

# *Small Company Asset Adequacy*



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# Agenda

- Current AOMR
- Newly Adopted AOMR and major changes
  - Small Company Exemption deleted
  - Executive Summary now required
  - Required interest rate scenario testing eliminated
  - State of Domicile filing
- Effective Dates
- Summary of Cash Flow Testing

# *Current/Old AOMR*

- Under the Current/Old AOMR, there were 2 types of actuarial opinions
  - Section 7, actuarial opinion not based on asset adequacy
  - Section 8, actuarial opinion based on asset adequacy
  - Filing above opinions based on size (4 categories of companies)

# *New AOMR 2001*

- Section 7 – Small Company Exemption Removed
  - Controversial
  - Issue over cost vs. benefit
  - Reason for elimination is risk, not size should determine if asset adequacy analysis is required
  - Formula reserves may not be sufficient
  - Recently, insolvencies due to asset side of balance sheet as opposed to liability side
  - Regulation still has possible exemption, at discretion of insurance commissioner, for company's doing business in only one state

# *New 2001 AOMR*

- Asset Adequacy Issues Summary
  - Must be submitted no later than March 15 of year following the year for which statement of actuarial opinion based on asset adequacy is required
  - Amount of reserves and product lines included in previous analysis but not included in current analysis
  - Describe scenarios tested and sensitivity testing
  - If negative ending surplus results, actuary should describe those tests and the amount of additional reserve to eliminate the negative surplus

# *New AOMR 2001*

- Asset Adequacy Issues Summary Cont'd
  - Disclose any assumptions that are materially different than the assumptions used in previous analysis
  - Methods used to recognize impact of reinsurance
  - Statement of satisfaction that all options, explicit or embedded, have been appropriately considered
  - Shall contain name of company and signed and dated by appointed actuary

# *New AOMR 2001*

- Required Interest Rates Eliminated
  - New York 7 no longer required
  - Actuaries judgment as to what interest rate scenarios and other sensitivities to test

# *New AOMR 2001*

- State of Domicile
  - Reserves must meet requirements of state of domicile and
  - At least as great as minimum amounts required by state of filing
  - Alternative options permit state of domicile
    - Reserves meet formal formal written standards and conditions of state of filing
    - Company's request to file an opinion based on state of filing has been approved and conditions required have been met
    - Comparison of nationwide reserves held to those held under NAIC codification standards



# *New AOMR 2001*

- NAIC has adopted the new AOMR into codification
- Some states have adopted for year-end 2003
- Others reviewing for year-end 2004 and later

# *Cash Flow Testing*

- For life and annuity companies, most popular method of asset adequacy analysis is cash flow testing.
- What is it?
  - Definition – Process of projecting and comparing as of a valuation date, the timing and amount of asset and obligation cash flows after the valuation date. Exclude new business.

# *Cash Flow Testing*

- Process can be broken down into 5 general steps
  - Step 1 – Identify which assets and obligations are to be included in the cash flow testing
    - Include material liabilities, immaterial liabilities can be excluded
    - Should be a majority of your obligations
    - If assets are segmented, you need to assign those assets to match the obligations they back

# *Cash Flow Testing*

- Step 2 – Select and validate models for asset and obligations.
  - This involves modeling your assets and liabilities into manageable pieces.
  - Typically, each individual asset is modeled separately, while liabilities can be grouped.
  - Important to validate beginning static balances for both assets and liabilities to insure model fit is good (book value, market value, par value, reserves, face amount, annualized premium, deferred premium, etc.)

# Cash Flow Testing

- Step 3 -select an appropriate scenario or set of scenarios
  - Scenario – set of economic and operating assumptions on the basis of which cash flow testing is performed
  - Can be either deterministic or stochastic
  - Examples include interest rate scenarios, mortality scenarios (increase/decrease mortality x%) lapse scenarios (increase/decrease lapses by x%)
  - Remember, new AOMR no longer requires the 7 interest rate scenarios. Actuary's judgment to determine which scenarios to test

# *Cash Flow Testing*

- Step 4 – Project the cash flows of the selected assets and obligations
  - Typically want to project for 20 or 30 years for life and annuity business.
  - Validate income statement items in first projection year (premiums, inv. income, claims, surrenders, expenses, etc)

# *Cash Flow Testing*

- Step 5 – Develop conclusions based on analysis of the cash flow testing and document assumptions and findings
  - Check to see if company passes each scenario at the end of the projection period
  - If failing multiple scenarios, additional reserves may be needed
  - Process of determining additional reserves is to find the amount of reserves at the projection start date needed such that the company passes those scenarios for which they failed

# *Cash Flow Testing*

- Step 5 continued
  - Actuarial Memorandum documents the assumptions along with the results and any sensitivity testing that was performed
  - AOMR Section 7 discusses what to include in Memorandum
  - Memorandum does not need to be filed with opinion. However, the state can request a copy.



# *Actuarial Memorandum*

- Reserves
  - Product Descriptions
  - Source of liability in force
  - Reserve method and basis
  - Investment Reserves
  - Reinsurance arrangements
  - Identify explicit or implied guarantees

# *Actuarial Memorandum*



- Document Assumptions
  - Lapses
  - Mortality
  - Dividend strategy
  - Crediting rate strategy
  - Competitor rates
  - Annuitization rates
  - Commissions and expenses
  - Morbidity

# *Actuarial Memorandum*

- Assets
  - Portfolio descriptions, including quality
  - Investment and disinvestment strategies
  - Source of asset data
  - Asset valuation bases
  - Assumptions (default costs, Call assumptions, prepayment rates, investment expenses)

# *Actuarial Memorandum*

- Analysis
  - Methodology
  - Rationale for inclusion/exclusion of business
  - Criteria for determining asset adequacy
  - Disclose whether impact of reinsurance was considered
  - Summary of material changes in methods
  - Summarize results and conclusions