special Considerations letter
- View that many companies are looking at this as a regulatory exercise instead of risk management process.
- Additional information / documentation of the following would be helpful:
  - Policyholder behavior and hedging assumptions
  - Scenario results by benefit type

Assumptions / Margins – Regulatory Perspectives

- Concern about setting assumptions without credible experience
  - Example: lapse rates on VAs with guarantees in the money
- Little information about margins provided
  - Need more information to help gauge appropriateness of margins used
- Feel that additional detail around assumption setting and margins will be particularly important as more products fall under PBA

PBR for (Non-Variable) Annuities

- Annuity Reserve Working Group tasked with developing requirements
- General approach
  - VM 20 (Life reserves)
  - Some consideration of VACARVM
  - Some cases, clean slate
  - Developing issue papers for presentation to LHATF
- VM 22 placeholder in Valuation Manual
- Expected scope:
  - Annuities to which AG 43 does not apply
  - Including Payout Annuities, Longevity Insurance, Structured Settlement Annuities, Traditional deferred annuities Two-tiered Annuities, Market Value Adjusted Annuities, Equity Indexed Annuities, Bond Indexed Annuities, Modified Guaranteed Annuities, etc.
- Expected timing: 2012?

Principle-Based Capital – Market Risks

- Phases of “C3” standards
  - C3 Phase I – interest rate risk on fixed annuities
  - C3 Phase II – variable annuities with guarantees
  - C3 Phase III – life insurance and annuities
- Combination of Life Capital and Annuity Capital Workgroups
  - C3 Workgroup (C3WG) formed in June 2008
  - Report focused on life at this time but will include annuities as well
- Envisioned in the future that one C3 standard will apply to all products in one standard
  - May have some differences by product

C-3 Framework

- Scope applies to all life insurance products in-force
  - Will expand to cover annuities also
- General framework:

Stochastic Exclusion Test	Factor Based Amount	A
CTE 90 Stochastic Scenario Calculation	Stochastic Amount	B
Other Equivalent Methods	Alternative Amount	C
De minimus Blocks	Unmodeled Amount	D

- C3 Amount = A + B + C + D

Good News: May Not Need Stochastic

- Simplifying methods available
- Stochastic Exclusion Test
  - Same approach as established by the LRWG
  - Reserve adequacy test
- Alternative Amount
  - Designed to produce result comparable to CTE90 stochastic result
  - Must be demonstrated
  - Reserve adequacy test
  - Subject to minimums

Stochastic Amount

- Calculated in aggregate over a broad range of scenarios
- Cash flow projections using Prudent Estimate Assumptions for all assumptions not stochastically modeled
- Average of 10% highest (CTE 90) Scenario Amounts for all scenarios
- Policies may be grouped based on actuarial judgment

Determination of the Scenario Amount

- Calculate net accumulated asset amount
  - Determined for each segment at end of every future year
  - Equals starting assets plus accumulated net cash flows
  - Starting assets must be at least 98% of statutory liabilities
  - Net accumulated asset amount can be either positive or negative
- Accumulated deficiency
  - Equals the excess of working reserve over the aggregate net accumulated asset amount at each duration
  - Working reserve = cash surrender value (0 if no CSV)
- Scenario Amount = Greatest PV of accumulated deficiency

Prudent Estimate Assumptions

- For assumptions not stochastically determined or prescribed
  - Anticipated experience plus a margin for uncertainty
  - Margins should be consistent with those for reserves
  - Assumptions not locked in and based on principles
- Actuaries future expectations based on company experience
  - Industry or other data if no credible company experience
- Supported by a documented process to reassess appropriateness in future

Hedging on Life Products – C3P3

- Clearly defined hedging strategy like C3P2
- Must include both costs and benefits
  - Note that addition could increase requirements
- New or revised program must be in place (or shadow) for 3 months to lower requirements
- Needs to recognize all risks, costs, imperfections, mismatch
  - Can the hedging be implemented / revised in timely manner in tail scenarios?

Reinsurance

- Counterparties are assumed to be sophisticated parties
  - Assumptions should be based on past practice
  - Usual and customary actions under the treaties
- Recapture / termination provisions
  - May need to be determined by scenario depending on specific projected experience
- Credit risk
  - Assumption is that without known financial impairment reinsurer is projected to perform – handled in C1 risk
  - Known financial impairments should be taken into account

Other Items

- No Standard Scenario
- Reinvestment / disinvestment assumptions
  - Consistent with company strategy for segment
  - Spreads based on actuarial judgment

Conclusion

- Some simplifications for products with immaterial market risk
- Complicated projections for other products
  - "If you sell these products, you should be able to understand the risk"
- Big job but worth the effort
  - Development of more sophisticated projection capabilities
  - Better understanding / management of risk
  - Leverage the information in other areas
- Time to start getting ready!!!!

Questions / Comments

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