2017 Valuation Actuary Seminar
October 18-19, 2017
Boston Marriott Copley Place
Boston, MA

Session 07TS: Appointed Actuary Boot Camp

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APPOINTED ACTUARY BOOT CAMP

Session 42

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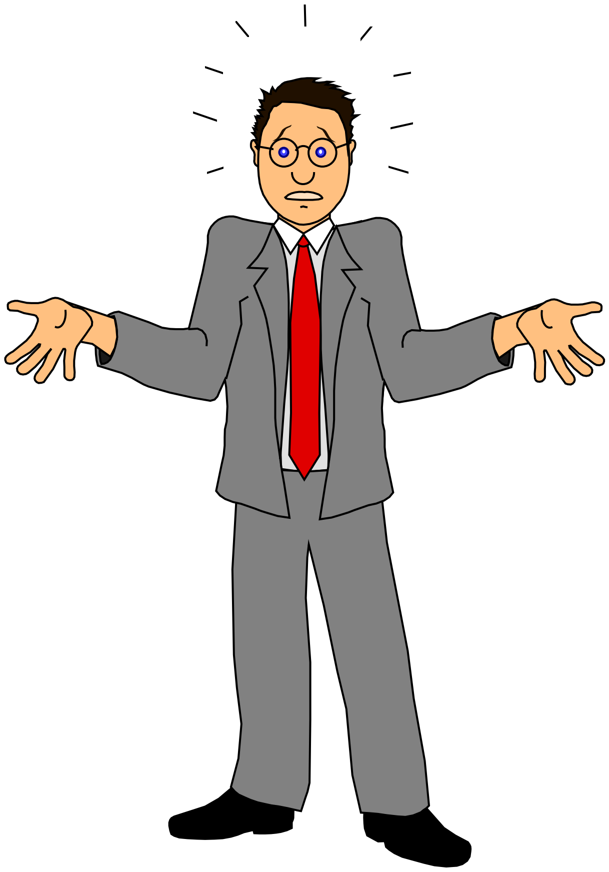
Wednesday, October 18, 2017

SOCIETY OF ACTUARIES

SESSION OVERVIEW

- Information gathering
- Resource organization
- Model building
- Results development
- Analyzing the results
- Capitalizing on the process

You've been chosen the new appointed actuary.........



POLLING QUESTION

How many of you are:

A. Experienced Appointed Actuaries – 5+ years
B. Fairly Newly Appointed – 2-5 years
C. Just Appointed
D. Not an Appointed Actuary – However, hopeful that you will be one someday
E. Not an Appointed Actuary – And not looking forward to being one.

Professionalism Requirements

- Appointed Actuary must be a Qualified Actuary
- Primary regulations and standards regarding professionalism for the Appointed Actuary
  - Code of Professional Conduct, Precept 2
  - Actuarial Opinion and Memorandum Regulation (“AOMR”), Section 5.B
  - American Academy of Actuaries Qualifications Standards

Professionalism Requirements

- Precept 2 of the Code of Professional Conduct states

> *"An Actuary shall perform Actuarial Services only when the Actuary is qualified to do so on the basis of <u>basic and continuing education and experience</u>, and only when the Actuary satisfies applicable <u>qualification standards</u>."*

(emphasis added)

Professionalism Requirements

- Section 5.B of the AOMR states that a Qualified Actuary must be
  - Member in good standing of the Academy
  - Qualified to sign statements in accordance with Academy requirements
  - Familiar with the valuation requirements applicable to life and health companies

(Note: some variation by state; for example NY Reg. 126 also requires Fellow by examination)

Professionalism Requirements

- Academy Qualification Standards
  - Revised effective January 1, 2008
  - Pre-2008 Qualification Standards
    - Restricted to ‘Prescribed’ Statements of Actuarial Opinion (“PSAO”)
    - Still applicable to PSAOs issued in 2008
  - Revised Qualification Standards
    - Expanded applicability to Statements of Actuarial Opinion (“SAO”)
    - PSAO is a type of SAO

Revised Qualification Standards

- Two levels of qualification
  - General Qualification Standards
    - Basic education and experience requirements
    - Continuing education requirements
  - Specific Qualification Standards
    - Apply to actuaries who issue Opinions associated with AOMR and Annual Statement
    - Additional requirements above and beyond General Qualification Standard
- Presentation will focus on the Specific Qualification Standards

