Post-NAIC Update/PBA Webinar

Dave Neve, FSA, MAAA, CERA

Chair, American Academy of Actuaries'

Life Financial Soundness / Risk Management Committee

Agenda for Webinar

- **Spring LATF Update:** Leslie Jones, Chairperson of NAIC's Life Actuarial Task Force
- **Spring CADTF/SMI Update:** Nancy Bennett, Senior Life Fellow at the American Academy of Actuaries
- **PBA Practice Note Update:** Todd Erkis, Chairperson of the Academy's PBA Practice Note Work Group
- **VM-20 Impact Study Update:** Jason Kehrberg, Senior Consultant at Towers Watson

Spring 2011 LATF Update

Leslie Jones, ASA, MAAA

Chair, Life Actuarial Task Force (LATF)

Deputy Director & Chief Actuary

South Carolina Department of Insurance

LATF Update

- LHATF → LATF
- Update on PBA Project
  - VM-20 Impact Study
  - Amendments to the Standard Non-forfeiture Law for Life Insurance
    - Amended Model Law exposed for Comment & Referred to Process and Coordination Subgroup for Review
  - Feedback Loop for PBA
    - Referred to Process & Coordination Subgroup
    - Request for Assistance from the American Academy of Actuaries
  - Statistical Agent/VM-51
    - Academy request to work on a policyholder behavior format with SOA and others
    - Format to be complete by 2012 Summer National Meeting
    - NY conducting pilot program collecting mortality data
    - Memo from PBR (EX) WG regarding the Statistical Agent Process
  - PBR (EX) WG referral regarding update to Action Items

LATF Update

- SOA/Academy Joint Project Oversight Group - Mortality Table Update
  - Payout Annuity Mortality Table – Basic Table, Projection Scale and Margins exposed for comment
  - Preneed and Guaranteed/Simplified Issue – Data call has been developed with submission due date July 2011 and expected draft experience table early 2012
- Academy Nonforfeiture Improvement Work Group
  - List of public policy issues to be included in the report was presented to LATF
  - Final report to be presented to LATF in August 2011
- C-3 Phase 2 and AG 43
  - Received update from Oliver Wyman on potential methodology changes. Fundamental changes will be required to address structural issues regarding the disincentives to engage in prudent risk management.
  - LATF will consider refinements that could be made to AG43 on an interim conference call

LATF Update

- Referral from "E" Committee to consider the purpose and proper use of separate accounts
  - Subgroup formed to report back with background and recommendations
  - Subgroup members: Blaine Shepherd (MN), Felix Schirripa (NJ), Mike Boerner (TX) and Tomasz Serbinowski (UT)
- Contingent Annuities
  - Reviewed a draft report from the Contingent Annuity Subgroup
  - The Subgroup will continue working on the draft based on feedback received from LATF
- Actuarial Guideline XXXVIII
  - LATF reviewed a document from NY summarizing concerns about some product designs involving UL policies with secondary guarantees that appeared to artificially increase premiums in the reserve calculations and thereby reduce reserves below the required minimum
  - LATF is gathering more information regarding these designs and how they are being reserved
  - LATF will draft a bulletin to insurance departments and a referral to the ABCD to be discussed on a future conference call

LATF Update

- International Update
  - Larry Bruning provided an update and described several International Association of Insurance Supervisors (IAIS) insurance core principles (ICPs) that are still out for consultation: ICP 8 (Risk Management in Internal Controls), ICP 12 (Winding-up and exit from the market), ICP 14 (Valuation), ICP 22 (Anti-money laundering and combating financial terrorism), and ICP 24 (Macroprudential supervision and market analysis)
  - Mr. Bruning urged LATF members to review ICP 14 (Valuation) as the work being done on principle-based reserving would tie into this core principle
- Referral from Financial Analysis (E) Working Group regarding Regulatory Asset Adequacy Issues Summary
  - John Engelhardt, NAIC staff, will draft a response to the Task Force for review on a conference call

LATF Update

- Blanks (E) Working Group
  - Approved a proposal to add the actuarial certification for preferred class mortality to the supplemental exhibits and interrogatories
- IIPRC Update
  - Adopted additional standards for private placement plans for both individual variable adjustable life and individual variable annuity contracts
  - Adopted additional standards for both the change of insured benefit and for over loaned protection benefit

Spring 2011 CADTF/SMI Update

Nancy Bennett, FSA, CERA, MAAA

Senior Life Fellow

Chair, Life Capital Adequacy Subcommittee

American Academy of Actuaries

CADTF Update

- Derivatives Risk Mitigation Proposal
  - CADTF & "E" Committee passed the ACLI proposal to provide C1 credit for certain types of credit derivatives (i.e., basic & intermediate).
  - Change will be effective for December 31, 2011 Life RBC filings, pending adoption by Exec/Plenary.
- Commercial Mortgage Update
  - ACLI is working on a long-term solution to replace the current MEAF methodology.
  - ACLI has engaged an outside modeling firm to model loss distributions for certain groupings of commercial mortgages.