Specific Qualification Standards

- Education requirement
  - Must meet general education requirement
    - Be a member of certain listed actuarial organizations (incl. IAA-member organizations)
    - Be knowledgeable of the Law (as defined in Code)
  - Plus successful completion of exams or alternative education
    - Exams must cover specific listed topics
    - Alternative education path requires signed statement from another qualified actuary

Specific Qualification Standards

- Experience requirement
  - Must have minimum of three years of responsible actuarial practice
  - Must be relevant to the practice area
  - Must be under the review of an actuary who was qualified at the time

Specific Qualification Standards

- Continuing Education AAA (“CE”) requirement
  - 30 CE hours each calendar year
    - 15 CE hours must be directly relevant to specific listed topics (e.g., valuation, statutory accounting)
    - 6 CE hours must be from organized activities
    - 3 CE hours must be on professionalism topics
    - No more than 3 CE hours from general business courses
  - Typically met in preceding calendar year, but there is a make-up provision
  - Also SOA Requirement

Board Appointment and Notification Requirements

- Appointment is by the board of directors
- State notification requirements – VM-30
  - Company must notify domiciliary commissioner of appointment within five business days – including name, title, consulting firm (if applicable), manner of appointment, and statement that the actuary meets the requirements
  - If prior appointed actuary was replaced by an action of the board:
    - Five business days to notify domiciliary commissioner of this event
    - Separate letter to commissioner within 10 business days of notification to disclose any material (resolved or unresolved) disagreements with prior appointed actuary in the last 24 months
    - Request a letter from prior appointed actuary confirming agreement or disagreement with the letter to the commissioner, and provide the response to the commissioner

Seek Guidance from Published Sources

- Actuarial Standards of Practice
  - http://www.actuarialstandardsboard.org/asops.asp
  - http://www.actuary.org/content/applicability-guidelines-actuarial-standards-practice-0
  - ASOP 7 (Performing Cash Flow Testing for Insurers)
  - ASOP 22 (Statutory Statements of Opinion Based On Asset Adequacy Analysis)
  - ASOP 23 (Data Quality)
  - ASOP 25 (Credibility)
  - ASOP 28 (Statements of Actuarial Opinion Regarding Health Insurance Liabilities and Assets)
  - ASOP 41 (Actuarial Communications)

Seek Guidance from Published Sources

- Current ASOP Exposure Drafts – None applicable
  - http://www.actuarialstandardsboard.org/exposure.asp
- Past ASOP Exposure Drafts
  - Modeling
    - http://www.actuarialstandardsboard.org/asops/modeling-2/
    - https://www.actuary.org/content/great-modeling-debate-what-standards-should-apply
  - Assumption-setting
    - http://www.actuarialstandardsboard.org/asops/setting-assumptions-exposure-draft/

Seek Guidance from Published Sources

- Review the Actuarial Opinion and Memorandum Regulation as defined by your home state
  - Almost all states have approved the 2001 AOMR (as of early 2014)
  - VM-30 Effective for 2017 filings in 2018 (for states that have adopted the valuation manual)
  - Certain states do not require a Regulatory Asset Adequacy Issues Summary (RAAIS) or only require it for domestic companies

Seek Guidance from Published Sources

- Practice Notes
  - http://www.actuary.org/category/site-section/public-policy/life/practice-notes
  - Asset adequacy analysis (currently listed as exposure draft)
  - Life PBR under VM-20
  - Optional Retrospective Application of ASU 2010-26 Acquisition Costs
  - Application of C-3 Phase II and AG XLIII
  - Scenario and cell model reduction
  - NAIC Model Regulation XXX (2001&2006 versions)
  - Model Governance Practice Note
  - Other topics – fair value, embedded value, credibility theory and guaranteed benefit accounting guidance, C-3 Phase III

Seek Guidance from Published Sources

- AAA Life and Health Valuation Law Manual
  - http://www.actuary.org/content/life-health-valuation-law-manual
  - Requires subscription
  - Updated annually; 2017 manual (covering year-end 2016) currently available
    - 2018 covering year-end 2017 will be released around 1/31/18
  - Contains:
    - state-by-state valuation law summaries
    - Current and selected past versions of applicable NAIC model laws and regulations, including the Valuation Manual
    - Current versions of applicable New York regulations
    - Current versions of NAIC Actuarial Guidelines
    - Generally distributed interpretations and adoption status of key model laws and regulations
    - Overview of current topics as of the date of the manual