CADTF Update (cont.)

- C3 Phase 3 Update
  - LRBCWG plans to summarize concerns/questions about Academy's C3WG proposal; progress has slowed since LRBCWG is in need of a Chair.
  - Effective date for C3P3 pushed off to YE 2012.
- DTA Update
  - SSAP 10R changes affecting DTA admissibility were extended through 2011. Accounting changes currently under review.
  - Academy report on DTA treatment in RBC was submitted in 2010; additional review in light of accounting changes may be requested.
  - Additional tax sensitivity test has been added to LRBC formula for YE 2011 showing RBC ratios without any credit for DTA, illustrating the upper and lower bounds of the effect of DTA admissibility on RBC ratios.

CADTF Update (cont.)

- Fraternal RBC Update
  - Several procedural changes are underway to enable fraternal RBC formula to be more routinely updated by NAIC.
  - Changes include development of a new model law for fraternal RBC and capturing fraternal RBC stats in the NAIC database.
- 2011 Charges for CADTF adopted
- Referral charges from Rating Agency WG
  - RAWG was formed in 2008 to review reliance on rating agencies in the regulatory process, resulting in several referral charges to many standing NAIC groups.
  - Generally, the charges deal with the regulation of investment risk through reporting, disclosure, and RBC.
  - Certain proposals have been made within other NAIC groups (e.g., SVO, VOSTF, Blanks WG) that would change asset classification and require additional disclosure of investment risks. Academy's IAWG is actively monitoring and commenting on these proposals.

SMI Update: Purpose & Scope of SMI Activities

- What is SMI?
  - Describe the U.S. system based on a coherent set of principles.
  - Examine international developments and their potential use in U.S. insurance regulation.
  - Critically review the entire US solvency regulatory framework.
- Scope of SMI Activities
  - Capital Requirements & comprehensive Solvency Framework
  - Corporate Governance & Risk Management
  - Group Supervision
  - Financial Surveillance
  - Valuation (PBA)
  - Reinsurance
  - Statutory Accounting & Financial Reporting

SMI Update: Potential Outcomes

- Potential SMI Outcomes
  - NAIC solvency framework remains largely intact and deemed equivalent to Solvency II; OR NAIC solvency framework undergoes major overhaul?
  - Enhanced regulatory oversight for holding companies & insurance groups
  - Enhanced regulatory oversight for insurers' risk management practices via ORSA requirement (Own Risk and Solvency Assessment)
  - Statutory Accounting framework remains intact; OR statutory accounting is replaced by IFRS or a similar accounting regime?

SMI Update: RBC Activities

- NAIC SMI RBC Activities
  - Modernize 20-year old RBC system.
  - International Association of Insurance Supervisors' "Insurance Core Principles" require that target safety levels for capital (i.e., statistical safety levels) are specified for capital.
  - Calibrations will provide a benchmark for capital adequacy comparisons between insurers, countries and financial sectors.

SMI Update: NAIC Preliminary Vision for RBC

- What probably stays the same?
  - Separate RBC formulas for Life, P&C, Health
  - RBC calculated at legal entity level (not at group level)
  - Comprehensive “balance sheet methods” utilizing internal models not expected to replace formulaic structure
  - RBC provides a legally enforceable tool for taking over a company
- What might change?
  - Addition of some “missing” risks (e.g., cat risk)
  - Improved methods for determining credits for diversification of risks (i.e., review of correlation assumptions)
  - Regulatory trigger points based on an explicit calibration point for aggregate requirements (e.g., 95th percentile over 1 year)