POLLING QUESTION

State Specific Requirements
How many of you have to deal with state requirements:

A. None
B. New York
C. California
D. Both NY and CA
E. Other states and also NY or CA
F. Other state excluding NY or CA

State Specific Requirements

- Several states have issued guidance from time to time to the valuation actuary
- NY Specific
  - http://www.dfs.ny.gov/insurance/lifersve.htm
  - Special Considerations Relating to December 31, 2016 Reserves and Other Solvency Issues
  - Actuarial Opinion Requirements for December 31, 2016 Reserves
  - AOM & Risk Based Capital Checklist
  - 2017 SCL to be released around early November

State Specific Requirements

- NY Specific (continued)
  - Requirements for Using the 2001 CSO Mortality Table
  - Maximum Reserve Valuation and Maximum Life Policy Non-forfeiture Interest Rates
  - Liquidity and Severe Mortality Inquiry
  - Domestic companies have other requirements for EDP filing, as well as various checklists and questionnaires that should be completed
  - A Section 8 Opinion is required for all companies with greater than $100 million admitted assets

State Specific Requirements

- California Specific
  - http://www.insurance.ca.gov
  - 2014 Actuarial Memorandum and Executive Summary (November 3, 2016)
  - http://www.insurance.ca.gov/0250-insurers/0300-insurers/0100-applications/financial-filing-notices-forms/upload/2016-Actuarial-Memorandum-and-Executive-Summary.docx
  - 2017 Holiday Letter released around early November

State Specific Requirements

- Ohio Specific
  - issues a valuation letter to domestic companies related to the year-end requirements
- Pennsylvania Specific
  - requirements for domestic companies
- Other

Meet with Previous Appointed Actuary

- Find out why he or she was replaced. It may affect your decision to accept the position.
  - Don't take this step lightly
  - Remember – it's your signature that will appear on the opinion
  - Regardless of the pressure exerted upon you by corporate management, you will still be the one held accountable if your opinion is not justifiable
  - Were there key issues from the prior valuation that will impact or carry over to your opinion?

Impending Issues

- Principles-Based Approach (PBA)
- C1 RBC Changes
- Own Risk and Solvency Assessment (ORSA)
- Governance Developments
- Other?

POLLING QUESTION

Principle-Based Analysis
How many of you have implemented PBA in some form or fashion:

A. Not at all
B. Because required as a result of AG38 and AG48
C. In preparation for full implementation at some future date
D. Both B and C

What Your Opinion Covers

Asset adequacy, of course, but also that reserves:

- Comply with accepted actuarial standards and sound actuarial principles
- Comply with all contractual provisions, including provisions regarding reserve basis and method
- Meet the legislative/regulatory requirements of the state of domicile AND, in aggregate, meet or exceed the minimum requirements in the filing state

What Your Opinion Covers

Asset adequacy, of course, but also that reserves:

- Use consistent assumptions as previous year's annual statement, except as noted in the opinion
- Include provisions for all reserves that ought to be established

Don't ignore these items!

What You Will Be Testing

- Most company testing covers a material amount of the insurance liabilities
- The risk characteristics of the business and the assets supporting them need to be assessed for inclusion
- Short duration type products (five-year term) are probably not as important as longer types (Universal Life) and may be tested using methods other than cash flow testing

What You Will Be Testing

Testing methods should be consistent with the risks

- Cash flow testing - should be used when asset or liability cash flows are sensitive to interest scenario
- Gross premium valuation – appropriate if liability cash flows are sensitive to actuarial assumptions – e.g. term life backed by callable bonds
- Demonstration of conservatism – e.g. ADB
- Demonstration that risks are not subject to material variation – e.g. immunized GIC
- Loss ratio methods – e.g. short-tailed health

What You Will Be Testing

- Plans that are more sensitive to competitive market forces (annuities) probably require more testing than those that are not (seasoned whole life)
- Ancillary benefits (ADB, Waiver) normally not tested, but consider materiality
- Asset treatment should mirror company practice
- Segment if done internally, otherwise allocate pro-rata based on reserves

What You Will Be Testing

- You will most likely use the modeling capabilities of your projection system
- Need to meet with IT and investments to develop required input files for the modeling module
- May require combining data from several internal systems
- Most likely will take several iterations before you get it right

What You Will Be Testing

- Asset Adequacy, not solvency
- Start with assets equal to liabilities
- See if future value of assets sufficient to cover liabilities
- Not concerned with whether capital and surplus remains above minimum levels

What You Will Be Testing

- Usually done on a market, not book, basis
- Results of multiple lines may be aggregated within a company
  - Gains in one line offset losses in another
  - Treatment must be consistent for all scenarios
  - Can’t pick and choose

Seek Guidance From Auditors

If possible, meet with company's auditors to review special areas of concern for testing.

Model Construction

- Multiple steps involved
  - Develop project plan
  - Understand the assets & liabilities
  - Request data and other information
  - Develop/update model plans
  - Develop/update model points
  - Test modifications and validate results
  - Document, document, document

POLLING QUESTION

How Good Are Your Company Actuarial Models?

A. Extremely confident – Our models are very rigorous and precise. Significant time and energy have been put into them.

B. Confident – Generally they give fairly good results

C. Marginally confident – Either not very accurate or still a work in progress. However, they are believed to be "Directionally Correct".

D. Forget it – We still have a long way to go.

Model Construction

- Project plan is critical
  - Where are you & where are you going?
  - Honest assessment of available resources
  - Define roles
  - Develop timelines
- Importance of organization
  - Things might (will) go wrong
  - Being organized helps identify issues earlier

Liability Model Construction

- Perform review of existing products
  - Talk to pricing actuaries, product line managers, modelers, valuation actuaries, accountants, …
  - Categorize
    - Type and amount of in force
    - Major risks written
    - Material reinsurance coverages
    - Statutory, tax, nonforfeiture bases
  - Understand how products are managed

Liability Model Construction

- Data/information request and processing
  - Data/information needed to populate model
    - Seriatim in force records from admin, val systems
    - Product detail (e.g., premium rates)
    - Reinsurance terms (e.g., YRT rates, quota shares)
  - Data/information needed to support assumptions
  - Data/information needed to perform testing and validation
  - Allow extra time for data work

Liability Model Construction

- Develop model plans and model points
  - Make decisions about model size / granularity
  - Average assumptions must be selected for
    - Issue year / month
    - Issue age
    - Gender
    - Underwriting class
    - Policy size
    - Premium mode
  - Modeling software may help with this

Liability Model Construction

- Test your model along the way
  - Significant model inputs should be tested
  - Model changes and coding should be tested
  - Single cell testing recommended
  - Audit/controls becoming more important
- Good documentation
  - Gives you a head start on the Memorandum
  - Recommend keeping “notes for next time”

Model Validation Process

- Static validation
  - Comparison of model starting balances to actual starting balances at various levels
  - Certain information should be 100% M/A
    - Policy count, units, account value
  - Accuracy of the rest depends on the level of model granularity
    - Face amount, reserves, cash value, policy loans

Model Validation Process

- Static validation recommendation
  - Tolerance tightens for larger, more significant plans and lines of business
  - Rule of thumb model-to-actual criteria
    - Materiality decision for small groups of policies
    - Within 5% for moderate plans/products
    - Within 3% for major plans
    - Within 1-2% for major lines of business
    - Within 1-2% in aggregate
  - Might need to revisit model points for better fit

Model Validation Process

- Static validation recommendation
  - Consider consistency of variances for different variables
    - E.g. if annuity model reserves are high but model cash values are low, greater likelihood of overstating results
  - Tolerance should consider materiality to results
    - E.g. if PV of ending surplus is 2% of reserves, a 2% model-to-actual reserve variance is material

POLLING QUESTION

For those of you who are Appointed Actuaries, do your models:

A. Have specific Static and Dynamic Validation Model to Actual Percentage Targets for all basic inventory items (i.e. inforce, units, policy count, reserve, cash or account value) on a model cell by cell basis
B. Have specific targets, but are not based on individual model cells
C. Do not have explicit targets, but are reviewed for reasonableness

Model Validation Process

- Dynamic validation
  - Reasonableness review of the progression of certain income statement items
    - Premium, investment income, surrender charges, loads, claims, expenses, dividends, profit
    - Not just statement or cash flow items, but key profitability drivers – e.g. credited interest
  - Split by major plan/product and in total
  - Compare 3-5 year trend of actual to projected
  - If modeling software allows, backcasting recommended