SMI Update: Academy Support for the SMI RBC Project

- Support NAIC efforts to describe the statistical safety level of the current RBC formula
- Provided detailed description of the history & technical foundation of current RBC formulas
  - The original LRBC formula was not designed with establishment of aggregate RBC at an *explicit* calibration level where this calibration level results in a stated outcome
  - Aggregate LRBC was not established by equating the numerical results of a process to a pre-defined calibration level
  - Immaterial risks, extreme tail risks, and risks that are not conducive to pre-funding are excluded from current LRBC formula, by design
  - LCAS view: no material risks have been excluded consistent with the original established objectives and design of the LRBC framework
  - http://actuary.org/pdf/life/American_Academy_of_Actuaries_SMI_RBC-Report.pdf

SMI Update: Upcoming SMI RBC Activities

- Interim meetings between the Academy, Interested Parties and the SMI RBC work group
- NAIC coordination of SMI with all RBC Enhancements & other risk-focused projects

SMI Update: Additional NAIC Resources

- NAIC SMI webpage: http://naic.org/index_smi.htm
- NAIC SMI Roadmap: http://naic.org/documents/committees_ex_isftf_summer_ntlmtg_meeting_smi_roadmap.pdf
- NAIC Summary: http://naic.org/documents/smi_110131_update.pdf

Life PBA Practice Note Update

Todd Erkis, FSA, CERA, MAAA
Chair, American Academy of Actuaries
Life PBA Practice Note Work Group

Towers Watson

C3 Phase 3 Practice Note

- Practice note initially released in December 2009
- http://www.actuary.org/pdf/life/lifePBAPracticeNotefinal.pdf
- Since calculation is not in place yet, note discusses expected practice and explanation of calculation process
- Practice notes are not binding and do not define generally accepted practice
- When C3 Phase 3 is finalized, practice note will be reviewed for areas where updating is needed

Table of Contents: C3 Phase 3 Note

VM-20 Practice Note

- Separate practice note for life principle-based reserves under VM-20
- Work group working on this practice note since late 2010 – started with C3 Phase 3 practice note
- Good deal of note is walking through calculation requirements
- Note is in peer review process at the Academy
  - Hoping to release in next month or two

Table of Contents: VM-20 Note

1. Products Covered
2. Common Practice
3. VM-20 Calculation
3a Net Premium Reserve
3b Deterministic Reserve
3c Stochastic Reserve
4. Difference from CFT
5. Difference from C3P3
6. Work on other than Valuation Date
7. Asset Modeling
8. Scenarios
9. Anticipated Experience
10. Margins
11. Mortality
12. Premium
13. Policyholder Behavior
14. Expense
15. Non-guaranteed Element Assumptions
16. Stochastic Exclusion
17. Deterministic Exclusion
18. Reinsurance
19. Hedging

Selected DRAFT Question: VM-20 Calculation

Q3.5: Why would a company use the stochastic exclusion test?

A: Companies might calculate the stochastic exclusion test for some policies to avoid the complexity of the stochastic and/or deterministic calculations. If specific policies pass the stochastic exclusion test, the stochastic calculations would not have to be performed for those policies. Some companies may decide to perform the stochastic calculation even if they pass the exclusion test because there may be some diversification or risk offsets they would then recognize in their minimum reserve calculation under VM-20.

Selected DRAFT Question: Difference from Cash Flow Testing

Q4.3: May the same interest rate and equity scenarios be used to calculate the stochastic reserve as are used for cash flow testing projections?

A: Section 7.G.2.a of VM-20 states that a prescribed economic scenario generator with prescribed parameters is required to be used to generate the interest rate and equity scenarios used in the determination of the stochastic reserve. Scenario reduction techniques are allowed but only if they do not materially reduce the reserve. Asset adequacy analysis does not have to use the same generator and parameters. However, some actuaries may use the prescribed VM-20 scenarios for asset adequacy analysis if the actuary believes the scenarios are appropriate to use in cash flow testing.

Selected DRAFT Question: Asset Modeling

Q7.3: How would the actuary meet the 98% to 102% corridor required in Section 7.D.1?

A: Some actuaries would iterate after performing the calculation once to gain a reserve that is within the corridor. Some actuaries may choose other methods to demonstrate that the reserve is adequate even if it is outside of the required corridor. This could be based on additional calculations that had been performed historically or by showing that the reserve change is immaterial if the starting assets were changed. The latter may be used particularly if the reserve amount is quite small.

Selected DRAFT Question: Anticipated Experience

Q9.2: Are the same prudent estimate assumptions used for deterministic and stochastic calculations?