Model Validation Process

- Dynamic validation
  - If your model doesn't reasonably reproduce reality, your assumptions or your model (or both) may be flawed!
  - Adjustments may be needed to improve comparability
    - E.g. exclude new business from actual
    - E.g. exclude surplus income from actual

Dynamic Validation Example

($MM)	2013	2014	2015	2016 q1	2016 q2	2016 q3	2016 q4	2017	2018	2019
Premium	9.0	10.0	11.0	3.0	3.0	3.0	3.0	13.0	14.0	15.0
Inv Inc	1.0	2.0	3.0	1.0	1.0	1.0	1.0	5.0	6.0	7.0
INCOME	*10.0*	*12.0*	*14.0*	*4.0*	*4.0*	*4.0*	*4.0*	*18.0*	*20.0*	*22.0*
Expense	0.9	1.0	1.1	0.3	0.3	0.3	0.3	1.3	1.4	1.5
Death Claims	1.0	1.0	1.0	0.2	0.3	0.2	1.5	3.0	4.5	6.0
EXPENSE	*1.9*	*2.0*	*2.1*	*0.5*	*0.6*	*0.5*	*1.8*	*4.3*	*5.9*	*7.5*
BOOK PROFIT	**8.1**	**10.0**	**11.9**	**3.5**	**3.4**	**3.5**	**2.2**	**13.7**	**14.1**	**14.5**

Which income statement item has an unreasonable progression?

POLLING QUESTION

Do you explicitly model your assets?

A. Yes, each asset is individually modeled
B. Yes, however a grouping process is used to reduce the number of model cells
C. No, cash flows are input from another source
D. No, we use a “Topside” approach to reflect asset flows

Asset Modeling

- Approaches
  - Directly model in ALM software
  - Pre-process in outside system, such as BondEdge or Intex
  - Possibly a need to exclude “difficult” assets

Asset Modeling

- Inforce information necessary
  - Fixed Income : BV, MV, Par Value, Coupon, Book and Market Yield, Maturity, Frequency, Quality, Call Info, Sinking Fund Schedule
  - Adjustable Rates : Index, Caps and Floors, Adjustment Dates, Spread to Maturity
  - Commercial Mortgages : Term, Annual Payment, Balloon Payment
  - Equities : MV, Cost, Dividend Rate, Growth Rate

Asset Modeling

- Other Assumptions to Consider
  - Default Charge : Moody's or other source, need to consider transition between classes
  - Investment Expenses
  - Prepayment Risk

Asset Modeling

- Reinvestment and Disinvestment
  - What happens when there are excess or deficient cash flows?
  - Positive : reinvest
  - Negative : borrow, sell assets, buy negative assets

Asset Modeling

- Reinvestment
  - Items needed for reinvestment : % allocation to each class, term, quality, spread, type
  - Possibly call or prepayments, shifting mix, allocation targets, or other more complex features

Asset Modeling

- Disinvestment
  - Short- vs. long-term borrowing
  - Make sure not an arbitrage opportunity
  - Sale of assets : must validate market values are reasonable
  - Sale priority : preferred order, pro-rata, or maximize capital gain

Asset Modeling

- Validation
  - Cell checks : pick model cells over various classes and check that cash flows are being produced correctly, as well as correct inventory balances and yields.
  - Also consider same issues as above in aggregate, excluding the impact of liabilities

Asset Modeling

- Validation (continued)
  - Cash flow reconciliation : examine cash flow reports to validate appropriate re-/dis-investment
  - In addition to “in total”, check that cash flows are correct by asset category

Asset Modeling

- Validation (continued)
  - Rollforward approach : examine change in inventory items from period to period make sense
  - This can and should be done for BV, MV, and Par Value

Key Modeling Considerations

- Need to develop assumptions for
  - Projecting policyholder behavior
  - Projecting investment behavior
  - Projecting economic behavior
  - Projecting management behavior

- Use your experience where credible otherwise use industry experience

Key Modeling Considerations

- Policyholder behavior
  - Policy persistency
  - Premium persistency
  - Partial withdrawal activity
  - Mortality
  - Morbidity
  - Investment option transfer
  - Guaranteed benefit utilization

Key Modeling Considerations

- Investment Behavior
  - Calls
  - Puts
  - Sinking Funds
  - Prepayments
  - Defaults
  - Credit spread widening

Key Modeling Considerations

- Economic Behavior
  - Equity returns
  - Expense inflation
  - Slope and level of interest rates

Key Modeling Considerations

- Management Behavior
  - Reinvestment/Disinvestment strategy
  - Dividends
  - Expenses
  - Interest crediting strategy

Key Modeling Considerations

- Perform dynamic validation to test the fit of the model with the assumptions
- Compare projected income statement items with expected values to determine fit

Key Modeling Considerations

- Model Governance should be addressed in light of VM-G and the NAIC's CGAD Model Act
- Model control processes are becoming the norm
  - Change controls, peer review, etc.
  - https://www.soa.org/research-reports/2012/Actuarial-Modeling-Control/
- Periodic full bottom-up review of model
- Robust analysis of results – beyond the income statement

There are many more ways for your model to be wrong than to be right

Scenario Testing

- Originally, the AOMR required you to test what are called the “NY Seven”
  - These are discrete scenarios and are based upon the yield curve at the beginning of the projection period They are:
  - Level yield curve that doesn’t change from current levels
  - Increasing uniformly over ten years at one half percent per year and then level
  - Increasing uniformly over five years at one percent per year then uniformly decreasing at one percent per year to the original level at the end of ten years and then level
  - An immediate increase of three percent and then level
  - Uniformly decreasing over ten years at one half percent per year and then level
  - Uniformly decreasing at one percent per year over five years and then uniformly increasing at one percent per year to the original level at the end of ten years and then level
  - An immediate decrease of three percent and then level

Scenario Testing

- The revised AOMR does not specify (except in some states such as Indiana)
- Up to the actuary to select appropriate scenarios, although many start with the NY 7
- Add additional deterministic scenarios, such as steeper, normalized, inversions and with more modest increases and decreases than the NY 7.
- Also add set of stochastic scenarios
- Also, sensitivity testing of assumptions, as discussed later

Scenario Testing

- C-3 Testing requires more scenarios
- Phase 1 requires 50 scenarios or 12 more severe scenarios
  - http://www.actuary.org/content/economic-scenario-generators
  - Excel tool generates scenarios and calculates C-3 factor
  - As of 2006, all companies > $100 million AA must do for CFT business
  - Note: the Phase 1 interest rate generator has been enhanced to produce custom scenarios – also available at the link above

Scenario Testing

- Phase 2 requires a representative subset of scenarios drawn from the full sample of 10,000 scenarios, along with the standard scenario
- Resources at the jointly administered SOA/Academy website
  - http://www.actuary.org/content/economic-scenario-generators

Scenario Testing

- Phase 2 scenario subset considered to be sufficient if any resulting understatement in total reserves, as compared with that resulting from running additional scenarios, is not material
- How to determine sufficiency?
  - Perform statistical analysis
  - Compare std dev of CTE to the CTE itself
  - Calculate reserve based on std dev
  - Practice note provides more information

Sensitivity Testing

- Reserve opinion should be based on moderately adverse assumptions
- Sensitivity testing gives an indication about the degree and sensitivity of sufficiency in the reserves

Sensitivity Testing

- Sensitivity testing should consider the impact of key assumption changes
- Key assumptions may be different for different lines of business

Sensitivity Testing

- Key assumptions usually sensitivity tested include
    - Persistency
    - Mortality
    - Expenses
    - Yield curve changes
    - Equity returns
    - Asset defaults

Evaluating Results

ASOP No. 22, section 3.4.2: Adequacy of Reserves and Other Liabilities—When forming an opinion, the actuary should consider whether the reserves and other liabilities being tested are **adequate under moderately adverse conditions**, in light of the assets supporting such reserves and other liabilities. To hold reserves or other liabilities so great as to withstand any conceivable circumstances, no matter how adverse, would usually imply an excessive level of reserves or liabilities.