A: Section 9.A.5 requires that prudent estimate assumptions be consistent for the two calculations. Some actuaries would use the same assumptions except where the risk factor is scenario dependent.

Selected DRAFT Question: Margins

Q10.13: How are margins determined for dynamic assumptions?

A: Where an assumption is interest rate or equity return dependent, and a dynamic formula is included in the modeling, some actuaries may not add an additional margin to the calculation, on the basis that conservatism is provided by the conservatism inherent in the tail measure (i.e., CTE) and in their judgment this implicit margin would satisfy the requirements of Section 9.B.

However, some other actuaries may add additional conservatism, as they might feel that the use of the tail measure will only inject conservatism regarding the interest rate or equity risk, but not necessarily the dynamically related risk, which they may see as a distinct risk. Some actuaries might consider margins on the base underlying assumption to be applicable to the resulting assumption including dynamic components, so would not add an additional margin.

Selected DRAFT Question: Stochastic Exclusion Test

Q16.1: What is the Stochastic Reserve Exclusion Test?

A: As described in VM-20, Section 6, the Stochastic Reserve Exclusion Test may be used to identify groups of policies that may have a minimal interest rate and equity risk, and therefore may not have significant variation in financial results dependent upon future economic conditions. Companies may elect to use this test to exclude groups of policies from the calculation of stochastic reserves.

Next Steps

- Expected completion and posting on Academy website in a few months
- Seeking input from actuaries on both the VM-20 and update to C3 Phase 3 practice notes:
  - Help inform work group of industry practice
  - Identify technical corrections needed
  - Identify any areas where wording is confusing or needs modification
- The practice note workgroup will be following C3 Phase 3 and VM-20 progress and revisions
  - Will be updating both practice notes from time-to-time (are living documents)

Update on VM-20 Impact Study

Jason Kehrberg, FSA, MAAA

Towers Watson

Objectives of the field test

- Assess impact of the proposed valuation standard on US life insurance industry and across life insurance products
- Determine whether changes to the principle-based reserving methodology are necessary
  - Practical, understandable and efficient process
- Determine whether any refinements to VM-20 are necessary
- Evaluate proposed documentation requirements in VM-31
  - Enough for regulators to determine compliance
  - Practical from company perspective
- Effectiveness of Exclusion Tests and NPR Floor
- Evaluate treatment of reinsurance and reserve credits
- Determine ease of implementation

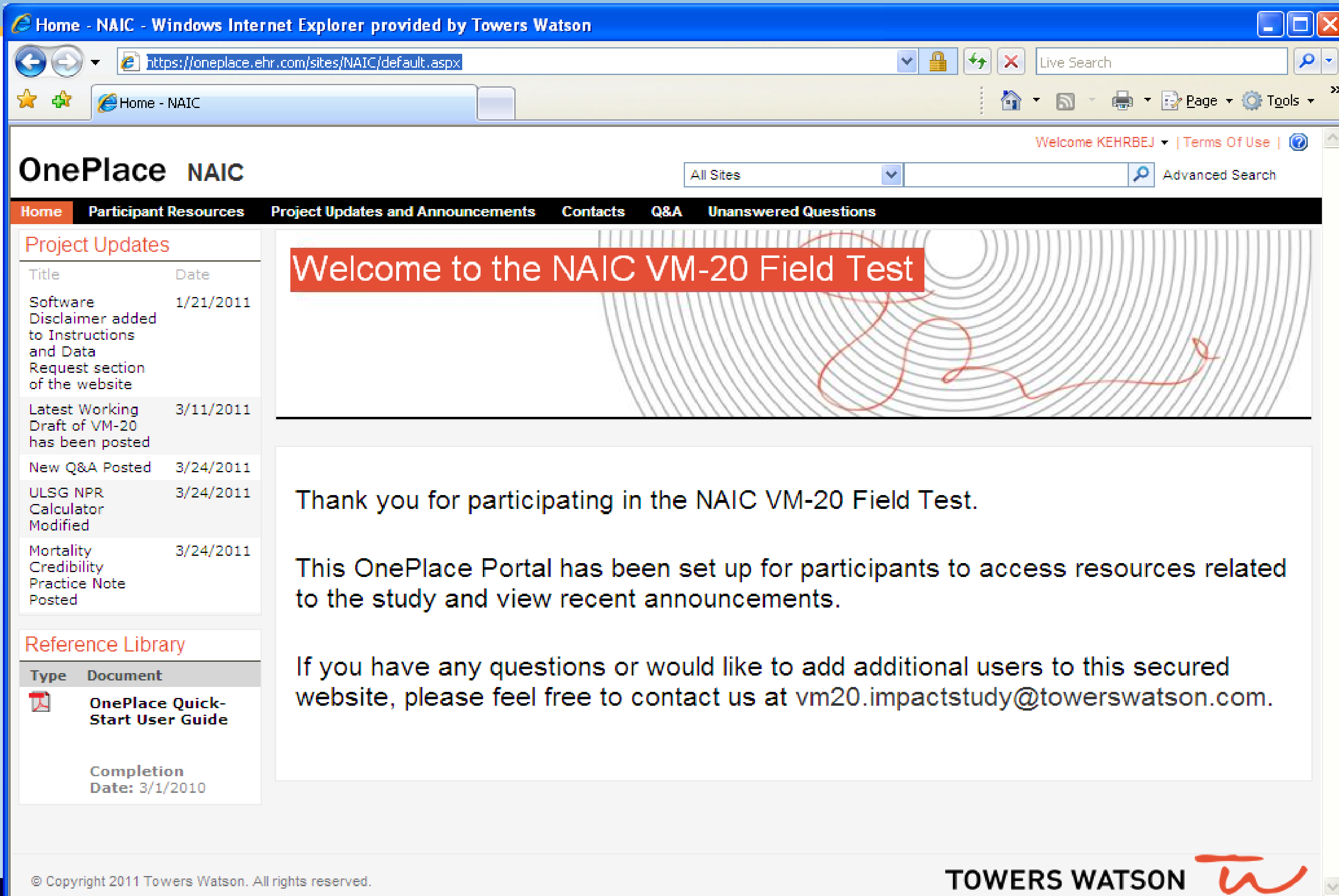
Objectives of the field test (continued)