- As appointed actuary, you are responsible for defining moderately adverse conditions
- You must decide which interest scenarios are moderately adverse, and whether additional scenarios should be tested
  - You must also decide how to balance deterministic and stochastic results
  - New SOA research report, Modern Deterministic Scenarios for Interest Rates, soon to be published
- Moderately adverse liability assumptions usually (outside of New York) tested individually through sensitivity tests
  - In some cases, combination sensitivities may be appropriate
  - For many lines, liability sensitivities are more important than interest scenarios

Evaluating Results

- Required to look at surplus value at end of projection period as well as interim year-by-year surplus value
- If Aggregate results fail a scenario on an ending surplus basis or if there are scenarios with material interim negative surplus values, you may need to increase reserve levels
- The Appointed Actuary needs to use professional judgment to determine the appropriate level of reserve strengthening

Evaluating Results

- We spoke before about developing statistical measures based on scenario testing
  - Probability of failing a scenario in a given year is less than x%
  - Probability of failing at most 5% of the scenarios is within y%
- Becomes meaningful when you apply it to a large number of stochastic scenarios
- Becoming more of the norm than the exception due to the movement to a more principles based reserve approach

Capitalizing On The Process

- Much management information can be developed from the CFT model
- One model for all financial projections - saves time and resources

Capitalizing On The Process

- Some additional applications include
  - GAAP projections
  - Reserve calculations
  - ALM
  - Liquidity projections
  - Appraisal of a block or an entire company
  - Determining Embedded Value
  - PBA

Capitalizing On The Process

- Add in new business to create a total company model to project
  - future capital needs
  - future cash flow
  - the financial impact of different sales mixes
  - the financial impact of management actions including compensation changes or capital expenditures

The Actuarial Memorandum

- The Actuarial Memorandum is the document that supports your Actuarial Opinion
- Make sure that your conclusions are supported by the memorandum
- If you relied upon someone for information, state so
- Get reliance letters where appropriate
- All work referred to in the memorandum must be documented in your supporting workpapers
- Another qualified actuary should be able to use your documentation to verify your work
- Peer Review

The Actuarial Memorandum

- VM30 Changes from prior AOMR:
  - Types of Opinion
    - “Qualified” and “Inconclusive” Opinions
  - Principles Based Reserves
  - Additional Disclosures

PBR and the Appointed Actuary

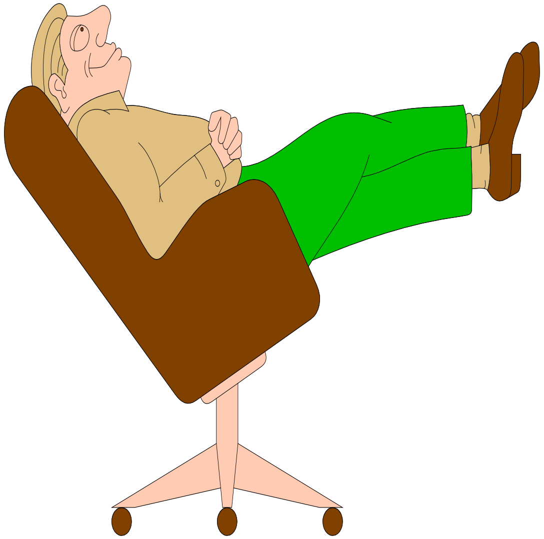
- VM20 places accountability for PBR assumptions with the company, not the Appointed Actuary
- Qualified actuary responsibilities under VM-G
  - Oversee principles-based valuation of a group of contracts
  - Verify that assumptions, methods, models, internal controls and standards for principle-based reserves comply with Valuation Manual
  - Prepare PBR Actuarial Report and provide summary report to board and senior management
  - Not to verify appropriateness of any prescribed assumptions
  - Not to opine on reserve adequacy
  - VM-G qualified actuary need not be the Appointed Actuary

PBR and the Appointed Actuary

- Certifications required under VM31 for PBR Actuarial Report
  - Qualified actuary certifies that policies passing the stochastic exclusion test are not subject to material interest rate risk
  - Certifications from an investment officer on modeled investment strategy and from senior management regarding VM-G compliance
  - None from Appointed Actuary
- PBR does not relieve Appointed Actuary of responsibility
  - Asset adequacy testing still required for PBR blocks
  - Appointed Actuary still responsible for asset adequacy assumptions

Other Considerations

- Your friendly neighborhood Insurance Department may want a copy
  - There is at least one that routinely asks for it
- You never know what the future holds
  - Problems may arise and if you hear from the Actuarial Board for Counseling and Discipline you certainly want to make sure that you’ve covered all the bases



Questions?

SOCIETY OF ACTUARIES