- Determine the *effectiveness* of various elements within VM-20 (*effectiveness* to be defined in conjunction with input from NAIC)
  - Effectiveness of Exclusion Tests and NPR Floor
  - Effectiveness of the proposed PBR methodology vs. current formula-based valuation
  - Effectiveness of scenarios in exposing asset and liability risks
- Observe how companies set experience assumptions and margins, and how companies select economic scenarios
- Look at use of sensitivity testing in setting margins and understanding volatility of results
- Determine areas requiring refinement or further clarification

Participant resources

- Kansas City kickoff and training session, and webcast
- Instructions & reporting template (Phase I in Nov, Phase II soon)
- Project email address
  - vm20.impactstudy@towerswatson.com
  - Recent themes have been mortality assumption setting process, the reporting template, calculating the net premium reserve, and exclusion tests
- Project bulletin board
  - https://oneplace.ehr.com/sites/NAIC/default.aspx
  - Contains industry and impact study-specific articles/presentations, pre-populated ESG, spreadsheet tools, etc.
- Periodic conference calls
- RTS, PIL, ATF structure

The bulletin board



Impact Study Timeline

- Kickoff and training seminar in November 2010
- Phase I instructions and reporting template distributed November 2010, results to be submitted to TW by March 31, 2011
- Phase II instructions and reporting template will be distributed next week, results to be submitted to TW by May 31, 2011
- Final report due to NAIC on June 30, 2011
- It is critical that we have sufficient data:
  - Necessary for credible results
  - Necessary for confidentiality
  - If data submissions are delayed, final report could be also
  - Consider dividing report in two

Update on participant status

- In total, 41 companies are participating in the VM-20 field test:
  - As of April 12, seven companies have submitted Phase I results
  - Thirteen will submit results by the end of April, eight will need an extra two months, and eight will need an extra three months, five companies are in the process of providing us with more details

Update on participant status (continued)

- Those companies unable to submit Phase I results by March 31 cited year-end commitments as the primary reason for the delay
- Also, some aspects of VM-20 have been particularly time consuming to implement:
  - Net premium reserve calculation
  - Entire process of setting the mortality assumption

Other thoughts

- Certain aspects of setting the mortality assumption are new (and challenging) for many:
  - Credibility blending
  - Margin setting
  - Mortality improvement not allowed
- NPR calculation is somewhat difficult to set up (have been a lot of questions here, often defaulting to CRVM interpretations)
- Reinsurers are being paired with ceding companies to model opposite sides of treaties
  - Not expecting mirror results